**Name:_____Sec:____ Roll No__**

**SET - A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION: [2024-25]**
**ENGLISH**
**Class – XI**

**Time: 3 hours** **Maximum Marks : 80**

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***GENERAL INSTRUCTIONS:***

1. *The Question Paper contains THREE sections - READING, GRAMMAR AND CREATIVE WRITING SKILL and LITERATURE.*
2. *Attempt questions based on specific instructions for each part.*

## SECTION A : READING SKILLS (26 marks)

### Reading Comprehension Through Unseen Passages

1. **Read the following text.** 10

1. We live in an age of wonders and miracles. It has been called the 'Age of Science' and different aspects of our life that changed in the preceding centuries have been attributed to science. This is completely true, but it is only one side of the coin. The flip side is that as we have advanced more in the field of technology, something fundamental to humanity has been left behind. Values such as empathy and concern for our fellow human beings are gradually being eroded due to the onslaught of our ever-evolving lifestyles, aided by the marvels of technological advancements

2. Take the example of the Internet. On the one hand, access to information and knowledge at the click of a button is a veritable boon to everyone (especially students) and this has made our lives much simpler. On the other hand, it has severely limited actual contact with teachers, friends and elders. Thus, the learning that a person gains is incomplete as he or she cannot easily take the advice that another person can give on the basis of knowledge and practical experience that is at his or her disposal.
3. Take the example of the Internet. On the one hand, access to information and knowledge at the click of a button is a veritable boon to everyone (especially students) and this has made our lives much simpler. On the other hand, it has severely limited actual contact with teachers, friends and elders. Thus, the learning that a person gains is incomplete as he or she cannot easily take the advice that another person can give on the basis of knowledge and practical experience that is at his or her disposal.
4. Today, a small child can access and navigate the Internet with an ease that still astounds those from the older generation. But what is even more astounding is the neglect of the basic human traits of friendship, relationships and family values. Owing to all the technological advancements and the gadgets available today, children often miss out on the most enriching childhood experiences such as playing

outdoor games with friends, which apart from being immensely enjoyable and physically exhilarating, also develop traits such as teamwork and discipline at an early age.

5. But now when the concept of friends is gradually being limited to virtual friends on social networking sites, one shudders to think of the implications for the personality development of a child because the time spent with computers or mobile phones for entertainment can never really substitute for the holistic benefits of outdoor play. Such examples can be found in plenty. Now if we compare the hustle and bustle of modern city life and the peace and calm of a rustic village life, we can see that in cities, life is a race with a variety of factors. It is a race that everyone tries their level best to win, but nobody actually wins as it never ends.
6. As for me, I think this age of rapid development has created at least as many problems as it has solved, if not more. The reason is that the basic goal of life, which should be the pursuit of happiness, has now been replaced by the pursuit of money. Money and happiness are considered analogous in our present society, but they actually are not so. In this mindless pursuit of money, nobody has time now to appreciate the beauty of life, which consists not of multi- billion-dollar skyscrapers, but a simple act of kindness to someone in a time of need.

7. So there is an urgent need to stop for a moment and think about where we are actually heading, is it development or destruction? Do we have to wait until people have grown so much apart from each other that we cannot see the suffering of our own species due to our mindless greed, or can we still mend our ways?

8. To answer this question, I will take the help of that most magnificent of human feelings-hope. I sincerely wish that we, as the most intelligent species on earth, would take our fair share of responsibility and sincerely think about the path we should follow. Though mankind will possibly last for a long time thanks to its determination and sheer ingenuity, we have to make sure we do not lose our humanity somewhere along the way.

i According to the passage, it is like one side of the coin to say that life has changed owing to science as

(a) age of science has brought wonders and miracles.

(b) different aspects of life have changed due to science.

(c) there is another side of the coin to look at.

(d) this side of coin is true and sufficient to look at.

ii Which of the following is not true about the internet?

(a) It provides an easy access to information and knowledge.

(b) It has made our lives simpler.

(c) It has limited actual contact with teachers and friends.

(d) It can easily give advice based on personal experience.

iii Internet hampers the holistic growth of a child by ……..

(a) encouraging human traits of friendship, society and family.

(b) enriching childhood experiences of outdoor games.

(c) providing virtual friends and gadgets.

(d) developing teamwork and discipline.

iv According to the passage, true happiness lies in ……

(a) simple acts of kindness

(b) rapid development

(c) multi-billion-dollar skyscrapers

(d) pursuit of money

v The word 'veritable' in para 2 means:

(a) actual

(b) big

(c) latest

(d) perfect

vi What does holistic mean?

vii Name the two things considered analogous in our present society but they actually are not so?

viii It has severely limited actual contact with …….

ix We cannot see the suffering of our own species due to our

…….

x ……. will probably last for a longer period of time.

2. **Read the following text** 8

AUSTRALIA'S 2019-2020 BUSHFIRE SEASON WAS NOT NORMAL

1. Data from satellite sources assembled by the United Nations Environment Programme's (UNEP) World Environment Situation Room confirms that the wildfires in Australia in the last two months of 2019 and the first six weeks of 2020 were far from normal. 2019 was the second hottest year on record since 1880, and Australia recorded its warmest temperatures ever in December 2019.
2. "Rising temperatures continue to melt records. The past decade was the hottest on record. Scientists tell us that ocean temperatures are now rising at the equivalent of five Hiroshima bombs a second. One million species are in near-term danger of extinction. Our planet is burning," says United Nations Secretary-General António Guterres.
3. "The trend is very clear: 37 of the last 40 years were the warmest recorded since 1880, and the six warmest years recorded were the last six years," says Pascal Peduzzi, Director of UNEP's Global Resource Information Database in Geneva. "For those who think Australia is always burning, graphs clearly show that these fires were exceptional."

**4.** "This service, accessible via the UNEP's World Environment Situation Room, is provided for all countries at national and provincial levels. It identifies trends in wildfire activity since 2003, when the data first became available and monitoring began. We have sliced and diced the satellite-based data on wildfires worldwide from 2009 to the present day. We analyse the wildfires' data by month, type of land cover, protected area, province and nation to produce information products," Peduzzi adds. (Source: UN Environment)

**Answer the following questions, based on the passage above**

i. What do the reports confirm about the 2019-20 Australian fires?

(a) the fires were not normal

(b) the fires were normal

(c) the fires were natural

(d) data inconclusive

ii. What was the difference in the recorded temperatures in 2019 from the 1880s?

(a) 2019 recorded the wettest temperatures since 1880s

(b) 2019 recorded the hottest temperatures ever

(c) 2019 recorded the cooler temperatures than 1880s

(d) 2019 recorded the warmest temperatures since 1880s

iii. What comparison has been made between the rising sea temperatures and Hiroshima?

(a) ocean temperatures are rising at the equivalent of three Hiroshima bombs a second

(b) ocean temperatures are rising at the equivalent of five Hiroshima bombs a second

(c) ocean temperatures are rising at the equivalent of five Hiroshima bombs an hour

(d) none of these

(iv) Choose the option that lists the CORRECT answers for the following:

"Rising temperatures continue to melt records. The past decade was the hottest on record.

1) Scientists tell us that ocean temperatures are now rising at the equivalent of five Hiroshima bombs a second". Whose statement is this?
2) "The trend is very clear: 37 of the last 40 years were the warmest recorded since 1880, and the six warmest years recorded were the last six years." Whose statement is this?

(a) (1) is from United Nations Secretary and (2) is from the UN President

(b) (1) is from the UN President and (2) is from the UN General Secretary

(c) (1) is from United Nations Secretary and (2) is from the Director of UNEP

(d) (1) is from the UN General Secretary and (2) is from the UN President

(v) How can you say that the UN is concerned about the rising numbers of coal plants?

(vi) Since when did the UNEP's World Environment Situation Room has been tracking the world temperatures?

(vii) Which word in the passage means the same as "collect"?

(viii) Which word in the passage is opposite to the meaning of 'vague/murky'?

3. **Read the following text.** 8

1. You may never want to fly kites to keep away evil spirits, as the Chinese have done for centuries, or to make rain, as the Tibetans did, but some more modern and western uses may tempt you to try experimenting yourself along similar lines. Ancient and medieval Chinese sources describe kites being used for measuring distances, testing the wind, lifting men, signalling and communication for military operations.
2. The earliest known Chinese kites were flat (not bowed) and often rectangular. Later, tailless kites incorporated a stabilising bowline. Kites were decorated with mythological motifs and legendary figures; some were

fitted with strings and whistles to make musical sounds while flying. From China, kites were introduced to Cambodia, India, Japan, Korea and the western world.

3. The most widespread use of kites in modern times has been for meteorological investigations. Everybody knows about how Benjamin Franklin, the great American scholar and statesman, sent a kite up in 1752 during a thunderstorm to prove that lightning was caused by electricity. He produced sparks at ground level from a key hung on the wet line as the current flowed down it. A second investigator repeated Franklin's experiment shortly afterwards and was killed. By sending up instruments on kites it has been possible to make readings of air pressure, temperature, speed, direction and humidity. Although thermometers had been sent up long before, it was not until 1894, that a self-reading thermometer, a thermograph, was sent up by a kite.

(a) One the basis of your reading of the above passage, make notes on it using headings and subheadings. Use recognizable abbreviations (minimum four) and a format you consider suitable. Supply a suitable title to it. 5

(b) Make a summary of the above passage in about 80 words. 3

4. **GRAMMAR AND CREATIVE WRITING SKILLS (23Marks)**

(a) **Complete the following passage by choosing the correct option:** 4

Puppets are among the oldest man-made objects in (i)_____ world. Archeologists in Egypt and India have (ii)_____ pointed clay models that are operated by pulling their strings, which dates back to 4,000 years. Historians tell us that puppets (iii) _____ created by nearly all people of all times. The first puppets (iv)_____probably used mostly by adults.

(i)
- (a) a
- (b) an
- (c) any
- (d) the

(ii)
- (a) find
- (b) found
- (c) finding
- (d) fond

(iii)
- (a) has been
- (b) is
- (c) was
- (d) have been

(iv) (a) was

(b) were

(c) has been

(d) had been

5. **Rearrange the words and phrases to form meaningful sentences. (*ANY THREE*)** 3

(i) disappointment/to/lead/broken/and/sorrow/promises

(ii) and/his/word/thoughtful/keeps/is/always/gentleman/true/a

(iii) to keep/and/hasten/promise/it/will be/he/slow to/a/make

(iv) friendship/a/you/broken/cost/promise/your/can

6. **Attempt *ANY ONE* of two, in about 50 words**. 3

You are General Manager of Oasis Export House, Gurgaon, Delhi. You want to appoint a Marketing Manager for your company. Draft an advertisement.

***OR***

You own a commercial flat suitable for an office/bank. You wish to rent it out. Draft an advertisement to be published in 'Time Times of India', New Delhi under the classified columns.

7. **Attempt *ANY ONE* of two, in about 50 words.** 3

Draft a poster against the ill-effects of plastics on the environment. Suggest alternative solutions as well.

***OR***

You are the Sports Instructor at ABC Primary School. You are arranging the Annual Sports Day of the school. Design an attractive poster to inform the parents of the students about it.

8. ***ANY ONE*** **of the two, in about 120-150 words.** 5

'Early to bed and early to rise makes a man healthy, wealthy and wise is a well- known saying. You are Sumit/Sara of class XI. Write a **speech** to be delivered in the school morning assembly on the benefits of rising early.

***OR***

Games play an important role in our lives. They are not only the means of entertainment but also keep us physically fit. Some like indoor games and other outdoor. Write a **speech** for your school's morning assembly on the topic 'The Importance of Games in Our Life'.

9. ***ANY ONE*** **of the two, in about 120-150 words** 5

Write a **debate** in favour of or against the topic '*Do Social Media Platforms Do More Harm Than Good'*.

OR

Write a debate on *Is Climate Change a Real Threat*? in favour of or against the motion.

## SECTION C: LITERATURE TEXTBOOK AND SUPPLEMENTARY READING TEXT (31Marks)

10. **Read the given poem extracts and answer the questions for *ANY ONE* of the two, given.** **3**

*The Laburnum top is silent, quite still*

*In the afternoon yellow September sunlight,*

*A few leaves yellowing , all its seeds fallen.*

(i) What does 'Laburnum Top' mean here? Name the poet.

a) Top part of the Laburnum tree
b) Top part of the tree with yellow flowers
c) Top part of the silent, quiet and still tree'
d) All the above

(ii) What has happened to the tree?

(iii) Find a word from the extract which is the antonym of 'noisy'?

**OR**

*I descend the lave, the droughts atomies*

*dust-layers of the globe*

*And all that in them without me were seeds*

*only, latent, unborn;*

(i) Name the poetic device used in the first line of the given extract.

a)Personification b)Alliteration c)Simile d)Metaphor

(ii) With what purpose does the rain descend from the sky?

(iii) Give the synonym of the word 'lave'

11. **Read the given extracts and answer the questions for <u>*ANY ONE*</u> of the two, given.** 3

*"The thought was almost revolting. She could never have been pretty, but she was always beautiful."*

(i) What does the author mean by saying that his grandmother was always "beautiful" despite not being "pretty".

a) Beautiful by heart
b) She had a spiritual beauty
c) She was kind hearted
d) All the above

(ii) How does this perception of beauty affect the author's relationship with his grandmother?

(iii) '*an expanse of pure white serenity'*, Infer the meaning of the given expression.

***OR***

*The night dragged on with an endless, bitterly cold routine of pumping, steering and working the radio. We were getting no replies to our Mayday calls — which was not surprising in this remote corner of the world. Sue's head had swollen alarmingly; she had two enormous black eyes, and now she showed us a deep cut on her arm. When I asked why she hadn't made more of her injuries before this, she replied, "I*

*didn't want to worry you when you were trying to save us all."*

(i) Who was hurt due to the collision?

a) Mary
b) Jonathan
c) Susan
d) Larry

(ii) What is "May day" call?

(iii) What did the ship collide with?

12. **Read the given extracts and answer the questions for ***ANY ONE*** of the two, given** **4**

*MRS PEARSON: Don't be silly.*

*DORIS: [indignantly] It's not me that's being silly — and I must say it's a bit much when I've been working hard all day and you can't even bother to get my tea ready. Did you hear what I said about my yellow silk?*

*MRS PEARSON: No. Don't you like it now? I never did.*

*DORIS: [indignantly] Of course I like it. And I'm going to wear it tonight. So I want it ironed.*

*MRS PEARSON: Want it ironed? What d'you think it's going to do —iron itself?*

(i) Identify the tone in which Mrs. Pearson talks.

a) Commanding tone

b) Aggrieved tone

c) Irritated tone

d) Light and flustered tone

(ii) Why is Doris consistently reacting 'indignantly' towards her mother Mrs. Pearson?

(iii) Write about the relationship between Doris and Mrs. Pearson.

(iv) Write the word according to the given passage describes Doris's personality.

***OR***

*As I walked slowly back to the station I thought about my mother, who had given me the address years ago. It had been in the first half of the war. I was home for a few days and it struck me immediately that some thing or other about the rooms has changed, I missed various things. My mother was surprised that I should have noticed so quickly. Then she told me about Mrs Dorling. I had never heard of her but apparently she was an old acquaintance of my mother, whom she hadn't seen for years. She had suddenly turned up and renewed their contact.*

(i) What made the narrator turn up to the station?

a) Mrs. Dorling recognising her
b) Mrs. Dorling abusing her
c) Mrs. Dorling not recognising her deliberately
d) Mrs. Dorling recognising her deliberately.

(ii) Where did the war take place?

(iii) Why did Mrs. Dorling renew her contact with Mrs. S?

(iv) What does the word 'acquaintance' mean?

13. **Answer *<u>ANY TWO</u>* of the following four questions (*one from Prose and one from Poetry*), in about 40-50 words.** 6

(i) What does the poet say about her mother's face?

(ii) How did the poet conclude that Hell and Heaven were imaginary places?

(iii) How was the weather on the morning of 2nd January?

(iv) Latent seeds get a life by rain. Explain.

14. **Attempt *<u>ANY ONE</u>* of the following two questions in about 40 - 50 words.**

(i) What made the boys return the horse near the end of the story. 3x1

(ii) What change can be seen in Annie's family in the end?

15. **Attempt ***ANY ONE*** of the following two questions in about120 - 150 word.** 6x1

(i) What was the grandmother's reaction towards education in the English school?

(ii) What happened after the 'ominous silence' in *We're Not Afraid to Die...*

16. **Attempt ***ANY ONE*** of the following two questions in about 120 to 150 words:** 6x1

(i) How did Mrs. Fitzgerald utilise her husband's posting in the East?

***OR***

(ii) Why did Mrs. Dorling refuse to even talk to the narrator?

.....

**Name: _____ Sec:_____Roll No:____**

**SET - B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION [2024-25]**
**ENGLISH CORE**
**Class – XI**

**Time: 3 hours** **Maximum Marks : 80**

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***GENERAL INSTRUCTIONS:***

1. *The Question Paper contains THREE sections-READING, GRAMMAR &CREATIVE WRITING and LITERATURE.*
2. *Attempt questions based on specific instructions for each part.*

## SECTION A: READING SKILLS (26 marks)

### Reading Comprehension Through Unseen Passages

1. **Read the following text.** 10

1. It is common knowledge that school children are under great pressure to perform well in all fields, study ten subjects, play games and develop an impressive image. How do they manage? The skills, techniques and principles which they pick up while still young help them cope.
2. Two of twentieth century's finest minds have lamented that schools are not teaching the basics of personal excellence or the science of success. Edward De Bono laments: "*Almost all of what a child learns at school often is totally irrelevant to his need in later life. Most schools do not teach thinking at all.*"

The serious thesis of this article is that management must be taught as a school subject. The weightiest argument is that children are managers.

3. Many of the children are called upon to play directly three of the interpersonal roles: "Figurehead", "Leader" and "Liaison Officer". They do this while assisting teachers as monitors or class representatives or group leaders during educational tours and field work; while captaining teams on playgrounds; and while leading teams in quiz, debating and other competitions. Many more play these roles as surrogates.
4. The decision role of "Entrepreneur" and "Resource Allocator" may only occasionally be assigned to children. However, it is worth noting that, according to a recent survey in Delhi, a monthly allocation of up to Rs. 1000 is available as pocket money to school children. Therefore, school children too need to have control over money and to develop a sense of budget. If we add to these financial resources, the resources of time, information and intellect available to children, the first two decision roles are not irrelevant to them.
5. Children play the other two decision roles: "Disturbance Handler" and "Negotiator" more often. True, the international roles of "monitor", "disseminator" and "spokesman" are not so frequently and formally engaged in by children as by CEOs, MDs, Vice Presidents and other adult managers.
6. If you cannot see children as managers, they are managers in the making: many of the management habits (e.g., using a to-

do list), management skills (e.g. Sensitive listening), management attitudes and values are formed early in life. Personality theorists believe that it is extremely difficult to change personality traits, styles of thinking and habits of behaviour once they are formed.

**7.** As in language learning, where basic aspects of language like pronunciation and rhythm are extremely resistant to learning after puberty, good management habits, attitudes and values are difficult to acquire in adulthood. In the fifties, even in the educationally advanced countries such as the U.S, Algebra was thought to be too abstract to be taught in senior schools. Now it is taught from upper primary classes onwards in both educationally progressive and developing countries. Computer skills, lateral thinking and swimming, often felt to be forbidden by adults are easily learnt by children. In fact, both research evidence and specialists' beliefs strongly support the view that children's ability to learn skills like swimming and creative thinking is much more developed than adults. Equally important, complex organisms (a) learn what is necessary or pleasurable and (b) adapt themselves in ways that will serve their needs and interests with amazing enthusiasm, ease and effectiveness.

**Answer the following questions, based on the passage above**

(a) The reason of pressure on children is: 1

i. Common knowledge

ii. Absence of skills

iii. Choice between studies and games

iv. Performance demand in all fields

(b) What, according to a few educationists, is lacking in school teaching? 1

i. Basics of personal excellence

ii. Science of success

iii. Thinking

iv. All of the above

(c) What roles are children called upon to play obviously in schools? 1

i. Figurehead

ii. Entrepreneur

iii. Negotiator

iv. All of the above

(d) How are interpersonal roles performed by students? 1

i. adapting themselves in ways that will serve their needs

ii. as group leaders during educational tours and field work

iii. quiz team members

iv. spokesmen

(e) The sense of budget among children is an indication towards their capability of performing: 1

i. Interpersonal role

ii. Decision role

iii. Leading role

*iv.* Informational role

(f) According to the passage, the article advocates teaching _____ as a subject in schools. 1

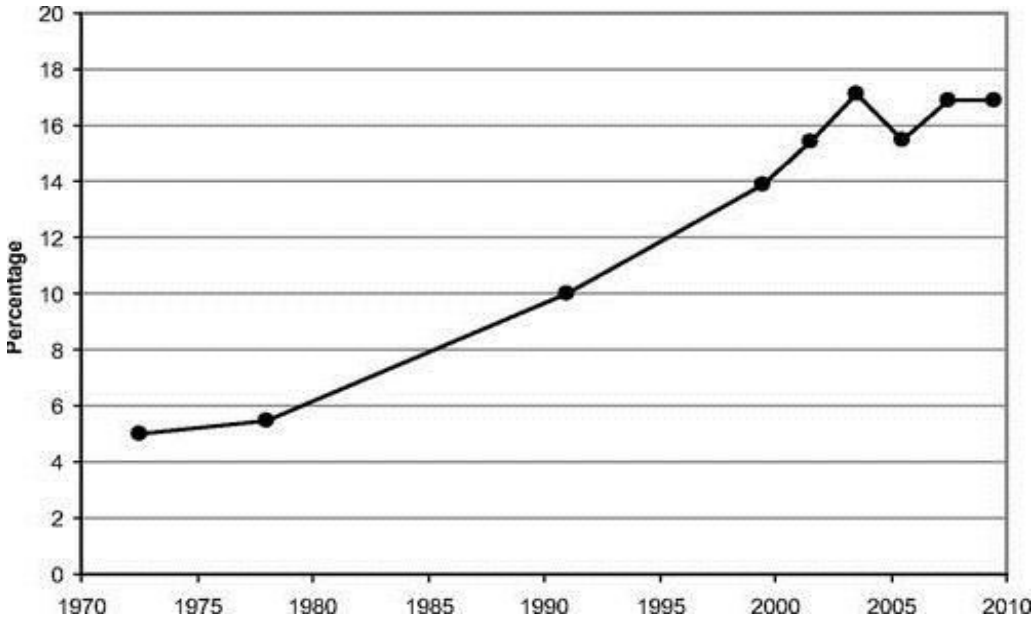
(g) What does the survey in Delhi, with regards to monthly allocation of pocket money to school children, speak of the need for? 1

(h) Why is it difficult to acquire good management habits in adulthood? 1

(i) The term for "*a detailed critical inspection / study*", as used in Para 4, is _____. 1

(j) Find the word from the passage (*Para 7*) which is opposite in meaning of "*concrete*"? 1

2. **Read the following text.** 8



## ***OBESITY IN CHILDREN IN UNITED STATES***

1. It's not 'cool' to be fat, but that has not prevented an obesity epidemic from occurring among America's youth. Childhood obesity increased from 5% in 1974 to about 13% in 1994. Today it is about 20% and rising. Children, on average, spend up to five to six hours a day involved in sedentary activities like watching television, using the computer, and playing video games, which is partly to blame for this escalating rate. Perhaps it wouldn't matter if they were sufficiently active at other times, but most of them aren't.
2. To make matters worse, children are bombarded with TV ads from fast food chains and other purveyors of high fat, high sugar meals and snacks. These highly effective advertising campaigns, combined with a physically inactive lifestyle, have produced a generation of kids who are at high risk for obesity-associated medical conditions.
3. The major health threat is the early development of Type 2 diabetes (adult onset), particularly in children with a family history of disease. Doctors are reporting a surge in young adolescents developing Type 2 diabetes – which can lead to heart disease, high blood pressure, kidney disease, stroke, limb amputations and blindness. People who develop diabetes in adolescence face a diminished quality of life and shortened life span, particularly if the disease progresses untreated. It's a scary prospect for our children, but, in many cases, obesity and diabetes are preventable.

4. When children are spending most of their free time sitting in front of televisions and computers, they are not outside running, jumping or engaging in team sports that would keep their weight down. Parents need to set limits on the time their children are engaged in passive activities. Paediatricians recommend restricting children to one to two hours per day on TV and computers combined – though older children may need additional time for learning activities.

5. Parental involvement remains the most important key to our children's healthy diets. Programmes to educate parents about nutrition are essential. Fast foods should be consumed only in moderation. Caregivers, who are often busy and harried, must avoid the temptation to whisk their kids into fast-food restaurants or to pick up fast food for dinner at home. Changing eating habits and lifestyles is not easy, but the health benefit for our children is a wonderful payoff for parents willing to take on the task.

(a) One of the major reasons behind obesity among children is _____. 1

i. using the computer
ii. playing indoor games
iii. watching television
iv. their remaining inactive at most times

(b) Based on the information given in the passage, choose the option that correctly states that adolescents who develop diabetes may have _____ if not treated promptly. 1

1. heart disease, high blood pressure
2. limb amputations and blindness
3. reduced span of life
4. poor quality of life

i. 1 & 2
ii. 3 & 4
iii. 1, 2, 3 & 4
iv. 1, 2 & 3

(c) Why do parents need to set limits on the time their children are engaged in passive activities? 1

i. keep their weight down
ii. paediatricians have so recommended
iii. time is required for learning activities
iv. All of these

(d) Based on the graphical chart in the passage, choose the option that correctly states the depiction of obesity condition among children 1

i. The obesity graph has always been on the rise
ii. The period 2002-04 witnessed the steepest rise
iii. There was a check in rise during 1973-75
iv. All of these

(e) Early development of Type 2 diabetes is normally found in children with _____. 1

(f) The most important factor to improve our children's diet is _____. 1

(g) *"...but the health benefit for our children is a wonderful payoff for parents willing to take on the task."* Here 'the task' refers to _____. 1

(h) The word 'purveyors' as used in the passage (Para 2) means _____. 1

3. **Read the following text.** 8

1. We all want to succeed – whether it's in losing weight, learning the guitar, speed-reading, or starting our own business. For those of us who have tried and failed, success seems elusive. Why it is one person succeeds where another person fails? First and foremost, I believe it is in their mindset. But secondly, I believe that successful people have developed certain habits, either naturally or through research that the rest of us haven't stumbled upon yet.
2. What is important to you? Finding your core values may seem a bit off-topic when it comes to success, but creating goals that are in line with your values is key to creating intrinsic motivation. Sit and reflect on what you value most. Pick a handful of things and actually write them down. Remind yourself of your values every day, and reflect on whether you are honouring those values through your work.

3. Choose one goal to start. Focus is the key here. The more focused you are on one goal, the higher chance you have of success. Keep it realistic, while not giving yourself too much time. Set a date for success. By setting a time limit, you are making the process more real. Believe fully in your ability to achieve your goal. Visualize yourself having completed your goal in the exact time-frame you have chosen, although finishing early is also acceptable. Success is inevitable.
4. Push yourself. Go out of your comfort zone. This is the best way to learn, and the best way to make progress quickly. If you're looking for new ideas, being risk averse will not help. Push yourself to be courageous, and take the next step. Failure is inevitable when you take risks, which is what you'll be doing if you want to succeed. By its very definition, the desire to succeed at something means you are risking failure. Many people tend to give up far too early. Use failure. Treat it as a good thing, and march on!

(a) **On the basis of your reading of the above passage *make notes* on it using headings and sub-headings. Use recognisable abbreviations wherever necessary. Supply an appropriate title to it.** 5

(b) **Write a *summary* of the above passage in 50 words.** 3

## SECTION B : GRAMMAR AND CREATIVE WRITING SKILLS (23 marks)

4. **Fill in the blanks by choosing the correct option from the alternatives given below:** 4

Most of us (i) _____in our efforts at self-improvement because our schemes are too ambitious and we never have time (ii) _____ carry them out. We also make the fundamental error (iii) _____ announcing our resolution to everybody so that we look even more foolish when we slip back (iv) _____our bad old ways.

(i) (a) feel (b) fail (c) fill (d) file

(ii) (a) to (b) of (c) for (d) at

(iii) (a) by (b) in (c) on (d) for

(iv) (a) to (b) on (c) into (d) at

5. **Rearrange <u>ANY 03 out of 04</u> following words and phrases to form meaningful sentences:** 3

(a) children/are/many/still/employed/factories/in

(b) wash/they/when/utensils/playing/should/dolls/they/be/with

(c) children/don't/most/they/entitled/know/are/to/rights/certain/that

(d) CRY/bring/in/India/an/and/prosperity/peace/organization/is/to

6. **Attempt *ANY ONE* of two, in about 50 words.** 3

(a) You are Barun Sarkar of 10, Rajaji Nagar, Bengaluru. You want a Science teacher for your son who is a Class XII student. Draft a suitable **advertisement** in not more than 50 words stating your requirements.

*OR*

(b) You want to rent out your newly constructed flat in the heart of the city. Draft an **advertisement** in not more than 50 words to be published in '*The Deccan Herald'*, Bangalore under classified columns. Give all the necessary details. You are Mohan/Mahima of Jaya Nagar, Bengaluru.

7. **Attempt *ANY ONE* of two, in about 50 words.** 3

(a) Design a poster in not more than 50 words about the need for regular yoga and exercise on the occasion of *International Yoga Day*. You are Arvind / Adrija, Sports Captain of St. Carmel School, Durgapur.

*OR*

(b) You intend to spread the message of communal harmony to observe the occasion of *Communal Harmony Campaign Week*. Design a poster with slogans in not more than 50 words for the same to be displayed in the school premises during the week.

8. **Attempt *ANY ONE* of two, in about 120-150 words** 5

"*Beat Plastic Pollution*", the theme for World Environment Day 2024, is a call to action for all of us to come together to combat one of the great environmental challenges of our time. Chosen by this year's host, India, the theme of World

Environment Day 2024 invites us all to consider how we can make changes in our everyday lives to reduce the heavy burden of plastic pollution on our natural places, our wildlife – and our own health.

Draft a **speech** to be delivered in the morning assembly of your school on the occasion of World Environment Day. You are Amita/Abhishek.

*OR*

Draft the text of a speech on the topic, "*A student must know how to manage his time.*" It is to be delivered in the morning assembly. You are Karan/ Karuna, Head Boy/ Girl of the school.

9. **Attempt *ANY ONE* of two , in about 120-150 words** 5

*"Academic excellence is the sole requirement for a successful career."* Draft the text of your **debate** either for or against the motion for an Inter School Debate Competition. You are Suparna/ Subham.

*OR*

Draft the text of a **debate** either in favour or against the motion: *'Courses in Commerce provide a better scope in career than Sciences.'* Invent necessary details.

## SECTION C : LITERATURE TEXTBOOK AND SUPPLEMENTARY READING TEXT (31 marks)

10. **Read the given extracts and answer the questions for *ANY ONE* of the two, given.** 3

*The Laburnum top is silent, quite still*
*In the afternoon yellow September sunlight,*
*A few leaves yellowing, all its seeds fallen.*

(a) How does the poet describe the Laburnum tree top?

i. Motionless and quiet
ii. Yellow and falling
iii. Sunlit
iv. All of the above

(b) **Complete the sentence appropriately.**

The silent tree top is moved to 'life' by _____.

(c) Identify the figure of speech in '*September sunlight*'.

***OR***

*Eternal I rise impalpable out of the land and the bottomless sea,*

*Upward to heaven, whence, vaguely form'd, altogether changed, and yet the same...*

(a) The extract is a conversation between ———

i. The Poet and the clouds
ii. The Poet and the rain
iii. The Rain and the earth
iv. All of the above

(b) **Complete the sentence appropriately.**

"*Upward to heaven…*" refers to _____.

(c) **Explain:** *"altogether changed, and yet the same..."*

11. **Read the given extracts and answer the questions for ANY ONE of the two, given.** 3

*When I decided to go abroad for further studies, I was sure my grandmother would be upset. I would be away for five years, and at her age one could never tell. But my grandmother could.*

(a) "*…and at her age one could never tell.*" What could not be told?

i. Her age.
ii. She would be upset.
iii. She would live till her grandson returned.
iv. All of the above

(b) *But my grandmother could.* What could the grandmother do?

(c) How did the grandmother react to the author's decision?

***OR***

*The first indication of impending disaster came at about 6 p.m., with an ominous silence. The wind dropped, and the sky immediately grew dark. Then came a growing roar, and an enormous cloud towered aft of the ship. With horror, I realised that it was not a cloud…*

(a) The '*impending disaster*' referred to is / are _____.

i. gigantic waves
ii. ominous silence
iii. enormous cloud
iv. typhoon

(b) The expression '*ominous silence*' means _____.

(c) If "...*it was not a cloud...*", what was it then?

12. **Read the given extracts and answer the questions for ANY ONE of the two, given.** 4

*MRS FITZGERALD: Let 'em wait or look after themselves for once. This is where your foot goes down. Start now.*

*[She lights a cigarette from the one she has just finished.]*

*MRS PEARSON: [embarrassed] Mrs Fitzgerald—I know you mean well—in fact, I agree with you— but I just*

*can't—and it's no use you trying to make me. If I promise you I'd really have it out with them, I know I wouldn't be able to keep my promise.*

(a) Which of the following explains, "*This is where your foot goes down.*"?

i. To physically fix your foot down on the floor.
ii. To restrain yourself against a stronger person.
iii. To adopt a firm policy when faced with disobedience.
iv. To give into what is not expected.

(b) List a contrast in personalities of the two women?

(c) Who should be made to '*wait*'?

(d) Why does Mrs. Pearson fear that she '*just can't*'?

***OR***

*'Have you come back?' said the woman. 'I thought that no one had come back.'*

*'Only me.'*

*A door opened and closed in the passage behind her. A musty smell emerged.*

*'I regret I cannot do anything for you.'*

*'I've come here specially on the train. I wanted to talk to you for a moment.'*

*'It is not convenient for me now,' said the woman. 'I can't see you. Another time.'*

(a) *'Have you come back?' said the woman.* This expresses _____.

i. a question
ii. the woman never had expected the author to return.
iii. her delight and happiness
**iv.** a sympathy

(b) What prompts the woman to say, '*'It is not convenient for me now…"*?

(c) Mention the address that the narrator had come to.

(d) Why had the narrator come to the address?

13. **Answer *ANY TWO (01 FROM PROSE AND 01 FROM POETRY)* of the following 04 questions, in about 40-50 words.** 3x2

(a) *The poet talks about a particular cardboard.* How is it special to her? (*A Photograph*)

(b) How are the several questions asked by the poet significant in the poem, "*Childhood*"?

(c) What prompted Jonathan to call his father the 'best daddy' and 'best captain'?

(d) *"Which, strange to tell, gave me an answer..."* What leaves the poet surprised when he gets an answer from the rain?

14. **Answer *ANY ONE* of the following two questions, in about 40-50 words.** 3

(a) *The farmer, John Byro, I said... He wants his horse.*

How did Aram come to know that the horse belonged to John Byro?

(b) What was Mrs. Fitzgerald's opinion of Mrs. Pearson's attitude?

15. **Answer *ANY ONE* of the following two questions, in about 120-150 words.** 6

*The grandmother herself was not formally educated but was serious and concerned about the author's education.* How does the author's reminiscence from the text support this?

*OR*

How does the title, *"We're Not afraid to die... if We Can All Be Together"* justify the voyagers' battle and ultimate triumph over the inclement ocean?

16. **Answer *ANY ONE* of the following two questions, in about 120-150 words.** 6

*MRS FITZGERALD: [cutting in] Maybe not. But it'ud b*

*e better for them if they learnt to treat you properly... Husbands, sons, daughters should be taking notice of wives an' mothers, not giving 'em orders an' treating 'em like dirt. An' don't tell me you don't know what I mean, for I know*

*more than you've told me.*

How did Mrs Fitzgerald help Mrs Pearson realize her value in the family?

*OR*

*I had remembered it. But I had waited a long time to go there...I wanted to see them, touch, remember.*

Why did the narrator, Mrs S's daughter, specially make a visit to 46, Marconi Street? Was her purpose achieved? Give reasons.

**********

**Name:_____ Sec:_____ Roll No_____**

**SET-A**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION [2024-25]
## MATHEMATICS
## Class: XI

**Time: 3 Hrs.** **Maximum Marks: 80**

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**General Instructions:**

(i) This question paper has 5 sections A,B,C,D and E
(ii) Section A contains 17 MCQs and 3 assertion reason based question carrying 1 mark each
(iii) Section B contains 4 case based questions carrying 4 marks each.
(iv) Section C contains 8 questions carrying 2 marks each.
(v) Section D contains 6 question carrying 3 marks.
(vi) Section E contains 2 question carrying 5 marks.
(vii) All questions are compulsory. However internal choice in 3 questions of 2 marks and 2 questions of 3 marks and 1 question of 5 marks are provided.

## SECTION-A

1. The empty set or the null set or the void set is not denoted by the symbol (a)$\phi$ (b){ } (c) $\{\phi\}$ (d) $\phi$ or { } [1]

2. If A $\subset$ B then [1]
(a) $a \in A \Rightarrow a \notin B$ (b) $a \in A \Rightarrow a \in B$
(c) $a \notin A \Rightarrow a \in B$ (d $a \in B \Rightarrow a \in A$

3. If n(A)= 2 and n(B)=3 , then the number of relations from set A to set B are (a)6 (b)8 (c)4 (d)64 [1]

4. The domain of the real valued function $f(x) = \sqrt{1-x^2}$ [1]
(a) [0,1] (b)$[-1,1]$ (c)$[-1,0]$ (d)$(-\propto, 1] \cup [1, \propto)$

5. Real part of $\frac{3}{i}$ is (a) 3 (b)0 (c)$-3$ (d)$i$ [1]

6. The solution of the inequality $3 - 2x \geq x - 12, x \in N$ [1]
(a) {0,1,2} (b){1,2,3} (c) {1,2,3,4,5} (d){0,1,2,3,4,5}

7. $\frac{3\pi}{4}$ in degree measure is (a)45° (b)180 ° (c)270 ° (d) 135° [1]

8. The value of $\sin(45° + \theta) - \cos(45° - \theta)$ [1]
(a)$2cos\theta$ (b)$2\ sin\theta$ (c) 1 (d)0

9. If $sin\theta + cos\theta = 1$ then the value of $sin2\theta =$ [1]
(a)1 (b)0 (c)$-1$ (d)2

10. $\lim_{x\to a} \frac{x^{12}-a^{12}}{x-a} =?$ (a)$12a^{11}$ (b) $11a^{12}$ (c)0 (d) $a^{12}$ [1]

11. $\lim_{x\to 0} \frac{e^{3x}-1}{x} =?$ (a)3 (b)1 (c)0 (d)x [1]

12. If $f(x) = c$ where c is a constant, then $f'(10) =?$ [1]
(a)0 (b)c (c)10 (d)1

13. Derivative of $\frac{1}{x}$ with respect to x at x=4 is [1]
(a) $\frac{1}{4}$ (b)$-\frac{1}{16}$ (c) 4 (d)16

14. If $\frac{1}{8!} + \frac{1}{9!} = \frac{x}{10!}$ then x = [1]
(a)100 (b) 90 (c) 10 (d)0

15. LCM of 6! , 8! , 9! ,11! (a)11! (b)99! (c)88! (d)66! [1]

16. If ${}^{n}C_{12} = {}^{n}C_{8}$ then n= [1]
(a) 20 (b)12 (c) 6 (d)30

17. ${}^{15}C_8 + {}^{15}C_9 - {}^{15}C_6 - {}^{15}C_7 =$ [1]
(a) ${}^{15}C_4$ (b) ${}^{15}C_1 + {}^{15}C_3$ (c) 0 (d)${}^{15}C_2$

18. **Assertion(A):** Two equal arcs of two different circles subtends angles at the centre of measure 60° and 40° respectively, ratio of their respective radius is 3:2 [1]
**Reason(R):** in a circle of radius r , an arc of length $l$ , subtends an angle of $\frac{l}{r}$ radians at the centre
(a) A and R both are true and R is the correct explanation of A
(b) A and R both are true but R is not the correct explanation of A
(c) A is true R is false
(d) R is true A is false

19. **Assertion(A):** number of relations from a set A={1,3} to the set B={$-1$,0,1} is 32 [1]
**Reason(R):** number of relations from a set A to the another set B is $2^{n(A)\times n(B)}$
(a) A and R both are true and R is the correct explanation of A
(b) A and R both are true but R is not the correct explanation of A
(c) A is true R is false
(d) R is true A is false

20. **Assertion(A):** a relation R={(1,3) , (2,2), (3,1)} defined on the set A ={1,2,3} is a function [1]

**Reason(R):** A relation from a set A to the another set B , is said to be a function if every element of A is related to a unique element of B

(a) A and R both are true and R is the correct explanation of A
(b) A and R both are true but R is not the correct explanation of A
(c) A is true R is false
(d) R is true A is false

## SECTION-B

21. **Case study 1**: In a survey it was found that in a group of 950 persons ,750 can speak hindi and 460 can speak English.
(i)how many can speak both Hindi and English? 1
(ii)how many can speak hindi only? 1
(iii)how many can speak English only? 2

OR

(iii) if H is the set of people who speak hindi and E is the set of people who speak English then find n($H - E$)

22. **Case study 2**: In a school , in every class a student is given a unique natural number, known as roll number of the student.we can consider a relation from "students of a class" to the set of natural numbers. there are 38 students in the class
(i)is the relation from "students of a class" to a set of natural numbers, a function? 1
(ii) is range equal to the set of natural numbers? 1
(iii)how many elements are there in the range of this relation? 2

OR

(iii)for the above relation what is the domain of the relation?

23. **Case study 3**: In a family all had gathered for the lunch and after lunch they had a fruit each.APPLE was one of the fruits. A student studying in class XI took the apple and started thinking about different arrangements of the letters of the word 'APPLE' . help him to answer the following
(i)in how many ways all the letters of the word APPLE can be arranged? 1
(ii)how many words with meaning or without meaning will start with letter A? 1
(iii) how many words with meaning or without meaning will start with a vowel? 2

OR

(iii) in how many words both the P's are always together ? the word may or may not have meaning

24. **Case study 4:** During sports day a dance program also is organised, teachers have to select 5 students ,out of 7 boys and 9 girls who want to be a part of the function , teachers are trying out different combinations.

(i)find the total combinations of selecting 1 boy and 4 girls 1
(ii)find the total combinations of selecting 4 boys and 1 girl 1
(iii) find the total combinations of selecting atleast 4 girls 2

OR

(iii)find the combinations of selecting all the boys

## SECTION-C

25. Let U={1,2,3,4,5,6,7,8,9} , A={2,4,6,8}, B={3,4,5,6} find $(A-B)'$ [2]
26. Determine the domain and range of the relation R defined by $R = \{(x+1, x+5): x \in A\}$ where A= {0,1,2,3,4,5} [2]
27. Find the domain of the real function $f(x) = \frac{x}{x^2+3x+2}$ [2]

OR

If $f(x) = y = \frac{ax-b}{cx-a}$ then prove that $f(y) = x$

28. Evaluate $\left[i^{18} + \left(\frac{1}{i}\right)^{25}\right]^3$ [2]
29. A wheel makes 360 revolutions in one minute. Through how many radians does it turn in one second? [2]
30. Prove that [2]
$\sin(n+1)\,x\ \sin(n+2)\,x + \cos(n+1)\,x \cos(n+2)\,x = \cos x$
31. Find n if ${}^{n-1}P_3 : {}^{n}P_4 = 1:9$ [2]

OR

A boy has 6 pockets . In how many ways the boy can put 5 coins in his pockets?

32. How many diagonals can be drawn of a hexagon? [2]

OR

In how many ways can 5 boys and 3 girls be seated in a row, so that no two girls sit together

## SECTION-D

33. Prove that $cos20° \cos 40° \, cos60° \, cos80° = \frac{1}{16}$ [3]

OR

Prove that $\frac{\sin(180°+\theta)\cos(90°+\theta)\tan(270°-\theta)\cot(360°-\theta)}{\sin(360°-\theta)\cos(360°+\theta)cosec\,(-\theta)\sin(270°+\theta)} = 1$

34. Evaluate $\lim_{x\to 0} \frac{x\tan 4x}{1-\cos 4x}$ [3]

OR

$\lim_{x\to a} \frac{(\cos x - \cos a)}{x-a}$

35. Evaluate: $\lim_{x\to 2} \frac{x^3-2x^2}{x^2-5x+6}$ [3]

36. If $f\,(x) = 1 + x + \frac{x^2}{2} + \cdots + \frac{x^{100}}{100}$ then find $f\,'(1)$. [3]

37. Differentiate $e^x$ with respect to x from the first principle [3]

38 The difference between the two acute angles of a right angled triangle is $\left(\frac{2\pi}{5}\right)^c$. Find these angles in degrees and radians [3]

## SECTION-E

39. If z be a complex number such that $z \neq 1 \; and \; |z| = 1$. then show that $\frac{z-1}{z+1}$ is purely imaginary . what will be your conclusion when $z = 1$ [5]

40. Solve the system of inequations [5]

$$\frac{6x}{4x-1} < \frac{1}{2}, \frac{x}{2x+1} \geq \frac{1}{4}$$

**OR**

Solve $\frac{5x+8}{4-x} < 2, x \in R$

.....

**Name:_____ Sec:_____ Roll No_____**

**SET-B**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
# HALF - YEARLY EXAMINATION [2024 – 2025]
# CLASS - XI
# SUBJECT: MATHEMATICS

**TIME: 3 Hrs.** **Maximum Marks: 80**

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General Instructions:

1. This question paper contains – **five sections A, B, C, D** and **E**. Each section is compulsory. However, there are internal choices in some questions.
2. **Section A** has 17 **MCQ's and 03** Assertion – Reason based questions of 1 mark each.
3. **Section B** has 04 **Source Based / Case Based (CBQ) – type** question of 4 marks.
4. **Section C** has 08 **Short Answer (SA) – type** questions of 2 marks each.
5. **Section D** has 06 **Long Answer (LA-I) – type** questions of 3 marks each.
6. **Section E** has 02 **Long Answer (LA-II) – type** questions of 5 marks each.

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## SECTION - A
## (Multiple Choice Questions)
## Each question carries 1 mark.

1. If U = { 0, 5, 10, 15, 20 } and A = { 5, 10 }, then the number of elements in $A^c$ are: [$A^c$ is the complement of A] 1
   (a) 3
   (b) 2
   (c) 4
   (d) 5
2. If A = {a: the sum of all positive factors of a is 2a}, then: 1
   (a) $28 \in A$
   (b) $17 \in A$
   (c) $27 \in A$
   (d) $35 \in A$
3. If ( 3a + 5, 5 – b ) = ( 8, -2 ), then: 1
   (a) a = 1, b = 3
   (b) a = 1, b = 4
   (c) a = 1, b = 3/2
   (d) a = 1, b = 7

4. If $2f(x) - 3f(\frac{1}{x}) = x^2$, $(x \neq 0)$, then $f(2)$ is equal to: 1

(a) $-\frac{7}{4}$

(b) $\frac{5}{2}$

(c) -1

(d) None of these

5. Evaluate: $i^{30} + i^{40} + i^{60}$ 1

(a) -1

(b) -2

(c) 0

(d) 1

6. The solution set of $|x - 2| \leq 5$ is: 1

(a) $[-3,7]$

(b) $(-3,7)$

(c) (-3,7]

(d) None of these

7. A clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 3 o'clock in the afternoon? 1

(a) $240^\circ$

(b) $150^\circ$

(c) $210^\circ$

(d) $90^\circ$

8. Find the value of $\cos 240^\circ + \sin \frac{\pi}{3}$: 1

(a) $\frac{\sqrt{3}+1}{2}$

(b) $\frac{\sqrt{3}-1}{2}$

(c) $\frac{1-\sqrt{3}}{2}$

(d) $\frac{\sqrt{2}+3}{2}$

9. If $\sin\theta = \sin 45° + \sin 15°$, where $0° < \theta < 180°$, then $\theta$ is equal to: 1

(a) $45°$

(b) $150°$
(c) $60°$
(d) $75°$

10. Evaluate: $\lim_{x \to 0} \frac{ax+x\cos x}{b \sin x}$ 1

(a) $\frac{a+1}{b}$
(b) $\frac{a-1}{b}$
(c) $\frac{b+1}{a}$
(d) $\frac{b-1}{b}$

11. If $f(x) = 3x^2 - 7x + 5$, then $\lim_{x \to 0} \frac{f(x)-f(0)}{x}$ is equal to: 1

(a) 6
(b) -7
(c) 7
(d) -6

12. If $f(x) = x^{100} + x^{99} + \cdots + x + 1$ , then $f'(1)$ is equal to: 1

(a) 5050
(b) 5049
(c) 5051
(d) 50051

13. If $y = \sqrt{x} + \frac{1}{\sqrt{x}}$, then $\frac{dy}{dx}$ at x=1 is: 1

(a) 1
(b) $\frac{1}{2}$
(c) $\frac{1}{\sqrt{2}}$
(d) 0

14. If $(n + 3)! = 110 \times (n + 1)!$, then n is equal to: 1

(a) 6
(b) 7
(c) 8
(d) 9

15. If ${}^{10}P_r = {}^{7}P_{r+2}$, then r is equal to: 1

(a) 6
(b) 8

(c) 10
(d) 4

16. If ${}^{n}C_9 = {}^{n}C_8$, then the value of ${}^{n}C_{17}$ is: 1
(a) 1
(b) 2
(c) 3
(d) 4

17. If ${}^{n}C_2 - {}^{n}C_1 = 35$, then the value of n is: 1
(a) 10
(b) 11
(c) 12
(d) 13

## ASSERTION – REASON BASED QUESTIONS

18. Assertion (A): The radian measure of $30^{\circ}$ is $\frac{\pi}{6}$. 1
Reason (R): $\pi = 180^{\circ}$.
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

19. Assertion (A): The relation R in a set A = {1, 2, 3, 4, 5} defined by R = {(x, y): 5x = y} have the domain {1, 2, 3, 4, 5} and range = {5, 10, 15, 20, 25}. 1
Reason (R): Domain and range of relation R is respectively the set of all first and second entries of the distinct ordered pair of the relation.
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

20. Assertion (A): $f(x) = x^4 + 8x^2 - 5$ is an even function. 1
Reason (R): A function f(x) is said to be an even function if $f(-x) = -f(x)$.
(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

## SECTION - B

**This section** has 04 **Source Based / Case Based (CBQ) – type** question of 4 marks each.

21. In a group of 850 persons, 600 can speak Hindi and 340 can speak Tamil.
Based on the above information, answer the following questions.
(a) How many can speak both Hindi and Tamil? 1
(b) How many can speak Hindi only? 1
(c) How many can speak Tamil only? 2

22. If there are p elements in set A and q elements in set B, then there will be pq elements in $A \times B$ i.e if n(A) = p and n (B) = q, then $n(A \times B) = pq$.
Based on the above information, answer the following questions.
(a) If $A \times B = \{(a, 1), (b, 3), (a, 3), (b, 1), (a, 2), (b, 2)\}$. Then find A and B. 1
(b) If the set A has 3 elements and set B has 4 elements, then find the number of elements in $A \times B$. 1
(c) A and B are two sets given in such a way that $A \times B$ contains 6 elements. If 3 elements of $A \times B$ are (1, 3), (2, 5) and (3, 3), then find A and B. 2

23. On 15th August, 1947 India became independent from the British Empire following the Independence Movement led by Mahatma Gandhi and his message of non – violent resistance. The handover of power was overseen by Lord Mountbatten, the last viceroy of India.

Two friends arranged the letters of the word INDEPENDENCE.

Based on the above information, answer the following questions.

(a) In how many of these arrangements do the words start with P? 1

(b) In how many of these arrangements do all the vowels occur together? 2

(c) In how many of these arrangements do the vowels never occur together? 1

24. In a school, a teacher wants to conduct debate competition on a topic. For this, he divides the students in his class in some groups.

A group consists of 7 boys and 4 girls.

Based on the above information, answer the following questions.

(a) In how many ways can a team of 5 members be selected, if the team has no girls? 1

(b) In how many ways can a team of 5 members be selected, if the team has atleast 1 boy and 1 girl? 1

(c) In how many ways can a team of 5 members be selected, if the team has atleast 3 girls? 2

## SECTION - C

**This section** has 08 **Short Answer (SA) – type** questions of 2 marks each.

25. For any sets A and B, prove that $A - (A \cap B) = A - B$ 2

26. Let $R = \{(x, y): x + 3y = 12, x \in N \text{ and } y \in N\}$. Find domain of R and range of R. 2

27. If $f(x) = \frac{x+1}{x-1}$ then show that $f\{f(x)\} = x$ 2

**OR**

If $f(x) = \frac{2x}{1+x^2}$ then show that $f(\tan\theta) = \sin 2\theta$

28. If $(1 + i)z = (1 - i)\bar{z}$, then prove that $z = -i\bar{z}$ 2

29. Find the degree measure of the angle subtended at the centre of a circle of diameter 60 cm by an arc of length 16.5 cm. 2

30. Prove that $\frac{1-\cos 2x+\sin x}{\sin 2x+\cos x} = \tan x$ 2

31. If $(n + 3)! = 56 \times (n + 1)!$, find the value of n. 2

**OR**

If ${}^{2n}P_3 = 100 \times {}^{n}P_2$, find n

32. If ${}^{n}C_{14} = {}^{n}C_{16}$, find ${}^{n}C_{28}$ 2

**OR**

If ${}^{15}C_r : {}^{15}C_{r-1} = 11: 5$, find r.

## SECTION - D

**This section** has 06 **Long Answer (LA-I) – type** questions of 3 marks each.

33. If $\tan\theta = \frac{a}{b}$, prove that $a \sin 2\theta + b \cos 2\theta = b$ 3

**OR**

Prove that: $\sqrt{\frac{1+\sin x}{1-\sin x}} = \tan\left(\frac{\pi}{4} + \frac{x}{2}\right)$

34. Evaluate: $\lim_{x \to 1}\left(\frac{\sqrt{3+x}-\sqrt{5-x}}{x^2-1}\right)$ 3

**OR**

Evaluate: $\lim_{x \to 0} \frac{\sqrt{2}-\sqrt{1+\cos x}}{\sin^2 x}$

35. Evaluate: $\lim_{x \to \pi/4} \frac{1-\tan x}{1-\sqrt{2}\sin x}$ 3

36. Differentiate $\sqrt{\sin 3x}$ using first principle. 3

37. If $y = \frac{\cos x - \sin x}{\cos x + \sin x}$, show that $\frac{dy}{dx} + y^2 + 1 = 0$. 3

38. A wire of length 121 cm is bent so as to lie along the arc of a circle of radius 180 cm. Find in degrees, the angle subtended at the centre by the arc. 3

## SECTION – E

**This section** has 02 **Long Answer (LA-I) – type** questions of 5 marks each.

39. If $(a + ib) = \frac{c+i}{c-i}$, where c is real, prove that $a^2 + b^2 = 1$ and $\frac{b}{a} = \frac{2c}{c^2-1}$ 5

40. Solve: $\frac{|x-2|-1}{|x-2|-2} \leq 0$, $x \in R$. 5

**OR**

A manufacturer has 460 litres of a 9% acid solution. How many litres of a 3% acid solution must be added to it so that the acid content in the resulting mixture be more than 5% but less than 7%.

**Name:_____ Sec:_____ Roll No_____**

**SET-A**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION: [2024-2025]
## PHYSICS
### CLASS XI

**Time: 3 Hrs.** **Maximum Marks: 70**

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**General Instructions:**

**(1) There are 33 questions in all. All questions are compulsory.**

**(2) This question paper has five sections: section A, Section B, Section C, Section D and Section E.**

**(3) All the sections are compulsory.**

**(4) Section A contains 16 questions, twelve MCQ and four Assertion Reasoning based of 1 mark each. Section B contains 5 questions of 02 marks each. Section C contains 7 questions of 03 marks each. Section D contains 2 case study based questions of four marks each. Section E contains 3 long answer questions of 05 marks each.**

**(5) Use of calculators is not allowed.**

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## SECTION-A

1. The equation $\left(p + \frac{a}{v^2}\right)(v - b)$ =Constant. (p is pressure and v is volume). The unit of a is [1]

(a) dyne $cm^5$
(b) dyne $cm^4$
(c) dyne $cm^{-3}$
(d) dyne $cm^{-2}$

2. If the energy (E), velocity (v) and force (F) be taken as fundamental quantities, then the dimension of mass will be 1

(a) $Fv^{-2}$
(b) $Fv^{-1}$
(c) $Ev^{-2}$
(d) $Ev^{2}$

3. A body sliding on a smooth inclined plane requires 4 seconds to reach the bottom, starting from rest at the top. How much time does it take to cover one-fourth the distance starting from rest at the top? 1

(a) 1 sec (b) 4 sec (c) 2 sec (d) 16 sec

4. A body A is thrown up vertically from the ground with a velocity $v_o$ and another body B is simultaneously dropped from a height H. They meet at a height $\frac{H}{2}$, if $v_o$ is equal to 1

(a) $\sqrt{2gH}$ (b) $\sqrt{gH}$ (c) $\frac{\sqrt{gH}}{2}$ (d) $\sqrt{\frac{2g}{H}}$

5. A particle is projected with certain velocity at two different angles of projections with respect to horizontal plane so as to have the same range 'R' on a horizontal plane. If $t_1$ and $t_2$ are the times taken for the two paths, then which one of the following relations is correct? 1

(a) $t_1 t_2 = \frac{2R}{g}$ (b) $t_1 t_2 = \frac{R}{g}$ (c) $t_1 t_2 = \frac{R}{2g}$ (d) $t_1 t_2 = \frac{4R}{g}$

6. The square of resultant of two equal forces is three times their product. Angle between the forces is 1

(a) $\pi$ (b) $\frac{\pi}{2}$ (c) $\frac{\pi}{4}$ (d) $\frac{\pi}{3}$

7. A weight W is suspended from the midpoint of a rope, whose ends are at the same level. In order to make the rope perfectly horizontal, the force applied to each of its ends must be 1

(a) less than W
(b) equal to W
(c) equal to 2W
(d) infinitely large

8. A man of mass 75 kg is standing in an elevator which is moving with an acceleration of 5 $ms^{-2}$ in upward direction. The apparent weight of the man will be ($g = 10ms^{-2}$) 1

(a) 1125 N
(b) 1375 N
(c) 1250 N
(d) 1425 N

9. Two springs of spring constant 1500 $Nm^{-1}$ and 3000 $Nm^{-1}$ respectively are stretched with a same force. Their potential energies will be in the ratio of 1

(a) 4:1
(b) 2:1
(c) 1:4
(d) 1:2

10. A particle of mass m having velocity v moving towards north collides with similar particle moving with same velocity towards east. The two particles stick together and move towards north east with a velocity 1

(a) $\sqrt{2}v$
(b) $v/\sqrt{2}$
(c) $v/2$
(d) $2v$

11. Angular acceleration α of a body is given by the relation $\alpha = 4at^3 - 3bt^2$. If initial angular velocity of the body is $\omega_o$, then its velocity at time t will be 1

(a) $\omega_o + at^4 - bt^3$
(b) $\omega_o + 4at^4 - 4bt^3$
(c) $\omega_o + 12at^2 - 6bt$
(d) $\omega_o - at^4 + bt^3$

12. A disc, initially at rest, starts rotating about its own axis, with a constant angular acceleration of 0.2$rad\ s^{-2}$. The time taken by the disc to rotate by 10 rad is 1

(a) 7.07 s
(b) 10 s
(c) 14.14 s
(d) 100 s

**Question No. 13 to 16 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:**

(a) **If both A and R are true, and R is the correct explanation of A**
(b) **If both A and R are true, but R is not the correct explanation of A**
(c) **If A is true but R is false**
(d) **If both A and R are false**

13. **Assertion(A) :** The acceleration of an object at a particular time is the slope of the velocity-time graph at that instant of time. 1
**Reason(R) :** For uniform motion acceleration is zero.

14. **Assertion(A) :** A projectile that traverses a parabolic path show deviation from its idealized trajectory in the presence of air resistance. 1
**Reason(R) :** Air resistance affect the motion of the projectile.

15. **Assertion(A) :** Slope of momentum-time graph gives acceleration. 1
**Reason(R) :** Acceleration is given by rate of change of momentum.

16. **Assertion(A) :** The change in kinetic energy of a particle is equal to the work done on it by the net force. 1
**Reason(R) :** Change in kinetic energy of particle is equal to work done only in case of a system of one particle.

## SECTION – B

17. If density ($\rho$), acceleration due to gravity (g) and frequency ($f$) are the basic quantities, find the dimension of force. 2

**OR**

Find the value of 100 J on a system which has 20 cm, 250 g and half minute as fundamental units of length, mass and time.

18. Find the dimension of $\frac{a}{b}$ in the equation: $F = a\sqrt{x} + bt^2$, where F is force, x is distance and t is time. 2

19. On a foggy day two drivers spot each other when they are just 80 m apart. They are travelling at 72 $km\,h^{-1}$ and 90 $km\,h^{-1}$ respectively. Both of them applied brakes retarding their cars at the rate of 5 $ms^{-2}$. Determine whether they avert collision or not. 2

20. A projectile is fired with a velocity u making an angle $\theta$ with the horizontal. Derive expressions for (i) maximum height and (ii) horizontal range. 2

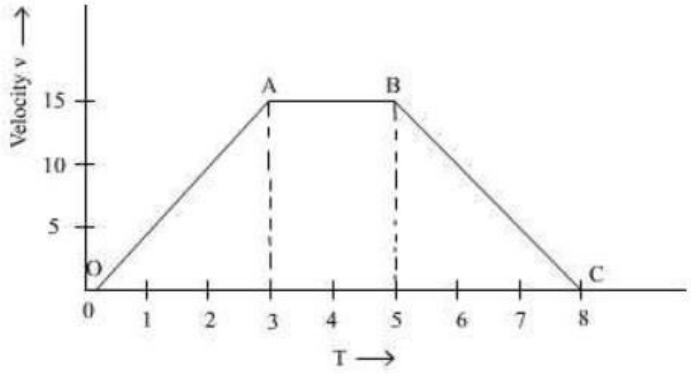
21. Prove that in an elastic one-dimensional collision between two bodies, the relative velocity of approach before collision is equal to the relative velocity of separation after the collision. 2

## SECTION –C

22. Assuming that the mass M of the largest stone that can be moved by a flowing river depends upon 'v' the velocity, '$\rho$' the density of water and on 'g' the acceleration due to gravity. Show that M varies with the sixth power of the velocity of flow. 3

23. (a) Deduce the following equation for uniformly accelerated motion by using the method of calculus. $S_{nth} = u + \frac{a}{2}(2n - 1)$. 3

(b) The velocity-time graph for a vehicle is shown in the figure. Draw acceleration-time graph.



24. (a) The sum of the magnitudes of two forces acting at a point is 18 N and the magnitude of their resultant is 12 N. If the resultant makes an angle of $90^o$ with the force of smaller magnitude, what are the magnitudes of the two forces? 3

(b) For any two vectors $\vec{A}$ and $\vec{B}$, prove that
$\left|\vec{A} \times \vec{B}\right|^2 = A^2B^2 - \left(\vec{A}.\vec{B}\right)^2$

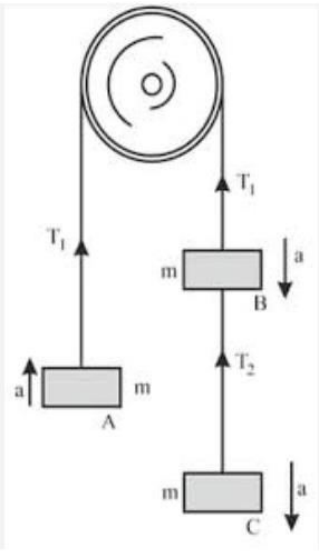
**OR**

(a) A ball is thrown at an angle $\theta$ and another ball is thrown at an angle $(90^o - \theta)$ with the horizontal direction from the same point with velocity $40\, ms^{-1}$. The second ball reaches 50 m higher than the first ball. Find their individual heights. Take $g = 10\, ms^{-2}$.

(b) Show that
$\left(\vec{A} - \vec{B}\right) \times \left(\vec{A} + \vec{B}\right) = 2(\vec{A} \times \vec{B})$

25. (a) Define angle of friction. 3

(b)




Three bodies A, B and C, each of mass m are hanging on a string over a fixed pulley, as shown in the figure. What are the tensions in the strings connecting bodies A to B and B to C?

26. A block of mass m=1 kg, moving on a horizontal surface with speed $v_i = 2ms^{-1}$ enters a rough patch ranging from $x = 0.10\, m$ to $x = 2.01\, m$. The retarding force $F_r$ on the block in this range is inversely proportional to x over this range. 3

$$F_r = \frac{-k}{x} \qquad 0.1 < x < 2.01$$
$$= 0 \; for \; x < 0.1 \; m \; and \; x > 2.01 \; m$$

Where $k = 0.5$ J. What is the final kinetic energy and speed $v_f$ of the block as it crosses this patch? (Take $\ln 20.1 = 3$)

27. State the work-energy theorem. Prove the work-energy theorem for a variable force. 3

28. (a) Define the term moment of force. 3
(b) Show that the centre of mass of a uniform rod of mass M and length L lies at the middle point of the rod.

## SECTION – D

Case Study Based Questions

**Read the following paragraph and answer the questions that follow.**

29. As the applied force on the object is increased, the static friction $f_s$ also increases to balance the applied force and the block does not move. Once the applied force is increased beyond a certain limit, the block just begins to move. At this stage static friction is maximum. Once the motion has begun the force of friction decreases. A smaller force is now necessary to maintain uniform motion. 4

(i) A block of mass 50 kg just slides over a horizontal distance of 1 m. If coefficient of friction between their surfaces is 0.2, the work done against friction is (Take $g = 9.8 \; ms^{-2}$)

(a) 98 J (b) 56 J (c) 72 J (d) 34 J

(ii) A cylinder of mass 10 kg is rolling on a place with an initial velocity of 10 m/s. If coefficient of friction between surface and cylinder is 0.5, then before stopping, the cylinder will cover a distance of (Take $g = 10 \; ms^{-2}$)

(a) 10 m (b) 5 m (c) 7.5 m (d) 2.5 m

(iii) A body of mass m, having momentum p is moving on a rough horizontal surface. If it is stopped in a distance x, the coefficient of friction between the body and the surface is

(a) $\mu = {}^{p}/_{2mgx}$ (b) $\mu = {}^{p^2}/_{2mgx}$

(c) $\mu = {}^{p^2}/_{2gm^2x}$ (d) $\mu = {}^{p^2}/_{2gm^2x^2}$

(iv) If the coefficient of static friction between the tyres and road is 0.5, what is the shortest distance in which an automobile can be stopped when travelling at 72 km/h? (Take $g = 9.8\ ms^{-2}$)

(a) 50 m (b) 60 m (c) 40.8 m (d) 80.16 m

30. A collision is said to occur between two bodies, either if they physically collide against each other or if the path of one is affected by the force exerted by the other. For a collision to take place, the actual physical contact is not necessary. In Rutherford's scattering experiment, α-particles get scattered due to the electrostatic repulsion between the α-particle and the nucleus from a distance. The α-particle is said to have suffered collision with the nucleus. 4

(i) If a neutron collides with a stationary α-particle with velocity v, what is magnitude of resultant velocity of neutron?

(a) $\frac{v}{5}$

(b) $\frac{2v}{5}$

(c) $\frac{3v}{5}$

(d) $\frac{4v}{5}$

(ii) A particle of mass $m_1$ moving with velocity v collides with a mass $m_2$ at rest, and then they get embedded. At the instant of collision, velocity of the system

(a) increases
(b) decreases
(c) remains constant
(d) becomes zero

(iii) A body moving with a velocity v, breaks up into two equal parts. One of the parts retraces back with velocity v. Then the velocity of the other part is
(a) v in forward direction
(b) 3v in forward direction
(c) v in backward direction
(d) 3v in backward direction

(iv) A bullet hits and gets embedded in a solid block resting on a frictionless surface. In this process which one of the following is correct?
(a) only momentum is conserved
(b) only kinetic energy is conserved
(c) neither momentum nor kinetic energy is conserved
(d) both momentum and kinetic energy are conserved

## SECTION – E

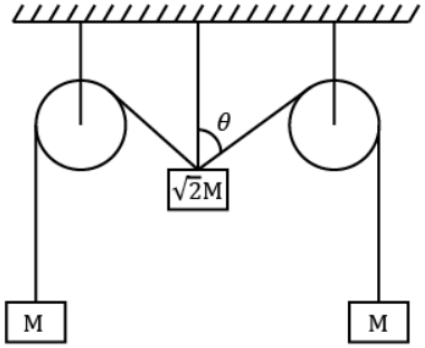
31. (a) A body covers 10m in $2^{nd}$ second and 25m in $5^{th}$ second. If the motion is uniformly accelerated, how far will it go in $7^{th}$ second? 5

(b) A ball thrown up is caught by the thrower after 4 s. How high did it go and with what velocity was it thrown? How far was it below the highest point 3 s after it was thrown?

32. Two vectors $\vec{A}$ and $\vec{B}$ are inclined to each other at an angle θ. Using parallelogram law of vector addition, find the magnitude and direction of their resultant. Discuss the special cases, when $\theta = 0^o$ and $\theta = 180^o$. 5

33. (a) Determine the angle of banking so as to minimise the wear and tear of the tyres of a car negotiating a banked curve. 5

(b) The pulleys and strings shown in figure are smooth and of negligible mass. For the system to remain in equilibrium, what should be the angle θ?

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**Name:_____ Sec:_____ Roll No_____**

**SET:B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION: [2024-2025]**
**SUBJECT: PHYSICS**
**CLASS XI**

**TIME: 3Hr** **Maximum Marks :70**

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**Instructions:**
**All questions are compulsory however there is internal choice in some selections.**
***Section A contains 16 questions each of one mark.***
***Section B contains 5 questions each of two marks.***
***Section C contains & questions each of three marks.***
***Section D contains 2 case based questions in form mcq each of four marks.***
***Section E contains 3 questions each of five marks***

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## Section :A

**Coose correct option only.**

Q1. Suppose refractive index $\mu$ is given by $\boldsymbol{\mu = A + \frac{B}{\lambda^2}}$ , where A and B are constant and $\lambda$ is wave length. Then dimension of B is same as : 1

(a)Wave length (b) Volume (c)Pressure (d)Area

Q2. In the relation $\frac{dy}{dt} = 2\omega \sin(\omega t + \varphi)$ . the dimensional formula for $(\omega t + \varphi)$ is: 1

(a)MLT (b)$MLT^0$ (c)$ML^0T^0$ (d) $M^0L^0T^0$

Q3. A particle is moving along X axis has velocity given by equation $v^2 = 108 - 9x^2$. The acceleration of the particle is: 1

(a)-9x $m/s^2$ (b) -18x $m/s^2$

(c)-9x/2m/$s^2$ (d)none of these

Q4. Velocity V of a moving particle varies with displacement X given by equation $X = \sqrt{V + 1}$ , then acceleration of the particle at X =5 will be will be 1

(a)24 (b)34 (c)14 (d)240

Q5. A particle is projected with a velocity of u=10m/s at an angle of $37^0$ with horizontal. Then magnitude of velocity of particle after 1 sec is : 1

(a)$3\sqrt{5}$ m/sec (b) $5\sqrt{5}$ m/sec

(c) $4\sqrt{5}$ m/sec (d)6 $\sqrt{5}$ m/sec

Q6. From a point on the ground at a distance **a** from the foot of a pole, a ball is thrown at angle of $45^0$, which just touches the top of pole and strikes the ground at a distance of **b** on the other side of it. Then height of the pole is: 1

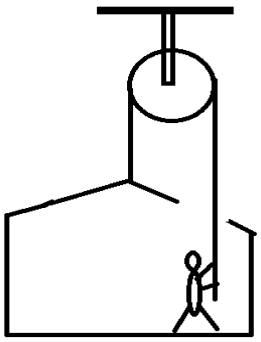
(a)ab/(a+b) (b) (a+b)/ab

(c)(a-b)/ab (d)$\sqrt{ab}$/(a+b)

Q7. The equation of the projectile is given by $y=16x-(5x^2/4)$, the Then horizontal range is 1

(a)11.8m (b)12.8m (c)8.8m (d)13.8m

Q8. A man is raising himself as well as a crate on which he stands with an acceleration of $5m/s^2$ by massless rope and pulley arrangement. The mass of the man is 100kg and that of crate is 50kg.If $g=10m/s^2$, then tension on the rope is: 1



(a)2125N (b)1125N (c)3125N (d)4125N

Q9. A ball of mass 0.2kg is thrown vertically upward by applying a force by hand. If the hand moves 0.2m while applying the force the ball goes 2m height further. The magnitude of force is: 1

(a)20N (b)22N (c)4N (d)16N

Q10. A 10N force is applied on a body to produce an acceleration of $1m/s^2$.Then mass of body is: 1

(a)15kg (b)20kg (c)10kg (d)5kg

Q11. Two bodies of masses 1kg and 2 kg are located at (1,2) and (-1,3). The coordinate of centre of mass is: 1
(a)-1/3,8/3 (b)1/3,8/3 (c) 2/3,4/3 (d) 1/3,4/5

Q12. Separation between C and O atoms in CO atom is 1.2Å.The distance of carbon atom from centre of mass is: 1
(a)0.3Å (b)0.7 Å (c)0.5 Å (d)0.9 Å

In each question a statement assertion(A) is given and a corresponding statement of reason(R) is given just below it. Of the statements mark the correct answer as:
(a)A and R both are true and R is the correct explanation of A.
(b) Assertion is correct, reason is correct; reason is not a correct explanation for assertion
(c) Assertion is correct; reason is false.
(d) If both Assertion and reason is false.

Q13. **Assertion (A):** A body is projected at an angle of 45 degree has maximum range 1
**Reason (R):** For maximum range $\sin 2\theta$, should be one

Q14. **Assertion (A):** In an elastic collision between two bodies the relative speed of the bodies after collision is equal to relative speed of the bodies before collision 1
**Reason (R):** In elastic collision linear momentum is conserved .

Q15. **Assertion (A):** Rocket moves forward by pushing the surrounding air backward. 1
**Reason (R):** it derives necessary thrust to move forward according to Newton's third law of motion

Q16. **Assertion (A):** A body can have acceleration even if the velocity is zero at that time 1
**Reason (R):** Body will be momentarily at risk when it reverses the direction of motion

## SECTION:B

Q17. If velocity of light (c), universal gravitational constant (G) and Planck's constant (h) are chosen as fundamental unit, then find dimension of mass. 2

OR

If velocity of light (c), universal gravitational constant (G) and Planck's constant (h) are chosen as fundamental unit, then find dimension of length.

Q18. Find the dimension of a/b in the equation: 2
$\mathbf{F=a\sqrt{x}+bt^2}$ , where F=force ,x=distance and t=time.

Q19. A passenger is at a distance of **x** from a bus, when bus begins to move with constant acceleration of **a.** what is the minimum velocity with which passenger should run towards the bus, such that he can get into the bus. 2

Q20. Derive the formula for horizontal range for a projectile if it is projected with a velocity of u at angle of $\theta$ with horizontal. 2

Q21. An engine is driving a car in a straight line with constant power (P). The car is moving in a straight line. Find how velocity varies with time. 2

## SECTION: C

Q22. In a new system of units, the fundamental quantities mass, length and time are replaced by acceleration (a), density (d) and frequency (f). Then find the dimensional formula for force in this system. 3

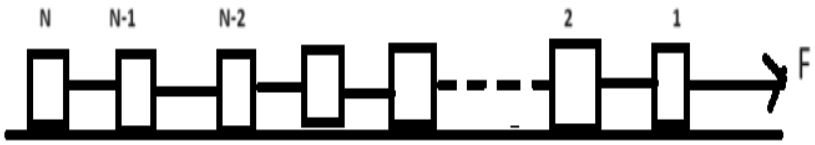
Q23. (a)Prove the formula $\mathbf{v^2=u^2+2as}$ using calculus. 3
(b) Prove the formula $\mathbf{s=ut+\frac{1}{2}at^2}$ using calculus.

Q24. Derive the equation for path of a projectile if it is projected with velocity u at an angle $\theta$ with horizontal. 3

OR

A particle is projected from ground at an angle of $\theta$. Determine the average Velocity between point of projection and highest point reached by the projectile.

Q25. (a)State Newton's second law of motion. 3
(b) Figure shows **N** identical blocks connected by strings on a smooth horizontal surface. A constant force **F** is pulling the blocks horizontally. Tension in the strings connecting $4^{th}$ and $5^{th}$ block is two times that of the tension connecting between $8^{th}$ and $9^{th}$ block then find total number of blocks in the system.




Q26. 3

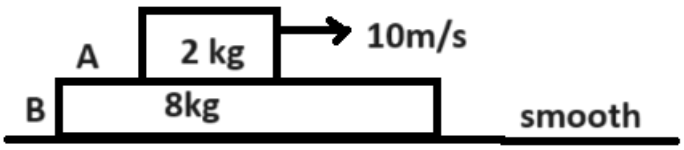

A block of mass 9Kg is moving with a uniform velocity of 2m/s on a rough horizontal surface under action of a force F. The force F acts at an angle of $37^0$ to the horizontal. Find the work done by the force during an interval of 4 seconds in the motion. Given Coefficient of friction between block and ground is $\mu = 1/3$ .

Q27. State work energy theorem. Prove work energy theorem for a variable force. 3

Q28. A wheel of mass 5kg and radius0.4m is rolling on road without slipping with angular velocity10rad/sec The moment of inertia of the wheel about the axis of rotation is 0.65kg/$m^2$. What is the percentage of kinetic energy of rotation in the total kinetic energy of the wheel. 3

**Case based Question**.

Q29. **Friction opposes relative motion between surfaces in contact. Work done by friction can be positive , negative and zero also.** 4




**A block of mass 2Kg is projected with a speed of 10m/sec on the surface of a plank of mass 8Kg kept on a smooth ground as shown in the figure. Coefficient of friction between A and B is 0.1**

Answer the following Questions:

(a)Time after which friction stops working between A and B.

(i)4sec (ii)6sec (iii)8sec (iv) 10 sec

(b)Velocity of the blocks when friction stops working between A and B.

(i)2m/s (ii)3m/s (iii)4m/s (iv)1m/s

(c) Work done by kinetic friction on A.

(i)-48J (ii)-56J (iii)-76J (iv)-96J

(d) Work done by kinetic friction on B.

(i)12J (ii)14J (iii)16J (iv)8J

Q30. **With a large amount of force acts for a very small time then it is called as impulse. Impulse is the product of force and time and is equal to change in momentum**

***Choose the correct option***

(a) A particle moving in a circle with uniform speed. In moving from a point to another diametrically opposite point:

(i) Momentum change is mv

(ii) Momentum changes is 2mv

(iii) Momentum change is zero

(iv) Momentum change is $\sqrt{2}$mv

(b) A ball strikes a bat with velocity V. The ball has a mass of m and after striking retraces its path. What is the impulse imparted by the bat?

(i)3mv (ii)mv (iii)zero (iv)2mv

(c) A gun fires a bullet of mass 50 gram with a velocity of 30m/s. Because of this gun is pushed back by a velocity of 1m/s . The mass of the gun is:

(i)5.5kg (ii)3.5kg (iii)1.5kg (iv)0.5kg

(d)A body of mass M moving with velocity V explodes into two fragments of equal parts. If one comes to rest and other part moves with velocity of u ,then value of u is ?

(i)V (ii)V/$\sqrt{2}$ (iii)4V (iv)2V

## SECTION:E

**Either answer (a) and (b) or answer (c) and (d)**

Q31. (a)Prove the formula $\mathbf{S_{nth} = u + \frac{a}{2}(2n-1)}$ by graph, where terms hold usual meaning.

(b)A body is thrown vertically downwards with a velocity of u from a height of h and reaches ground after $t_1$ sec. If the same body is thrown vertically upward with a velocity of u from a height of h reaches the ground of $t_2$ seconds. Find the time after which the same body will reach the ground from the same height if allowed to undergo a free fall.

OR

(c) Prove the formula $\mathbf{S_{nth} = u + \frac{a}{2}(2n-1)}$ by calculus, where terms hold usual meaning.

(d)Three particles start from origin at same time, one with a velocity of $v_1$ along X axis, another with velocity of $v_2$ along Y axis. Third moves with velocity $v_3$ along line y=x. What should be velocity of $v_3$ such that three bodies may lie on same line.

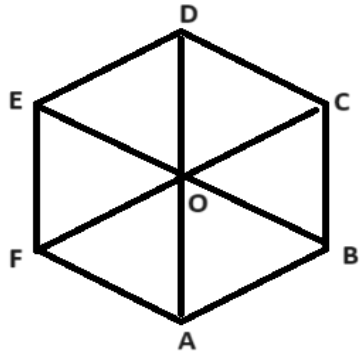
Q32. **Either answer (a) and (b) or answer (c) and (d)**

(a)State and prove Parallelogram law of vector.

(b) Resultant of two forces of magnitude P and Q acting at the point at an angle of 60 degree is $(\sqrt{7})Q$ ,then what is the ratio of magnitude of P and Q.

OR

(c)State triangle law of vector.
(d)




In the figure ABCDEF is a regular hexagon. Prove that $\overline{AB}+\overline{AC}+\overline{AD}+\overline{AE}+\overline{AF}=6\overline{AO}$

Q33. (a)Define angle of friction and angle of repose.

(b)Find the expression for work done against the friction, when a body is made to slide up an inclined plane of inclination $\theta$.

OR

(c)Briefly explain how a vehicle is able to go around a level curved track, determine the speed with which a vehicle can negotiate this curve safely.

(d)Determine the maximum speed with which a car can negotiate a curved road which is banked at an angle of $\theta$ .

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**Name:_____ Sec:_____ Roll No_____**

**SET : A**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION: [2024-2025]
## SUBJECT-CHEMISTRY
## Class: XI

**Time: 3 Hrs** **Maximum Marks: 70**

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**General instructions:-**

- There are 33 questions in this question paper with internal choice.
- SECTION-A consists of 12 multiple choice questions and 4 Assertion/Reason questions carrying 1 marks each.
- SECTION-B consists of 5 very short answer questions carrying 2 marks each.
- SECTION-C consists of 7 short answer questions carrying 3 marks each.
- SECTION-D consists of 2 case-based questions carrying 4 marks each.
- SECTION -E consists of 3 long answer questions carrying 5 marks each.
- **All questions are compulsory.**
- **Use of calculators is not allowed.**

==========

## SECTION-A

1 Which of the following is dependent on temperature? 1

a) Molarity
b) Mole fraction
c) Weight percentage
d) Molality

2 Which of the following particles will not show deflection from the path on passing through an electric field? 1

a) proton b) Neutron c) Cathode rays d) none of these

3 Simplest formula of the oxide of nitrogen containing 14 g of nitrogen for each 40 g of oxygen is 1

a) NO b) $N_2O_3$ c) $N_2O_4$ d) $N_2O_5$

4 Representative elements are those which belong to: 1

a) p and d-blocks b) s and d-blocks c) s and p-blocks d) s and f-blocks

5 What is the maximum number of orbitals that can be identified with the quantum numbers n = 3, l = 1, m = 0? 1

a) 1 b) 2 c) 3 d) 4

6 The number of elements in the 5th period of the periodic table is 1

a) 3 b) 9 c) 8 d) 18

7 What is the hybrid state of nitrogen in $N_2$ molecule? 1

a) $sp^3$

b) sp

c) $sp^2$

d) No specific state

8 The number of sigma and pi-bonds present respectively in $C_6H_6$(benzene ) is : 1

a) 12, 6

b) 12, 3

c) 6, 6

d) 6, 3

9 Which of the following species does not exist under normal conditions? 1

a) $Li_2$. b) $Be_2^+$ c) $B_2$ d) $Be_2$

10 Considering the elements F, Cl, O and N, the correct order of their chemical reactivity in terms of oxidising property is: 1

a) F > Cl > O > N

b) F > O > Cl > N

c) Cl > F > O > N

d) O > F > N > Cl

11 Three moles of ideal gas expanded spontaneously into vaccum. The work done will be 1
a) infinite
b) 3 joules
c) 9 joules
d) zero

12 Alcohols are isomeric with 1
a) Carboxylic acids
b) Ethers
c) Esters
d) Aldehydes

**For questions given below, two statements are given- one lebelled Assertion (A) and the other lebelled Reason(R). Select the correct answer from the following codes (A),(B),(C) and (D) as given below.**
**A) Both assertion and reason are correct statements and reason is the correct explanation of assertion.**
**B) Both assertion and reason are correct statements, but reason is not the correct explanation of assertion.**
**C) Assertion is correct, but reason is wrong statement.**
**D) Assertion is wrong, but reason is correct statement.**

13 Assertion: All spontaneous processes are irreversible. However, they may be reversed by some external agency. 1
Reason: Decrease of enthalpy is a criterion of spontaneity of a process.

14 Assertion: Carbon exhibits catenation to maximum extent. 1
Reason: Valency of carbon is 4.

15 Assertion: Noble gases have highest Ionisation energies in their respective periods. 1
Reason: Noble gases have stable electronic configurations.

16 Assertion: $CO_2$ molecule is non-polar in nature. 1
Reason: The molecule $CO_2$ does not have any polar bond.

## SECTION-B

17 Calculate the wavelength and frequency of light wave whose period is $2.0 \times 10^{-10}$ s. 2

18 In terms of period and group, where would you locate the element with Z = 114 ? 2

19 Determine the empirical formula of an oxide of iron which has 69.9% iron and 30.1% dioxygen by mass. ( Atomic mass: Fe = 55.85u, O = 16.00u) 2

20 Write bond line formulas for: 2,3-Dimethylbutanal and Heptan-4-one. 2

21 The standard enthalpy of formation of CO(g), $CO_2$(g), $N_2O$(g), $N_2O_4$(g) are -110, -393, 81 and 9.7 kj/mol respectively. Find the value of $\Delta_rH°$ for the reaction, 2

$N_2O_4(g) + 3CO(g) \text{------>} N_2O(g) + 3CO_2(g)$.

## SECTION-C

22 Calculate the number of atoms in each of the following: 3

a) 52 moles of He

b) 52 u of He

c) 52 g of He

23 What are the frequency and wavelength of a photon emitted during a transition from n = 5 to n = 2 state in the hydrogen atom?($R_H = 1.09 \times 10^7\ m^{-1}$) 3

OR

An ion with mass number 37 possesses one unit of negative charge. If the ion contains 11.1% more neutrons than the electrons, find the symbol of the ion.

24 Express the following in scientific notation: 3

a) 0.0048

b) 234000

c) 500.0

25 What is modern periodic law? What is periodicity and what is its cause? 3

26 Write the favourable conditions for the formation of ionic bond. 3

27 Draw resonating structures for $SO_3$ and $NO_3^-$ . 3

28 For a reaction; $2A(g) + B(g) \text{-----> } 2D(g)$ 3

$\Delta U°_{298} = -10.5$ KJ and $\Delta S° = -44.1$J

Calculate $\Delta G°_{298}$ for the reaction and predict wheather the reaction is spontaneous or not. (Given ,R= 8.314 $JK^{-1}mol^{-1}$ , T = 298 K)

OR

$A + B \text{----> } C + D$ ; $\Delta H = -10000$ J/mol and $\Delta S = -33.3$ J $mol^{-1}K^{-1}$

i) At what temperature the reaction will occur spontaneously from left to right?

ii) At what temperature, will the reaction reverse?

## SECTION-D

29 Read the passage given below and answer the following questions: 4

Thermodynamics is primarily based upon three fundamental generalisations which have been arrived at, purely on the basis of human experience. These generalisations are called first, second and third law of thermodynamics. In addition to these laws another generalisation was put forth at a later stage which came to be known as zeroth law of thermodynamics. These laws apply only when the system is in equilibrium or move from one equilibrium state to another. The predictions based upon these laws have been verified in most of the cases and so far no case has been reported where these laws break down.

a) Give the mathematical form of the first law of thermodynamics.

b) In the light of first law of thermodynamics. Give the condition and meaning of the relationship w = - q.

c) What is second law of thermodynamics? Give the unit of entropy.

**OR**

c) A gas expands isothermally against constant external pressure of 1 atm from a volume of 10 L to a volume of 20 L. In the process, it absorbs 800 J of thermal energy from the surroundings. Calculate the value of internal energy change.(1L-atm = 101.3 J)

30 Read the passage given below and answer the following questions: 4

In the periodic table electronegativity increases from left to right in a period and decreases from top to bottom in a group. The non-metallic character of an element is directly related to the electronegativity while the metallic character is inversely related to it.

a) The element with maximum electronegativity belongs to which period and group?
b) Which group contains metals, non-metals as well as metalloids?
c) What are the factors on which electronegativity depends?

**OR**

c) Give two difference between electronegativity and electron gain enthalpy.

## SECTION-E

31 Answer the following questions:- 5

a) Explain, why $He_2$ molecule does not exist?
b) How can you account for the fact that $BF_3$ is non-polar while $NF_3$ is not?
c) Which d-orbitals are involved in $sp^3d^2$ hybridization?
d) What do you understand by sigma and π-bonds? How will you account for their different strengths?

OR

Answer the following questions:-
a) What is meant by hybridisation of atomic orbitals?
b) Draw the shape of $PCl_5$.
c) Methane and water have similar molecular masses yet methane has boiling point of 112 K and water 373 K. Explain.
d) Describe giving molecular orbital configuration the magnetic behaviour of the following:
i) $N_2$ ii) $O_2$

32 a)Write the structural formula of : 5

i) p-Nitroaniline
ii) 2,3-Dibromo-1-phenylpentane
iii )4-Ethyl-1-fluoro-2-nitrobenzene.
b) Draw formulas for the next member of each homologous series beginning with the following compounds.
i) H-COOH
ii) $CH_3COCH_3$

**OR**

a) What are hybridisation states of each carbon atom in the following compounds?

$CH_2=C=O$, $(CH_3)_2CO$, $CH_3Cl$

b) Expand each of the following condensed formulas into their complete structural formulas.

i) $CH_3CH_2COCH_2CH_3$

ii) $CH_3CH=CH(CH_2)_3CH_3$

33 a) What is the maximum number of electrons in : 5

i) a principal shell

ii) s, p, d and f sub-shells

iii) an orbital?

b) Is it correct to say that " every atom with even atomic number has all paired electrons". Name and state the rule you rely upon while answering the question?

**OR**

Answer the following questions:

a) What is the lowest value of n that allows g orbitals to exist?

b) An electron is in one of the 3d orbitals. Give the possible values of l and $m_l$ for this electron.

c) How many electrons in an atom may have the quantum number n = 4, s = -1/2

d) An atom of an element contains 29 electrons and 35 neutrons. Deduce i) the number of protons and ii) the electronic configuration of the element.

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**Name:_____ Sec:_____ Roll No___**

**SET : B**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF-YEARLY EXAMINATION: [2024-2025]
## CHEMISTRY
## CLASS XI

**Time Allowed: 3 Hrs.** **Maximum Marks: 80**

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***General Instructions:***

- ***(i)*** ***This question paper consists of 33 questions in 5 sections.***
- ***(ii)*** ***All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.***
- ***(iii)*** ***Section A consists of 16 objective type questions carrying 01 mark each.***
- ***(iv)*** ***Section B consists of 5 Very Short questions carrying 02 marks each. Answer to these questions should be in the range of 30 to 50 words.***
- ***(v)*** ***Section C consists of 7 Short Answer type questions carrying 03 marks each. Answer to these questions should be in the range of 50 to 80 words.***
- ***(vi)*** ***Section D consists of 2 Source based/ Case based unit of assessment of 04 marks with sub parts.***
- ***(vii)*** ***Section E consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.***

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## SECTION – A

**Select and write the most appropriate option out of the four options given for each of the questions 1 -12. There is no negative mark for incorrect response.**

1. Which among the following term is unitless? 1

(a) Molality
(b) Molarity
(c) Mole-fraction
(d) Density

2. The energies $E_1$ and $E_2$ of two radiations are 25 eV and 50eV respectively. The relation between their wavelength i.e. $\lambda_1$ and $\lambda_2$ will be $\lambda_1$ 1

(a) $\lambda_1 = \lambda_2/2$
(b) $\lambda_1 = \lambda_2$
(c) $\lambda_1 = 2\lambda_2$
(d) $\lambda 1 = 4\lambda_2$

3. If 500ml of 5M solution is diluted to 1500ml, what will be the molarity of the solution obtained? 1

(a) 1.5M
(b) 1.66M
(c) 0.017M
(d) 1.59M

4. The correct order of electronegativity of N, O, F and P is- 1

(a) F>N>P>O
(b) F>O>P>N
(c) F>O>N>P
(d) N>O>F>P

5. The wavelength of a spectral line for an electronic transition is inversely related to 1

(a) The number of electrons undergoing the transition.
(b) The nuclear charge of the atom.
(c) The difference in the energy of the energy levels involved in the transition.
(d) The velocity of the electron undergoing the transition.

6. Which of the following is largest in size? 1

(a) $N^{3-}$
(b) $O^{2-}$
(c) $F^-$
(d) $I^-$

7. The type of hybridization and number of lone pairs of electrons of Xe in $XeOF_4$ respectively are 1

(a) $Sp^3d^2$ and 1
(b) $Sp^3d$ and 1
(c) $Sp^3d^3$ and 1
(d) $Sp^3d^2$ and 2

8. Pentane, isopentane and neopentane are example of 1

(a) Positional isomers
(b) Functional isomers
(c) Metamers
(d) Chain isomers

9. The species in which the nitrogen atom is in a state of sp hybridization is 1

(a) $NO_2^+$
(b) $NO_2^-$
(c) $NO_3^-$
(d) $NO_2$

10. Amongst the following elements (whose electronic configuration are given below) the one having the highest ionization enthalpy is- 1

(a) $[Ne]3s^23p^1$
(b) $[Ne]3s^23p^3$
(c) $[Ne]3s^23p^2$
(d) $[Ne]3d^{10}4s^24p^2$

11. The reaction A to B is not feasible but on changing entropy through a series of steps: 1
$\Delta S(A \rightarrow C) = 50eu$, $\Delta S(C \rightarrow D) = 30eu$, $\Delta S(B \rightarrow D) = 20eu$

$$\begin{array}{ccc} A & \rightarrow & B \\ \downarrow & & \uparrow \\ C & \rightarrow & D \end{array}$$

the entropy changes for A→B would be-

(a) 100eu
(b) 60eu
(c) -60eu
(d) -100eu

12. The number of Sigma and pi bonds present in 1,3-butadiene I respectively: 1

(a) 9 and 2
(b) 8 and 2
(c) 9 and 3
(d) 9 and 1

**Question No. 13 to 16 consists of two statements – Assertion (A) and Reason (R). Answer the questions selecting the appropriate options given below:**

**(a) Both A and R are true, and R is the correct explanation of A.**
**(b) Both A and R are true, and R is not the correct explanation of A.**
**(c) A is true but R is false**
(d) **A is false but R is true**

13. **Assertion:** The solubility of Most salts in water increases with rise of temperature. 1
**Reason:** For Most of the ionic compounds $\Delta_{sol}H^{\ominus}$ is positive and the dissociation process is endothermic.

14. **Assertion:** A group or a series of organic compounds each containing a characteristic functional group forms a homologous series. 1
**Reason:** The successive numbers differ from each other in molecular formula by $-C_2H_5$ unit.

15. **Assertion:** The distance between two adjacent copper atoms in solid copper is 256 pm. Hence the metallic radius of copper is assigned a value of 512 pm. 1
**Reason:** Metallic radius is defined as one half of the distance between the two adjacent metal ions in the metallic structure.

16. **Assertion:** $He_2$ molecule is unstable and does not exist. 1
**Reason:** The bond order of $He_2$ molecule is 0.

## SECTION – B

17. When would the wavelength associated with an electron equal to that of a proton? Given mass of electron= $9.1\times10^{-31}$ kg and mass of proton= $1.67\times10^{-27}$ kg 2

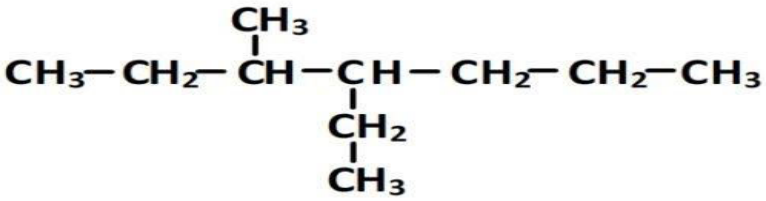
18. The increasing order of reactivity Among group 1 elements is Li<Na<K<Rb<Cs whereas that among group 17 elements is F>Cl>Br>I – Explain. 2

**OR**

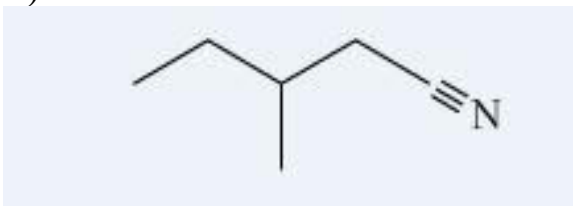
In terms of period and group where would you locate the element with Z= 35?

19. An unknown chlorohydrocarbon Has 3.55% of chlorine. If each molecule of the hydrocarbon has one chlorine atom only, then how many chlorine atoms are present in 1g of chlorohydrocarbon. (Given: Atomic mass of Cl= 35.5u, Avogadro's Constant= $6.023\times10^{23}mol^{-1}$) 2

20. Give the IUPAC names of the following compound: 2
(i)



ii)



**OR**

Write position isomers of $C_4H_8$ molecule.

21. Two liters of an ideal gas at a pressure of 10 atm expands isothermally against a constant external pressure of 1 atm until its total volume is 10 liters. How much heat is absorbed and how much work is done in the expansion**. (**Given: $\log_{10}5=0.6989$) 2

## SECTION-C

22. (a) How many significant figures are present in the following: 3
    (i) 0.0025
    (ii) 128,000

    (b) A hydrocarbon is composed of 75% carbon. Write down the empirical formula of the hydrocarbon. (Atomic mass of C= 12u, H= 1u)

23. Wavelengths of different radiations are given below: 3
$\lambda$ (A)= 300nm, $\lambda$ (B)= 300μm, $\lambda$ (C)= 3nm, $\lambda$ (D)= $30A^0$
Arrange these radiations in the increasing order of their energies.

**OR**

The uncertainty in the position and velocity of a particle are $9.54 \times 10^{-10}$m and $5.5 \times 10^{-20}$ m/s. Calculate the mass of the particle. (Given $h = 6.626 \times 10^{-34}$ $kgm^2s^{-1}$)

24. (a) What will be the mass of one $^{12}C$ atom in g? 3

24. (b) There is ratio of masses of oxygen and nitrogen in a particular gaseous mixture is 1:4. Find the ratio of the number of their molecules. (Atomic mass of N=14u, O=16u)

25. (a) Would you expect the second electron gain enthalpy of oxygen as positive, more negative or less negative than the first? Justify your answer. 3

(b) The maximum covalency of the first member (of group of elements in the s and p blocks) is 4, whereas the other members of the group can show higher covalency, why?

26 (a) Predict hybridization and shape of the following inorganic compounds: 3

(i) $SF_4$

(ii) $ClO_4^-$

(b) Arrange the following types of interactions in Order of decreasing stability:
Dipole attraction, hydrogen bonding, covalent bond, van der Waal's force

27. (a) Write the electronic configuration of $N_2$ and $N_2^+$. 3

(b) Find the bond order of these two species.

28. Calculate the enthalpy change for the process 3

$$CCl_4(g) \rightarrow C(g) + 4Cl(g)$$

$\Delta_{vap}H^e(CCl_4)$ = 30.5KJ/mol
$\Delta_fH^e(CCl_4)$ = -135.5KJ/mol
$\Delta_aH^e(C)$ = 715.0KJ/mol, where $\Delta_aH^e$ is enthalpy of atomization.
$\Delta_aH^e(Cl_2)$ = 242KJ/mol

**OR**

(a) For the reaction: $X_2O_4(l) \rightarrow 2XO_2$, $\Delta U$ =2.1 Kcal and $\Delta S$ = 20 $CalK^{-1}$ at 300K. Calculate $\Delta G$ for this reaction.

(b) How will you calculate work done on an ideal gas in a compression, when change in pressure is carried out in finite steps?

## SECTION – D

**The following questions are Source based/Case based questions. Read the given passage and answer the questions based on the passage and related studied concepts.**

—

29. The molar heat capacity of a substance is the heat capacity for one mole of the substance and is the quantity of heat needed today is the temperature of one mole by one degree Celsius (or one Kelvin). 4

What is the relation between Cp and Cv for an ideal gas?

(a) What will be the specific heat capacity of a gas if it is reduced to
(b) half from its original volume?
(c) Define Specific heat capacity.

**OR**

(c) 1g of Graphite is burnt in a bomb calorimeter in excess of oxygen at 298 Kelvin and one atmospheric pressure according to the equation

$$C(graphite) + O_2(g) \rightarrow CO_2(g)$$

During the reaction, temperature rises from 298 K to 299 K. If the heat capacity of the bomb calorimeter is -20 .7$KJg^{-1}K^{-1}$, What is the internal energy change for the above reaction at 298 K and 1 atm?(Atomic mass of C=12u)

30. In the periodic table electronegativity increases from left to right in a period and decreases from top to bottom in a group. The non - metallic character of an element is directly related to the electronegativity while the metallic character is inversely related to it. 4

(a) Write one basic difference between electron gain enthalpy and electronegativity.
(b) Arrange the following elements in the increasing order of non - metallic character:
B, C, Si, N, F.
(c) Show by a Chemical reaction with water that $Na_2O$ is a basic oxide and $Cl_2O_7$ is an acid.

**OR**

(c) Electron gain enthalpy Of Be and Mg are positive-Explain

## SECTION – E

31. (a) Write the electronic configuration of $O_2^+$ and $O_2^-$. 5

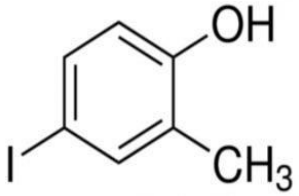
(b) Establish the stability of $O_2^+$ and $O_2^-$ On calculation of bond order.

(c) Mention their Magnetic character.

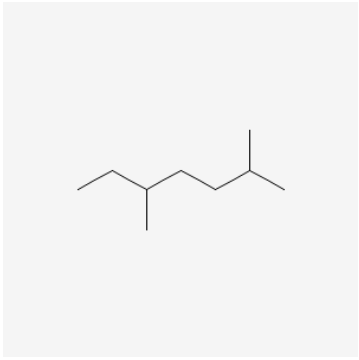
**OR**

(a) Explain why acetone is more volatile than alcohol.
(b) Explain as per VSEPR model why $PCl_5$ is trigonal bipyramidal whereas $IF_5$ is square pyramidal.
(c) Give reason why $H_2O$ molecule has a bent structure.

32. (a) Write the IUPAC names of the following compounds: 5

(i) 


(ii) $Cl_2CHCH_2OH$

(iii) 

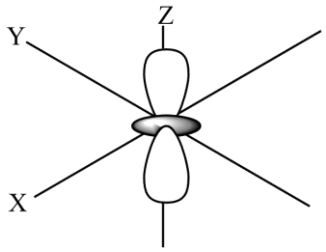
(b) Write the functional isomers of $C_2H_3N$.

33. (a) Why we observe large number of spectral lines in hydrogen sample? 5

(b) Can de-Broglie equation be used to calculate the wavelength of the revolving cricket ball? Explain.

(c) How do you account for the brightness (or intensity) of spectral line in hydrogen?

**OR**




Boundary surface diagram of the $dz^2$ orbital is shown in the above figure.

(a) What is the minimum value of principal quantum number(n) for a d-orbital?

(b) How many d-orbitals are possible? Why?

(c) How are shape, size and energy of 3d, 4d and 5d orbitals different?

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Name:_____ Sec: _____Roll No:___

SET: A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
HALF YEARLY EXAMINATION [2024-2025]
BIOLOGY[044]
CLASS : XI

Time: 3 Hours Maximum Marks : 70

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General instructions:

i) This question paper consists of 33 questions in 5 sections.
ii) All questions are compulsory.
iii) Section A consists of 16 objective type questions carrying 1 mark each.
iv) Section B consists of 5 Short Answer type questions carrying 2 marks each.
v) Section C consists of 7 Short Answer type questions carrying 3 marks each.
vi) Section D consists of 2 Case based/ Source based units of assessment of 4 marks each with sub- parts (internal choice has been provided in one of the sub - parts)
vii) Section E consists of 3 Long Answer type question carrying 5 marks.

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## Section – A

1. Cats belong to the family …… 1

a) Solanaceae
b) Felidae
c) Canidae
d) Psittacidae

2. The mode of nutrition in fungi is 1

a) Parasitic
b) Chemosynthetic
c) Holozoic
d) Photosynthetic

3. *Sacchoromyces* is unicellular ……. 1

a) Deuteromycetes
b) Basidiomycetes
c) Phycomycetes
d) Ascomycetes

4. Evolutionarily, which of the following are first terrestrial plants to possess vascular tissues ? 1

a) Pteridophytes
b) Bryophytes
c) Gametophytes
d) Sporophytes

5. The predominant stage in the life cycle of moss is — 1

a) Sporophyte
b) Pteridophyte
c) Gametophyte
d) Bryophyte

6. Radula is present in …… 1

a) *Sycon*
b) *Octopus*
c) *Taenia*
d) *Apis*

7. Which of the following have cellular level of organisation ? 1

a) Chordata
b) Cnidaria
c) Porifera
d) Arthropoda

8. Hypogynous flowers can be seen in 1

a) Mustard
b) Rose
c) Peach
d) Guava

9. Which of the following is diadelphous? 1

a) China rose
b) Citrus
c) Okra
d) Pea

10. Stomata in grass leaves are - 1

a) Dumb-bell shaped
b) Kidney shaped
c) Rectangular
d) Barrel-shaped

11. Casperian strips occur in 1

a) Epidermis
b) Pericycle
c) Cortex
d) Endodermis

12. A mature female frog can produce how many eggs at a time ? 1

a) 300
b) 3000
c) 30,000
d) 30

Question No. 13 to 16 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
a. Both A and R are true and R is the correct explanation of A.
b. Both A and R are true and R is not the correct explanation of A.
c. A is true but R is false.
d. A is False but R is true.

13. A : Phylogenetic relationships is one of the main critieria for classification used by Whittaker. 1
R : R.H. Whittaker proposed the five kingdom classification in 1996.

14. A : Carrageen is commercially used as hydrocolloid. 1
R : It has very high water holding capacity.

15. A :*Balanoglossus* possess an anterior proboscis. 1
R : Develop is indirect.

16. A : The multicellular root hair absorbs water and minerals from the soil. 1
R : Root hair are present at the region of maturation.

## SECTION B

17. Point out two significant impacts of heterotrophic monerans on human affairs. 2

18. Name two algae which are used as food supplements by space travellers. 2

19. Identify the appropriate phylum – 2

a) Pseudocoelomate
b) Bioluminescence.

20. What are the four main functions of the root system. 2

21. Which components make up the stele in a dicot root ? 2

OR

How are trichomes different from root-hair ?

## SECTION C

22. List the universal rules of binomial nomenclature. 3

23. Write a note on the symbiotic association – Lichens. 3

**OR**

Write a note on any three protozoan type.

24. Both *Cycas* and *Pinus* are gymnosperms, yet they have different characters. Justify. 3

25. Name the following – 3

a) An economically important arthropoda.
b) The organ responsible for osmoregulation in annilida.
c) The phylum to which *Hydra Vulgaris* belongs.

26. Discuss the different types of phyllotaxy in angiosperms, with examples. 3

27. Draw a well-labelled T.S. of monocot stem. 3

28. a) Frog belongs towhich phylum and class? 3
b) What are the sexual dimorphic characters in frog?

## SECTION D

Q.no. 29 and 30 are case based or source based units of assessments of 04 marks each with sub-parts (internal choice have been provided in one of the sub-parts) .

29. Organism in the subphyla Urochordata, Cephalochordata and Vertebrata collectively form the phylum chordate. Six major classes are placed under Gnathostomata while Agnatha comprises of only cyclostomata. 4

(a) Which class under vertebrata possess pneumatic bones ?
(b) Name the Division whose members bear jaw.
(c) Point out two differences between the Great white Shark and Rohu fish.

**OR**

(c) Write two characteristic features of Mammalia.

30. Solanacase is a large family, Commonly called the 'Potato family'. It is widely distributed in tropics, subtropics and temperate zones. 4

(a) Comment on the leaves of the members of this family.
(b) Write down the floral formula of the flower.
(c) Name two plants from this family that are used as a source of food.

**OR**

(c) Name two plants from this family that have medicinal benefits.

## SECTION E

31. Differentiate between the three main classes of algae in a tabular form. 5

**OR**

How do bryophytes reproduce ?

32. Summerise the characteristic features of Echinodermata. 5

**OR**

Mention important features of Aschelminthes.

33. The ovary in angiosperms can be classified based on the arrangement of ovules in it. Elaborate on these major categories with examples. 5

**OR**

What is aestivation ? How are flowers categorized based on this aspect ? Discuss with appropriate examples and schematic representation.

Name: ----------Sec: ------- Roll No-----_____

**SET : B**

BURNPUR RIVERSIDE SCHOOL, BURNPUR
HALF YEARLY EXAMINATION [2024-2025]
SUBJECT: BIOLOGY
CLASS -XI

Time : 3 Hours Maximum Marks :70

==========

General Instructions:

i All questions are compulsory.

ii The question paper contains five sections-A, B, C, D and E. There are 33 questions in the question paper.

iii **Section A** has 16 questions of 1 mark each. **Section B** has 05 questions of 2 marks each. **Section C** has 07 questions of 3 marks each. **Section D** has 02 case based question carries 4 marks each. It has three sub-questions (a),(b and (c).Parts (a) and (b) are compulsory .An internal choice has been provided in part (c), one has to attempt any one of the choices and **Section E** has 03 questions of 5 marks each.

iv There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

v Wherever necessary, neat and properly labeled diagrams should be drawn.

==========

## SECTION A

1. Which of the following "suffixes" used for units of classification in plants indicates a taxonomic category of 'family. 1
a)-ales b) -aceae c)- onae d)-ae

2. Which one is not true of Nostoc. 1
a)it is filamentous
b)it is autotrophic
c)it is prokaryotic
d)it is macroscopic

3. The five kingdom classification was proposed by: 1
a) R.H.Whittaker b) C. Linneaus c) A.Roxberg d) A.Kornberg.

4. Heterosporous condition is found in\ 1
   a) Selaginella
   b) Volvox
   c) Chlamydomonas
   d) Ulothrix

5. Isogamous condition with non flagellate condition is found in 1
a)Fucus
b)Spirogyra
c)Volvox
d)Spirogyra

6. Filaria is caused by member of 1
a)Aschelminthes
b)Arthropoda
c)Annelida
d)platyhelminthes.

7. Segmentation is first observed in 1
a) Platyhelminthes
b) Aschelminthes
c) Annelida
d) Athropoda.

8. Type of placentation found in pea 1
a)Basal
b)Axile
c)Marginal
d)Free Central.

9. Ovary is superior in 1
a) Hypogynous condition
b) Epigynous conditions
c) Perigynous conditions
d) None of the above.

10. Lateral roots develop from 1
a) Endodermis
b) epidermis
c) pericycle
d) pith.

11. Epiblema in roots is equivalent to 1
a) pericycle
b) endodermis
c) epidermis
d) stele

12. Most common species of frog found in India:-
*a)Rana tigrina*
*b)Microphyla rubra*
*c)Polypedates maculates*
*d)Microphyla ornate*

**Question 13 to 16 consists of two statements-Assertion (A) and Reason (R) .Answer these questions selecting the appropriate options given below:**

**a. Both A and R are true and R is the correct explanation of A.**
**b. Both A and R are true but R is not the correct explanation of A.**
**c. A is true but R is false.**
**d . A is false but R is true**.

13. Assertion:-Viruses are at the border line position between living and non living 1
Reason:- Phytoplankton are those living organisms which are terrestrial.

14 Assertion:-Red algae contribute in producing floridean starch 1
Reason:- some red algae secrete and deposit calcium carbonate over their walls.

15 Assertion:-The excretory cells of flatworms are called flame cells. 1
Reason:-Excretory cell helps in endocytosis.

16 Assertion:-Single cotyledon of monocot is called scutellum. 1
Reason: - Monocot shows secondary growth.

## SECTION B

17. *Pisum sativum* is widely used as the scientific name rather than the simpler English name Pea.What can be the reason? 2
18. What is heterospory? Mention its significance? 2
19. Identify the phylum in which adults shows radial symmetry and the larva bilateral symmetry. Enlist any two features of the phylum. 2
20. Differentiate between Actinomorphic and Zygomorphic flowers. 2

21. Write a short note on Epidermal tissue system. 2

OR

Differentiate between open and closed vascular bundle.

## SECTION C

22. *Mangifera indica* is a scientific name of Mango. 3
Enlist the rules which are followed for biological nomenclature.
23. A protozoan lives as predators or parasites. Describe any three major groups of Protozoa. 3

Or

Enlist the steps which occurs during the sexual reproduction of Fungi.
24. Why are Bryophytes called the amphibians of the plant kingdom?Mention some characteristics features of Bryophytes. 3
25. What is Bioluminescence?In which phylum is it seen? Mention any two features of the Phylum. 3

26. Discuss the family solanaceae 3
27. With a labeled diagram represent the T.S of a dicot root. 3
28. Describe the male reproductive system in frog. 3

## SECTION D (Case Based)

29. **Phylum Annelida** 4

Phylum Annelida is a group of segmented worms, including earthworm, leeches and marine worms. These organisms are characterized by their elongated cylindrical bodies and with repeating segments. Annelids have a true coelom. The play essential role in ecosystem, soil aeration and nutrient cycling.

a)What are metameres? (1)

b) What are triploblastic animals? (1)

c)Mention the function of nephridia and parapodia in these animals. (2)

OR

c)Mention an two characteristics features of the above phylum. (2)

30. The members of the family Solanaceae is called the 'potato family. It is widely distributed in tropics, subtropics and even in temperate zones. The plants in this family often contain alkaloid which might be toxic and with medicinal value. 4

a) Differentiate between alternate and opposite phyllotaxy? (2)
b) What are epipetalous flower? (1)
c) What are gamosepalous flowers? (1)

OR

d) What term is used for a fused gynoecium?

## SECTION E

31. Differentiate between Chlorophyceae, Phaeophyceae and Rhodophyceae. 5

OR

Enlist the characteristics features of Gymnosperms.

32. Mention the salient features of the Phylum Mollusca., 5

OR

Enlist the features of the Phylum Porifera

33. What is Placentation? Briefly describe the various types of placentation. 5

OR

What is aestivation? Describe the various types of aestivation in corolla.

**********

**NAME_____SEC_____ROLLNO_____**

**SET:A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION: [2024-2025]**
**COMPUTER SCIENCE**
**CLASS-XI**

**TIME: 3 Hrs.** **Maximum Marks: 70**

==========

**General Instructions:**

- **Please check this question paper contains 35 questions.**
- **The paper is divided into 5 Sections- A, B, C, D and E.**
- **Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.**
- **Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.**
- **Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.**
- **Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.**
- **Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.**
- **All programming questions are to be answered using Python Language only.**

==========

## SECTION A

**1.** State True or False: [1]
Language processors are a type of application software.

2. Special meaning words of Pythons, fixed for specific functionality are called _____ [1]
a)identifiers b)functions c)keywords d)literals

3. What is the value of the expression 100 // 25 ? [1]
a)4 b)4.0 c)2.5 d)none of these

4. Which of the following components is the main memory of computer? [1]
a)CD b)DVD
c)Internal Hard Drive d) RAM

5. Which of the following are keyword(s) ? [1]
a)name b)Print c)print d)input

6. The default separator character of print( ) is _____ [1]
a)tab b)space c)newline d)dot

7. A _____ is a basic electronic circuit which operates on one or more signals to produce an output signal. [1]
a)Gate b)Logic c)Not d)And

8. In a computer, CU stands for [1]
a)Control Unit b)Cache Unit
c)Calculating Unit d)Communication Unit

9. What is the value of the expression 10 +3 **3*2 ? [1]
a)28 b)739 c)829 d)64

10. Which of the following is not a legal integer type value in Python? [1]
a)Decimal b)octal c)Hexadecimal d)Roman

11. The order of statement execution in the form of top to bottom is known as _____ construct. [1]
a)selection b)repetition c)sequence d)flow

12. Flash memory and Blu Ray disk are example of [1]
a)Hardware b)Software c)CPU d)None of these

13. Which of the following statements will make a selection construct? [1]
a)if b)if-else c)for d)while

14. Negative index -1 belongs to _____ of string. [1]
a)first character b)last character
c)second last character d)second character

15. Which of the following functions will return the total number of characters in a string ? [1]
a)count() b)index() c)len() d)all of these

16. Python uses a/an _____ to convert source code to object code. [1]
a)interpreter b)compiler
c)combination of interpreter and compiler d) special virtual engine

**17** and **18** are ASSERTION (A) and REASONING (R) based Mark the correct choice as
(a) Both (A) and (R) are true and (R) is the correct explanation for (A).
b) Both (A) and (R) are true and (R) is not the correct explanation for (A).
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true.

17. **Assertion**: Python's pass statement is an empty statement. [1]
**Reasons**:An empty statement does nothing

18. **Assertion:** The individual characters of a string are randomly stored in memory. [1]
**Reason**: Python strings are stored in memory by storing individual characters in contiguous memory locations.

## SECTION B

19. Convert $(ABCD)_{16}$ to binary. [2]

20. Convert $(256)_{10}$ to binary [2]

21. Convert $(72960)_{10}$ to Hexadecimal [2]

22. State and verify De Morgan's first law in Boolean Algebra [2]

23. What is the purpose of range ( ) function? Give one example [2]

24. What is the difference between partition () and split () functions? [2]

25. What is the difference between interactive mode and script mode in python? [2]

## SECTION C

26. Write a program to display a menu for calculating area of a circle or perimeter of a circle. [3]

27. What will be the **output** produced by following code fragments? [3]

```
s='9875678900'
print (s[3], s[0:3], '-', s [2:5])
print (s[:3], '-', s[3:], ',', s[3:100])
print (s[20:], s[2:1], s[1:1])
```

28. How to save a python File? [3]

29. What would be the **output** of the following code? [3]

```
a=3+5/8
b=int(3+5/8)
c=3+float(5/8)
d=3+float(5)/8
e=3+5.0/8
f=int(3+5/8.0)
print(a,b,c,d,e,f)
```

30. Write a program that reads three numbers (integers) and prints them in ascending order. [3]

## SECTION D

31. a) What would be the **output** of the following code? [2]

```
x = 10
y = 0
while x > y :
   print (x, y)
   x = x - 1
   y += 1
```

b) What is following code doing? What would it print for input as 3? [2]

```
n=int(input("Enter an integer:"))

if n < 1 :

      print ("invalid value")

else :

     for i in range (1, n + 1) :

          print (i * i)
```

32. a) What will be the output produced by following code fragments? [2]

```
y = str(123)
x = "hello" * 3
print (x , y)
x = "hello" + "world"
y = len(x)
print (y, x)
```

b) What will be the output produced by following code fragments? [2]

```
print ('One', 'Two' * 2)
print ('One' + 'Two' * 2)
print (len('0123456789'))
```

## SECTION E

33. a) Write a program that inputs a string that contains a decimal number and prints out the decimal part of the number. For instance, if 515.8059 is given, the program should point out 8059 [2]

b) Write a program that reads a string and checks whether it is a palindrome string or not without using string slice. [3]

34. a) What will be the **output** produced by following code fragments? [2]

```
x = "hello world"
print (x[:2], x[:-2], x[-2:])
print (x[6], x[2:4])
```

b) Write a Python script to print Fibonacci series first 20 elements. Some initial elements of a Fibonacci series are : [3]

0 1 1 2 3 5 8 ….

35. Write a program to implement a simple calculator for two input numbers. Offer choices through a menu [5]

**NAME_____SEC_____ROLLNO_____**

**SET:B**

**BURNPUR RIVERSIDE SCHOOL,BURNPUR**
**HALF YEARLY EXAMINATION: [2024-2025]**
**COMPUTER SCIENCE**
**CLASS-XI**

**TIME: 3 Hrs.** **Maximum Marks: 70**

==========

**General Instructions:**

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- **Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.**
- **All programming questions are to be answered using Python Language only.**

==========

## SECTION A

1. State True or False [1]
A computer system consists both hardware and software

2. Special meaning words of Pythons, fixed for specific functionality are called _____ [1]
a)identifiers b)functions c)keywords d)literals

3. What is the value of the expression 100 // 25 ? [1]
a)4 b)4.0 c)2.5 d)none of these

4. Which of the following components is the main memory of computer? [1]
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a)name b)Print c)print d)input

6. The default separator character of print( ) is _____ [1]
a)tab b)space c)newline d)dot

7. A _____ is a basic electronic circuit which operates on one or more signals to produce an output signal. [1]
a)Gate b)Logic c)Not d)And

8. In a computer, CU stands for [1]
a)Control Unit b)Cache Unit
c)Calculating Unit d)Communication Unit

9. What is the value of the expression 10 +3 **3*2 ? [1]
a)28 b)739 c)829 d)64

10. Which of the following is not a legal integer type value in Python? [1]
a)Decimal b)octal c)Hexadecimal d)Roman

11. In the Python statement x=a+5-b: a and b are _____ [1]
a)Operands b)Expression
c)operators d)Equation

12. Which smaller unit of the CPU performs all arithmetic and logic functions in a computer? [1]
a)CU b)ALU c)PROCESSOR d)All of these

13. Which of the following statements will make a selection construct? [1]
a)if b)if-else c)for d)while

14. Negative index -1 belongs to _____ of string. [1]
a)first character b)last character
c)second last character d)second character

15. Which of the following functions will return the total number of characters in a string ? [1]
a)count() b)index() c)len() d)all of these

16. Python uses a/an _____ to convert source code to object code. [1]
a)interpreter b)compiler
c)combination of interpreter and compiler d) special virtual engine

**17** and **18** are ASSERTION (A) and REASONING (R) based Mark the correct choice as
(a) Both (A) and (R) are true and (R) is the correct explanation for (A).
b) Both (A) and (R) are true and (R) is not the correct explanation for (A).
(c) (A) is true but (R) is false.
(d) (A) is false but (R) is true.

17. **Assertion**: Both break and continue are jump statements. [1]
**Reasons**: Both break and continue can stop the loops and hence can substitute one-another.

18. **Assertion:** The individual characters of a string are randomly stored in memory. [1]
**Reason**: Python strings are stored in memory by storing individual characters in contiguous memory locations.

## SECTION B

19. Convert $(FACE)_{16}$ to binary. [2]
20. Convert $(B2F)_{16}$ to octal [2]
21. Convert $(72905)_{10}$ to Hexadecimal [2]
22. State and verify De Morgan's first law in Boolean Algebra [2]
23. What is the purpose of range ( ) function? Give one example [2]
24. What is the difference between partition () and split () functions? [2]
25. What is the difference between interactive mode and script mode in python? [2]

## SECTION C

26. Write a program to display a menu for calculating area of a circle or perimeter of a circle. [3]
27. What will be the **output** produced by following code fragments? [3]

```
s = '9876543210'
print (s[3], s[0:3], '-', s [2:5])
print (s[:3], '-', s[3:], ',', s[3:100])
print (s[20:], s[2:1], s[1:1])
```

28. Write a program to print Fibonacci series. [3]
29. What would be the **output** of the following code? [3]

```
a=3+5/8
b=int(3+5/8)
c=3+float(5/8)
d=3+float(5)/8
e=3+5.0/8
```

```
f=int(3+5/8.0)
print(a, b, c, d, e, f)
```

30. Write a program input three angles and determine if they from a triangle or not. [3]

## SECTION D

31. a) What would be the **output** of the following code? [2]

```
x = 10
y = 0
while x > y :
   print (x, y)
   x = x - 1
   y += 1
```

b) What is following code doing? What would it print for input as 3 ? [2]

```
n=int(input("Enter an integer:"))

if n < 1 :

   print ("invalid value")

else :

   for i in range (1, n + 1) :

      print (i * i)
```

32. a) What will be the output produced by following code fragments? [2]

```
y = str(123)
x = "hello" * 3
print (x , y)
x = "hello" + "world"
y = len(x)
print (y, x)
```

b) What will be the output produced by following code fragments? [2]

```
print ('One', 'Two' * 2)
print ('One' + 'Two' * 2)
print (len('0123456789'))
```

## SECTION E

33. a) Write a Python script that traverses through an input string and prints its characters in different lines- two characters per line. [2]

b) Write a program that reads a string and checks whether it is a palindrome string or not without using string slice. [3]

34. a) What will be the **output** produced by following code fragments? [2]

```
x = "hello world"
print (x[:2], x[:-2], x[-2:])
print (x[6], x[2:4])
```

b) What is the error in following code? Correct the code: [3]

```
weather = 'raining'
if weather = 'sunny' :
   print ("wear sunblock")
elif weather = "snow" :
   print ("going skiing")
else :
   print (weather)
```

35. Write a Program that reads a line and prints its statistics like: [5]
Number of uppercase letters:
Number of alphabets

Number of symbols
Number of lowercase letters
Number of digits

---

**Name:_____ Sec:_____ Roll No____**

**SET: A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION [2024-25]**
**SUBJECT: PHYSICAL EDUCATION**
**Class – XI**

**Time: 3hour** **Max Marks: 70**

==========

General Instructions:

1. There are 34 questions in the question papers. All questions are compulsory.
2. Section A consists of question no 1 to 19 which has 19 MCQS. Each question carries 1 mark.
3. Section B consists of question no 20 to 23 are very short answer type questions. Each question carries 2 marks. (30 to 50 words)
4. Section C consists of question No 24 to 26 are short answer type questions. The question carries 3 marks. (80 to 100 words)
5. Section D consists of question No 27 to question no 32 are value based / source based question, carry 4 mark
6. Section E consists of questions No 33 to 34 are long answer type questions. The question carries 5 marks. (100 to 150 words)

==========

## SECTION - A

Q.1 The sport which is not include in the Olympic is ____ 1
(a) Cricket (b) Hockey (c) Football (d) Athletics

Q.2 In the khelo India programme, the selected player is given an amount of _____ 1
(a) Rupees five lakh (b) Rupees two lakh
(c) Rupees three lakh (d) Rupees one lakh

Q.3 Which of the following is not a source of physical activity? 1
(a) Gym trainer (b) Umpire
(c) Agriculture profession (d) Administration related profession

Q.4 The Olympic ideal is 1
(a) Faster (b) Higher (c) Stronger (d) All of the above

Q.5 Where is the headquarter of the International Olympic Committee? 1
(a) Geneva (b) Paris (c) London (d) Lausanne

Q.6 The headquarter of Indian Olympic Association (IOA). 1
(a) New Delhi (b) Switzerland
(c) France (d) Sweden

Q.7 The elements of yama are _____ 1

(a) Truth, sacrifice, non- violence, priest, shiva
(b) Non- violence, truth, purity, self study, meditation on God.
(c) Truth, non- staling, non-violence, continence, meditation on God
(d) None of the abve

Q.8 Through ' Dhouti Kriya' 1

(a) Stomach is cleansed (b) Food pipe is cleansed
(b) Neither (a) nor (b) (d) Both (a) & (b)

Q.9 Which of the following Pranayama poses is given below? 1

(a) Anulom – Vilom (b) Jal-Neti
(c) Trataka (d) Kapalbhati

Q.10 Given below are the two statements labeled as Assertion (A) and Reason (R). 1

Assertion (A): Adaptive physical education develops the personality of children with disabilities.
Reason (R): The goal of the adaptive physical education is to involve the children with disability in the learning process by providing opportunities based on their specialty.
In the context of above two statements, which one of the following is correct?
(a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
(c) (A) is true but (R) is false
(d) (A) is false but (R) is true

Q.11 Adaptive physical education is _____ 1

(a) Cognitive and motor development
(b) The opportunity for a person exclusively
(c) Specific programme
(d) All of the above

Q.12 Objective of the adaptive physical education is _____ 1

(a) Development of personal ability
(b) Development of social qualities
(c) Psychological satiety/ satisfaction
(d) All of the above

Q.13 Fill in the blanks: 1

100 mts run tests are used to measure _____.

(a) Speed (b) Endurance (c) Strength (d) Flexibility

Q.14 Components of wellness are 1

(a) Social wellness (b) Physical wellness
(c) Emotional wellness (d) All of the above

Q.15 Match list I with list II and select the correct answer from the codes given below: 1

| | List-1 Component | | List-II Description |
|---|---|---|---|
| (i) | Endurance | 1 | The capacity of the muscles to overcome resistance |
| (ii) | Speed | 2 | The ability to continue an activity for a longer duration without fatigue |
| (iii) | Flexibility | 3 | Covering the maximum distance in minimum time |
| (iv) | Strength | 4 | Maximum extension of the joints |

Codes:

| | (i) | (ii) | (iii) | (iv) |
|---|---|---|---|---|
| a. | 4 | 1 | 2 | 3 |
| b. | 1 | 4 | 3 | 2 |
| c. | 3 | 2 | 1 | 4 |
| d. | 2 | 3 | 4 | 1 |

Q.16 _____ has an athletic type of body 1

(a) Endomorph (b) Mesomorph
(c) Ectomorph (d) None of these

Q.17 Health related physical fitness components is 1
(a) Body composition (b) Flexibility
(c) Strength (d) All of the above

Q.18 The use of Questionnaire is 1
(a) Test (b) Measurement (c) Evaluation (d) Analysis

Q.19 $\frac{\text{Weight of the body}}{\text{Height X Height}}$ is the formula for 1
(a) BMI (b) Waist- Hip ratio
(c) Weight Ratio (d) None of these

SECTION - B

Q.20 What is nauli? What are its benefits? 2

Q.21 What are the types of disability? 2

Q.22 What is the meaning of physical fitness? 2

Q.23 Howis WHR calculated and how cab it be used to assess the health of a person. 2

OR

What are the difference between endomorphy and mesomorphy.

**SECTION – C**

Q.24 Write a short note on Fit India programme. 3

Q.25 Write any three function of the IOC. 3

Q.26 What are the subdispline of Yama? Explain any three. 3

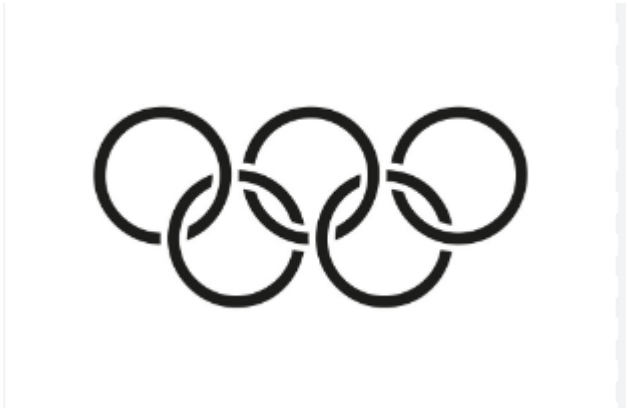
OR

What is First Aid? Write down the aim and objective of First Aid.

**SECTION – D**

Q.27 As the head girl of her school, shalini has to deliver a talk on careers in physical education. After the talk, she invites students to ask her a few questions. The students ask her the following questions. Answer them on behalf of salini. 4
(a) Are there opportunities to become a physical education teacher?
(b) How does training in physical education help to develop a career in media?
(c) What opportunities shuld be explored in the wellness industry?
(d) How does physical education training help to get job opportunities in coaching field.

Q.28 4



While introducing the chapter of Olymism in physical education class Mr. Davis found that children were not familiar with the term and were clueless about the various committees working in this field. So he explained in detail about IOC and various information related to it were discussed. On the basis of our knowledge about IOC, answer the following questions.

(a) What is the full form of IOC?
(b) When was the IOC established?
(c) Where is the headquarter of IOC?
(d) List down any two functions of IOC.

Q.29 Raman is a student of class 11. One day, a medical check –up camp arrived in his lacality. Raman participated there a volunter. Most of the people were advised to practice yogic kriyas on regular basis.The local body of that locality hired a yoga instructor and people started the practice of yogic kriyas under his/her guidance. Some of these kriyas are shown below 4



(i) The yogic kriya (i) can be identified as:
(a) Samadhi (b) Kapalbhati
(c) Dharana (d) Nouli

(ii) The yogic kriya (ii) can be identified as
(a) Sukhasana (b) Tratak
(c) Neti (d) Padmasana

(iii) The yogic kriya (iii) can be identified as:
(a) Nouli (b) Dhouti (c) Kapalbhati (d) Basti

(iv) The yogic kriya (iii)
(a) Improves the functioning of the lungs
(b) Improves weak memory
(c) Both (a) and (b)
(d) Neither (a) nor (b)

Q.30 Children with special needs face different challenges in undertaking certain activities. So in addition to the regular programmes of physical education the school must Provide APE programmes for children while introducing this chapter to the students, the physical education teacher explains the different types of disabilities and the objectives of APE. On the basis of this chapter answer the following questions. 4
(a) List down any four types of disabilities.
(b) What is down syndrome?
(c) What is APE?
(d) List any two aims of APE.

Q.31 Joseph, Pravesh and Ankit are good friends. Joseph is conseious of his physical fitness, while Ankit wants to make his mark as a physically fit child. Pravesh is indifferent to his lifestyle and his focus is only on studies, as a result of which he is physically weak. His weakness has affected his efficiency and neither is he able to do well in the academic field. 4

On the basis of the above situation, answer the following questions:

(i) What are the importance of physical fitness and wellness.

(ii) What are the components of physical fitness.

(iii) What are the components of wellness.

(iv) What are the components of health related fitness.

Q.32 Picture Based Questions: 4

Identify the following fitness test items.

## SECTION -E

Q.33 Explain the importance of test, measurement and evaluation in detail. 5

Q.34 What is disability? Write down the five causes of disability. 5

OR

What do you mean by strength? Write about its types.

**********

**Name: _____Sec:_____Roll No:__**

**SET : B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR CODE**
**HALF YEARLY EXAMINATION : [2024– 2025]**
**SUBJECT:PHYSICAL EDUCATION**
**CLASS: XI**

**Time: 3 Hours** **Maximum Marks:70**

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**General Instructions:**

(i) The question paper contains 34 questions and all are compulsory.
(ii) Question 1 to 19 carry 01 mark each and are Multiple Choice Questions.
(iii) Question 20 to 23 carry 02 marks each and shall not exceed 40 to 60 words.
(iv) Question 24 to 26 carry 03 marks each and shall not exceed 80 to100 words.
(v) Question No. 27 to 32 case based questions carry 4 marks each.
(vi) Question 33 and 34 carry 05 marks each and shall not be exceed 150 - 200 words.

==========

**Choose the correct option:**

1. "Physical Education is the sum of man's physical activity selected as to kind and conducted as to outcomes". Who said? 1
a) J.F. Williams b) D.L. Brownell c) J.B. Nash d) C.C. Cowell

2. Santosh Trophy is related to _____ game. 1
a)Volleyball b) Hockey c)Football d) Cricket

3. Cardiovascular efficiency is known as 1
a) Arobic fitness b) Heart and lungs endurance
c) Mascular endurance d) Mascular strength

4. Who was the first President of IOC? 1
a)Thomas Bach b) Robert Bach
c) Demetrius Vikelas d) Baron de Coubertin

5. What is the role of occupational therapist? 1
a)To give valuable assistance to differently abled parents
b)To help in communication skills
c)To help in daily life self care skills
d)To help them with motor skills

6. Which of the following asana is also known as a eagle pose? 1

a) Garudasana b) Padmasana c) Naukasana d) Vrikshasana

7. What is the main aim of physical education for differently abled? 1
a) To cure them
b) To help them in daily activities
c) To provide them equal opportunity to participate
d) To help them in reading and writing

8. At which Olympic Games, Olympic Oath have been taken for the first time? 1
a)Berlin Olympics b)Antwerp Olympics
c)Athens Olympics d)Melbourne Olympics

9. Which of the following is not a component of wellness? 1
a) Physical wellness b) Emotional wellness
c) Intellectual wellness d) Personal wellness

10. Where is the headquarter of International Paralympic Committee? 1
a)Rome b) Germany c) London d) Switzerland

11. Which one of the following is not a career option in physical education? 1
a)Coaching b) PET c) Fitness instructor d) Surgeon

Which of the following technique does not belongs to pranayama?

12. a)Puraka b) Rechak c) Kumbhaka d) Santosh 1

13. Which one of the following is not the colour in the symbol of Paralympics flag? 1
a)Red b)Blue c)Green d)Pink

14. How many techniques are there in pranayama? 1
a)1 b)3 c)6 d)8

15. The Khelo- India programme was introduced by _____ 1
a)Sports Authority of India b) Indian Olympic Association
c)Ministry of youth affairs and sports d) Sports Federation of India

16. What is the minimum decibel of hearing loss required for participating in Deaflympics ? 1
a)52 b)54 c)55 d)58

17. Sit and reach test measures the flexibility of _____ 1
a) Lower back and hamstring muscle
b) Upper back and hamstring muscle
c) Both A and B
d) None of the above

18. WHR is calculated by 1
a) Multiplying waist by hip measurement
b) Adding hip by waist measurement
c) Dividing hip by waist measurement
d) Subtracting waist from hip measurement

19. Skinfold technique is used to measure: 1
a) Weight
b) Fat Percentage
c) Girth Measurement
d) Over Fatness

**Answer the following questions.**

20. Write a short note of meditation. 2

21. Write the oath of Special Olympics Bharat. 2

22. Calculate the bodymass index of a man whose body weight is 70 kg and height is 1.6m. 2

23. Write about two components of wellness. 2

**OR**

Write about two components of physical fitness.

24. Discuss about any three International Competitions of sports. 3

25. Explain the role of Indian Olympic Association. 3

26. What role may yoga play in physical education and sports? 3

**OR**

Explain the importance of a healthy lifestyle.

**Case Based Questions:(Based on the above passages, answer the following questions.)**

27. The Paralympic Games is a major international multisports event involving players with a range of disabilities. On 29th July 1948, the day of the Opening Ceremony of the London 1948 Olympic Games" Dr. Guttmann" organized the first competition for wheel chair athletes which he named the "stoke Mandeville Games". They involved 16 injured servicemen and women who took part in archery. This games later become the Paralympic Games.

1

(i)Who organized the first Paralympic Games?

a)Barron de Coubertin b) Lord Killanin

c)Thomas Bach d) Dr. Guttmann

1

(ii) In which year the first Summer Paralympic Games held?

a)1960 b)1961 c)1963 d)1964

1

(iii) What was the Paralympic Games known as?

a)Wheel Chair Games b)Special Olympic Games

c)Deaflympic Games d)Stoke Mandeville Games

1

(iv) How many events were there in first Summer Paralympic Games ?

a)2 b)4 c)6 d)8

28. Ranjan is a high school student who is very active and enjoys playing various sports. However, he is not aware of the formal concept of physical education and its benefits.His school recently introduced a comprehensive physical education program designed to improve students' physical fitness, mental health and social skills. The program includes activities such as yoga, aerobics, team sports and individual exercises. Ranjan is curious about how participating in the program can benefit him holistically.

1

(i)Based on the scenario, which of the following is NOT a benefit of the physical education program for Ranjan?

a) Improve physical fitness to regular exercise
b) Enhance mental health by reducing stress and anxiety
c) Development of social skills through team sports
d) Academic improvement by focusing solely on physical activities

1

(ii) What is one of the primary goals of including physical education in school curriculum?

a) To trained students to become professional athletes
b) To ensure students get a break from academic subjects
c) To promote lifelong physical activity and healthy lifestyle habits
d) To focus solely on sports competitions

1

(iii) Which of the following best defines physical education?

a)A curriculum that focuses exclusively on competitive sports
b) A program designed to improve physical fitness , mental health and social well- being
c)Training for professional athletes
d) A set of exercises for bodybuilding

1

(iv) How does physical education contribute to a student's mental health?

a) By providing rigorous academic challenges
b) By reducing stress and anxiety through physical activities
c) By ensuring students become professional athletes
d) By focusing only on competitive sports

29. Rahul, a class of 11 student, spends most of his day sitting either in class or at home playing video games,. He rarely participates in physical activities and often eats fast food .As a result he feels tired and stressed most of the time . His physical fitness levels are low and he find hard to concentrate on his studies.

1

(i) what is one of the main reason for Rahul low physical fitness levels?

a) Regular physical activity
b) Participation in sports
c) Sedentary lifestyle
d) Balanced diet

1

(ii) How does Rahul's diet impact his wellness?
a) Positively, by contributing to fatigue and poor health
b) Negatively, by contributing to fatigue and poor health
c) It has no impact on his wellness 1
d) Positively, by improving his concentration

(iii) What could Rahul do to improve his concentration and reduce stress?
a) Spend more time playing video games
b) Continue eating first food 1
c) Increase physical activity and improve diet
d) Reduce the amount of sleep

(iv) Which component of wellness is most affected by Rahul's current lifestyle?
a) Physical well- being
b) Financial well- being
c) Social well - being
d) Spiritual well- being

30. Arjun, a student, incorporated yoga into his daily routine to improve his physical and mental well - being. He practiced Surya Namaskar every morning and meditation in the evening. After a month , he noticed significant improvement in his flexibility, concentration and overall mood. His classmates also observed that he was more focused and energetic throughout the day.

1

(i) What specific yoga practice did Arjun perform every morning?
a) Pranayama b) Surya Namaskar c)Asanas d) Dhyana

1

(ii) What activity did Arjun incorporate in the evening?
a) Running b) Weight lifting c) Meditation d) Swimming

1

(iii) What improvements did Arjun notice after a month of practicing yoga?
a) Improved diet b) Increased flexibility, concentration and overall mood 1
c) Better social skills d) Enhanced academic performance

iv) How did Arjun's classmates perceive the changes in him?
a) He was more stressed b) He was more focused and energetic
c) He was more introverted d) He was less participative in class

31. A school in a small town started and inclusive sports program to encourage children with special needs (CWSN) to participate in physical activities. Sarah, a student with the visual impairment, joined the program and took part in goalball, a sport designed for individual with visual impairment . With the support of her peers and adaptive sports equipment Sarah gained confidence and improved her physical fitness and social skills.

1

(i) What sports did Sarah participate in?
a) Basketball b) Goalball c) Swimming d) Running

1

(ii) What type of special need does Sarah have?
a) Hearing impairment b) Visual impairment
c) Physical disability d) Learning disability

1

(iii) What was one benefit Sarah experienced from participating in the sports program?
a) Decreased social interaction b) Increased confidence
c) Reduced physical fitness d)Increased isolation

1

(iv) What is the primary goal of inclusive sports program for CWSN?
a) To segregate children with special need
b) To limit their participation in physical activities
c) To focus solely on competitive success
d) To promote physical and social development

32. Rana, a student of class 11 , participated in a fitness assessment at his school . The test included measurements of his height, weight and endurance levels. His results were used to evaluate his overall fitness and to design a personalized training program .Through this, Rana understood the importance of regular fitness assessments for maintaining good health.

1

(i) What was the primary purpose of Rana's fitness assessment?
a) To evaluate his dietary habits 1
b) To measure his academic performance
c) To design a personalize training program
d) To monitor his social activities

(ii) Which of the following measurements were included in Rana's fitness assessment? 1
a) Academic scores b) Height and weight
c) Daily calorie intake d) Number of friends

1

(iii) Why are regular fitness assessments important according to the case study?
a) For maintaining good healthb) For tracking social media usage
c) For evaluating exam scores d) For planning vacations

(iv) Which chapter from the class 11 Physical Education syllabus does this case study related to?
a) Olympic Value Educationb) Test, Measurement and Evaluation
c) Yoga d) Physical Fitness and wellness

**Long answer type questions.**

33. How can inclusive education be implemented in India effectively? Explain it. 5

**OR**

What is J.C.R test? Explain it.

34. Discuss the objectives of adaptive physical education in detail. 5

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**Name: _____ Sec: ____ Roll No.: ____**

**CODE: A**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
# HALF YEARLY EXAMINATION: [2024-2025]
# INFORMATION TECHNOLOGY (802)
# CLASS – XI

**Time: 3 Hrs.** **Maximum Marks: 60**

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***General Instructions:***

1. Please read the instructions carefully.
2. This Question Paper consists of **17 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **A candidate has to answer all the 17 questions in the allotted (maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
   - ***i.*** This section has 06 questions.
   - ***ii.*** There is no negative marking.
   - ***iii.*** Do as per the instructions given.
   - ***iv.*** Marks allotted are mentioned against each question/part.
7. **SECTION-B: SUBJECTIVE TYPE QUESTIONS(30 MARKS):**
   - ***i.*** This section contains 11 questions.
   - ***ii.*** A candidate has to do all the 11 questions.
   - ***iii.*** Do as per the instructions given.
   - ***iv.*** Marks allotted are mentioned against each question/part.

==========

## SECTION-A

## OBJECTIVE TYPE QUESTIONS

1. **Answer the following 4 questions on Employability Skills (1 x 4 = 4 marks)**

i. What do you mean by 'Visual Communication'? 1

ii. In SMART model, what does 'R' stands for? 1
a. Render b. Real c. Realistic d. none

iii. Which of the following method is used to receive information from the sender? 1
a. Speaking b. Listening c. Telling d. none

iv. State whether the following statement is **TRUE** or **FALSE**. 1
"Teamwork teaches us to resolve the problems in a better way."

2. **Answer the following 5 questions (1 x 5 = 5 marks)**

i. To create a new database in MySQL ____ statement is used. 1
a. CR DATABASE b. NEW DATABASE
c. CREATE DATABASE d. none

ii. ____ is a Linux based platform for mobile phones. 1
a. Android b. Symbian c. Both (a) & (b) d. none

iii. ____ function is used to calculate the absolute value of a number n. 1
a. ABSL( ) b. ABSOLUTE(n) c. ABS(n) d. none

iv. Fill in the blank: 1
In OpenOffice Impress, ____ view presents slides in a miniature form.

v. Define Foreign Key. 1

3. **Answer the following 6 questions (1 x 6 = 6 marks)**

i. What is the use of UPDATE command in MySQL? 1

ii. What is the function of a Projector? 1

iii. What is the use of the 'Undo' option? Also, give the shortcut key for 'Undo'. 1

iv. In OpenOffice Calc, the heavy black border around the selected cell indicates that the selected cell is the ____ cell. 1
a. Highlight b. Passive c. Active d. none

v. ____ operator is used to retrieve those records that matches with a range of values in a column. 1
a. IN b. NOT c. BETWEEN d. none

vi. Fill in the blank: 1
1 GB = ____ MB.

4. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. ____ is a keyword used with Select statement to display values of all columns in a row. 1
a. Where b. Distinct c. ALL d. none

ii. What is the use of a Plotter? 1

iii. What is the function of 'Status Bar'? 1

iv. What do you understand by Column / Attribute? 1

v. ____ means that the data in the database is always accurate, such that incorrect information cannot be stored in the database. 1
a. Integrity of data b. Redundancy of data
c. Inconsistency of data d. none

5. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. What do you understand by 'Relational Database'? 1

ii. Write any two weaknesses of a computer. 1

iii. What is panning? 1

iv. Why 'Find and Replace' option is very useful? 1

v. What is the function of WHERE clause in MySQL? 1

6. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. What is the use of ORDER BY clause in MySql? 1

ii. Expand EPROM. 1

iii. ____ function is used to calculate the square root of a number n. 1
a. MinA( ) b. SQRT(n) c. Sqr(n) d. none

iv. In OpenOffice Calc, a worksheet contains how many rows? 1

v. What is the use of Modulo operator in MySql? 1

## SECTION-B: SUBJECTIVE TYPE QUESTIONS

### Answer the following 3 questions on Employability Skills (2 x 3 = 6 marks)

7. "Grooming helps us in many ways". Mention any four ways. 2

8. Write down the four steps for building self-motivation. 2

9. Write down the two advantages of Written Communication. 2

### Answer the following 3 questions (2 x 3 = 6 marks)

10. What is the main difference between NOT NULL and DEFAULT constraint? 2

11. Name the four types of Scanner. 2

12. Write down the shortcut keys for the following: 2
    a. Moves the cursor to the first cell in the sheet (A1).
    b. Moves the cursor to the last cell on the sheet that contains data.

### Answer the following 2 questions (3 x 2 = 6 marks)

13. Write the MySQL command to create the table "GAMES" with the following specification: 3

| Field name | Data type | Constraint |
|---|---|---|
| Game_id | int | Primary key |
| Game_name | varchar(25) | unique |
| No_of_coach | int | |
| Game_fees | float(9,2) | |
| Date_of _tournament | date | |

14. Write down the six functions of an Operating System. 3

## Answer the following 3 questions (4 x 3 = 12 marks)

15. In a spreadsheet, cells B8 to B12 contain values 33, 44, 55, 66 and 77. Write down the formulas using functions for the following questions. 4

a) To calculate the total of the numbers.
b) To calculate the product of the numbers.
c) To calculate the average of the numbers.
d) To calculate the square root of the number in cell B8.

16. Souvik has to prepare a project on his computer system. Suddenly, he finds that the mouse, which is attached to his computer system, is not working. 4

Mention any three troubleshooting options that might help him to bring the mouse in its working condition. (3)

Also, explain him the meaning of troubleshooting. (1)

17. Consider the following table named "STUDENT". 4

| ROLLNO | NAME | CLASS | SEC | ADDRESS |
|---|---|---|---|---|
| 12 | AMIT | 10 | A | ASN |
| 35 | SUMIT | 10 | B | DGP |
| 26 | ANJALI | 12 | A | KOL |
| 45 | SUNITA | 12 | E | KOL |

Write SQL statements to do the following:

a. Display the names of all students.
b. Display the names of all students along with their addresses.
c. Display the names of all students of class 10.
d. Display all rows sorted in descending order of roll numbers.

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**Name: _____ Sec: ____ Roll No.: ____**

**CODE: B**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
# HALF YEARLY EXAMINATION: [2024-2025]
# INFORMATION TECHNOLOGY (802)
# CLASS – XI

**Time: 3 Hrs.** **Maximum Marks: 60**

==========

***General Instructions:***

1. Please read the instructions carefully.
2. This Question Paper consists of **17 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **A candidate has to answer all the 17 questions in the allotted (maximum) time of 3 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (30 MARKS):**
   - ***i.*** This section has 06 questions.
   - ***ii.*** There is no negative marking.
   - ***iii.*** Do as per the instructions given.
   - ***iv.*** Marks allotted are mentioned against each question/part.
7. **SECTION-B: SUBJECTIVE TYPE QUESTIONS(30 MARKS):**
   - ***i.*** This section contains 11 questions.
   - ***ii.*** A candidate has to do all the 11 questions.
   - ***iii.*** Do as per the instructions given.
   - ***iv.*** Marks allotted are mentioned against each question/part.

==========

## SECTION-A

## OBJECTIVE TYPE QUESTIONS

1. **Answer the following 4 questions on Employability Skills (1 x 4 = 4 marks)**

i. 'Before preparing a public speech, the speaker should keep in mind the 3P's of Public speaking.' Mention any two of them. 1

ii. In SMART model, what does 'M' stands for? 1
a. Monitor b. Measurable c. Meeting d. none

iii. Which of the following method is used to give information to the receiver? 1
a. Speaking b. Listening c. Both (a) & (b) d. none

iv. State whether the following statement is TRUE or FALSE. 1
"Teamwork helps us to understand sharing of things among our peers."

2. **Answer the following 5 questions (1 x 5 = 5 marks)**

i. To modify a table in MySQL ____ statement is used. 1
a. MODIFY TABLE b. ALTER TABLE
c. RECREATE TABLE d. none

ii. ____ was the first widely-installed operating system for personal computers. 1
a. DOS b. Windows c. UNIX d. none

iii. ____ moves the text from the current location to the target location. 1
a. Copy Text b. Move Text c. Both (a) & (b) d. none

iv. From which tab do you get the 'Spelling' option in OpenOffice Impress? 1
a. Design tab b. Format tab c. Tools tab d. none

v. What do you understand by 'Domain'? 1

3. **Answer the following 6 questions**
**(1 x 6 = 6 marks)**

i. What is the function of WHERE clause in MySQL? 1

ii. What is a Cache memory? 1

iii. What is the use of Help tab in OpenOffice Writer software? 1

iv. The ____ sign before row number and column label makes the cell address absolute. 1

a. # b. & c. $ d. none

v. ____ is a legal empty value in MySQL. 1

a. NIL b. NULL c. Both (a) & (b) d. none

vi. Fill in the blank: 1

The electronic signals are in the form of 0 and 1 which are known as ____.

4. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. ____ keyword is used to display unique values. 1

a. Where b. Distinct c. ALL d. none

ii. What is the use of a Scanner? 1

iii. Name the two types of Ruler Bar. 1

iv. What is the function of the Window tab in OpenOffice Writer? 1

v. ____ means having duplicate copies of the same data. 1

a. Integrity of data b. Redundancy of data

c. Inconsistency of data d. none

5. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. What is the use of UPDATE command in MySQL? 1

ii. What is a Accumulator? 1

iii. What do you understand by Toggle case? 1

iv. In OpenOffice Calc, a worksheet contains how many columns? 1

v. Write down the syntax of INSERT command in MySQL. 1

6. **Answer the following 5 questions**
**(1 x 5 = 5 marks)**

i. What is the use of BETWEEN operator in MySQL. 1

ii. Expand EEPROM. 1

iii. Which of the following are types of filters? 1

a. Auto Filter b. Advance Filter

c. Both (a) & (b) d. none

iv. What does the vertical ruler bar shows in OpenOffice.org Writer? 1

v. What is the use of DISTINCT keyword in MySql? 1

## SECTION-B: SUBJECTIVE TYPE QUESTIONS

**Answer the following 3 questions on**
**Employability Skills (2 x 3 = 6 marks)**

7. Mention the four factors that influence teamwork. 2

8. Name and define the two types of motivation. 2

9. Write down two disadvantages of Written Communication. 2

**Answer the following 3 questions (2 x 3 = 6 marks)**

10. Consider a MySql table named as 'STUDENT'. 2
Write down SQL queries for the following:
   a. To display the structure of the table.
   b. To display the contents of the table.

11. Mention the four basic operations of a computer system. 2

12. Write down the shortcut keys for the following: 2
   a. Moves one sheet to the left. In the page preview it moves to previous print page.
   b. Moves one sheet to the right. In the page preview it moves to next print page.

## Answer the following 2 questions (3 x 2 = 6 marks)

13. Write the MySQL command to create the table "PRODUCT" with the following specification: 3

| Field name | Data type | Constraint |
|---|---|---|
| P_id | int | Primary key |
| P_name | varchar(30) | unique |
| No_of_Products | int | |
| P_cost | float(5,2) | |
| Date_of_manufacture | date | |

14. Write down any six types of Operating System. 3

## Answer the following 3 questions (4 x 3 = 12 marks)

15. Aradhana is word processing her chemistry workbook. She wishes to include her roll number in a header and page numbers in a footer. 4

(a) What is a footer? (1)

(b) How is a header different from footer? (1)

(c) In next coursework, Aradhana only wants to add page Numbers.

(i) Where should she put page numbers: (1)

- in header or
- in footer or
- in the text of every page.

(ii) Can she add a footer without adding header? (1)

16. Ayan has to prepare a project on his computer system. Suddenly, he finds that the keyboard, which is attached to his computer system, is not working. 4

Mention any three troubleshooting options that might help him to bring the keyboard in its working condition. (3)

Also, explain him the meaning of troubleshooting. (1)

17. Consider the following table named “TEACHER”. 4

| T_Id | T_Name | T_Sub | T_Teaching_ Experience | T_Address |
|---|---|---|---|---|
| 56 | MR. A. SINGH | MATHS | 12 | KOLKATA |
| 32 | MRS. T. SEN | SCI | 10 | SILIGURI |
| 16 | MRS. R. DAS | ENG | 5 | BANKURA |
| 60 | MR. P. GHOSH | SCI | 7 | ASANSOL |

Write SQL statements to do the following:

a. Display the names of all teachers.

b. Display the names of all teachers along with their addresses.

c. Display the names of science teachers.

d. Display all rows sorted in ascending order of teaching experience.

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**SET-A**

**Name: _____ Sec: ____ Roll No.: ___**

**_**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION: [2024-2025]
## ACCOUNTANCY
## CLASS: XI

**Time: 3 Hours** **Maximum Marks: 80**

==========

General Instructions:

Read the following instructions very carefully and strictly follow them.

(i) This question paper consists of 34 questions. All questions are **compulsory.**

(ii) Question no. 1-20 are very short type questions carrying 1 mark each.

(iii)Question no. 21-26 are short answer type- I questions carrying 3 marks each.

(iv)Question no. 27-29 are short answer type- II questions carrying 4 marks each.

(v) Question no. 30-34 are long answer type questions carrying 6 marks each.

(vi) Attempt all parts of a question together.

==========

1. Which of the following is not an objective of accounting: 1
   (a) To provide information about assets, liabilities, and capital of the enterprise.
   (b) To provide information about private assets and liabilities of owner.
   (c) To maintain record of business.
   (d) To provide information regarding the P/L of the enterprise.

2. As a result of a following transactions Accounting Equation will be: 1
   (i) Started business with cash ₹5,00,000 (ii) Goods purchased for cash ₹2,00,000 (iii) Goods costing ₹1,50,000 sold in ₹ 1,60,000 in credit.
   (a) ₹4,60,000 (b) ₹7,10,000
   (c) ₹5,10,000 (d) ₹ 6,60,000

3. Credit purchases of furniture will be recorded through _____ vouchers. 1

4. Accounting Cycles starts with preparation of Trading A/c. True/False 1

5. Outstanding Expenses A/c is: 1

(a) Real A/c (b) Personal A/c
(c) Nominal A/c (d) Valuation A/c

6. When a transaction is completely omitted to be recorded in the book it is called: 1

(a) Error of Principle (b) Error of Omission
(c) Error of Commission (d) Error of Posting

7. Assertion (A): Any expenditure that gives benefit for one accounting period is known as Capital Expenditure. 1
Reason(R): A revenue expenditure that benefits of which will occur in more than one F.Y. has to be written off in more than one accounting period is called Deferred Revenue Expenditure.
(a) Both Assertion (A) and Reason(R) are correct and Reason(R) is the correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason(R) are correct but Reason(R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true and Reason(R) is false
(d) Assertion (A) is false and Reason(R) is true

8. If ₹2,000 received from Anil has been credited to Sunil, it will be called Error of Commission. True/False 1

9. Which item shows debit balance in the trial balance: 1

(a) Purchase Return (b) Salary Outstanding
(c) Sales (d) Prepaid Expenses

10. Livestock includes: 1

(a) Stock (b) Goods
(c) Animal (d) LIC

11. Trial Balance does not include_____. 1

12. Petty cash book is a _____ book of cash book. 1

13. Adapting of AS is mandatory for: 1
(a) Sole Trader (b) Partnership firm
(c) Companies (d) All of the above

14. The numbers of AS specified by the ICAI so far is: 1
(a) 29 (b) 30
(c) 31 (d) 32

15. Purchase of assets on credit is recorded in: 1
(a) Cash Book (b) Purchase Return Book
(c) Sales Return (d) All of the above

16. The balance of Sales column in the Sales Day Book is ₹30,000. ₹5,000 were recovered from debtors. Then balance of sales column will be transferred by which amount? 1
(a) ₹25,000 (b) ₹30,000
(c) ₹35,000 (d) ₹20,000

17. Current Liability does not include: 1
(a) Bills Payable (b) Creditors
(c) Outstanding Expenses (d) Debentures

18. Find out the amount of capital in opening entry if the following balances appear in the books of SK Sons? 1
Cash: ₹430; Bank ₹2,675; Sundry Debtor ₹7,495; Closing Stock ₹9,000; Machinery and Equipment ₹6,000, Creditors ₹5,600
(a) ₹20,000 (b) ₹10,600
(c) ₹25,600 (d) ₹15,000

19. Preparation of trial balance is _____. 1

20. Which of the following transactions is not of financial character? 1
(a) Purchase of asset on credit
(b) Purchase of asset for cash
(c) Withdrawing of money by proprietor from business
(d) Strike by employees

21. Prepare Sales Return Book in the books of Ram Lal & Co, Hisar (Haryana) from the following transactions assuming CGST @6% and SGST @6%: 3

| Date | Particulars |
|---|---|
| 2022<br>April | Goods returned by Tukaram & Co, Karnal (Haryana)<br>1 Stand Fan @ ₹4,000 |
| 5 | 2 Table Fan @ ₹2,000 each<br>Less Trade Discount 15% |
| 10 | Bhabani Oil Mills (Maharashtra) returned defective goods valued ₹40,000. |
| 12 | Returned by Fateh Chand & Co for being damaged in transit:<br>5 Chairs @₹1600 each<br>Less Trade Discount 10% |

22. Write a short note on GAAP. 3

23. Prepare the Accounting Equation from the following transaction: 3

(a) Started business with cash ₹1,40,000 and stock ₹2,50,000.
(b) Sold goods (costing ₹50,000) at a profit of 25% on cost.
(c) Deposited into bank ₹1,80,000
(d) Purchased goods for cash ₹30,000 and on credit ₹44,000
(e) Purchased a motor cycle for personal use of ₹25,000
(f) Goods costing ₹50,000 sold at a profit of 25% out of which ₹27,500 received in cash and balance in cheque.

24. Pass Journal Entries in the books of Hari Shankar & Co from the following: 3

| Date | Particulars |
|---|---|
| 2021<br>June | |
| 3 | Purchased goods for cash of the list price of ₹80,000 at 10% trade discount and 2.5% cash discount. |
| 6 | Sold goods to Nagpal of the list price of ₹50,000 at a 20% trade discount. |
| 10 | Nagpal paid the account by paying cash under a discount of 15% |

25. RK Ltd maintains a Current A/c with SBI. On 31.03.2023 the bank column of its cash book showed a debit balance of ₹1,54,300. However, the bank statement showed a different balance as on that date. The following were the reasons for difference: 3

(i) Cheque deposited but not yet credited by bank ₹75,450.
(ii) Cheque issued but not yet presented for payment ₹80,760.
(iii) Bank Charges not yet recorded in the cash book ₹1,135.
(iv) Cheque received by the bank directly from debtor ₹1,35,200.

(v) Insurance premium ₹3,000 paid by the bank as per standing instruction but not recorded in the cash book.

(vi) Dividend collected by the bank but not yet recorded in the cash book ₹1,000.

You are required to prepare BRS and find out the balance as per the bank statement as on 31.3.2023.

26. Record the following transactions in the Journal Proper of M/S Jamuna Traders: 3

| Date | Particulars |
|---|---|
| 2022<br>Dec.<br><br>10 | Sunil who owed us ₹50,000 was declared insolvent and 40% is received as full and final payment. |
| 12 | Proprietor withdrew for personal use cash ₹10,000 and goods ₹4,000. |
| 15 | Goods worth ₹40,000 was destroyed by fire, insurance co admitted insurance claim of ₹25,000. |

27. Akash and Suresh are two friends who both are studying class XI. They are discussing about various aspect of accounting. They are discussing about various users of accounting. Akash says that he finds it interesting that accounting provides necessary information to employees. Suresh tells he finds more interesting that outsider party also get information valuable to them. Suresh further tells that even accounting helps owners to compare one year's cost, expenses and sales with those of other years. However, they were quite shocked by the fact that the management worker relations were not taken inti consideration. Meanwhile their teacher came and they stop their discussion. 4

Answer the following questions on basis of above case study:
(i) Which type of accounting users are said by Suresh?
(ii) Which limitation are talked about by them?
(iii) Which advantages are discussed by them?

28. Rectify the following errors: 4

(a) Machineries are purchased on credit from Raman for ₹20,000 recorded through purchase book.

(b) Goods for ₹2,000 sold to Geeta Traders on credit were entered in the sales book as ₹200 only.

(c) Goods purchased from Ajay for ₹2,600 were recorded in sales book by mistake.

(d) A credit sale of ₹126 were recorded as ₹162.

29. Prepare a Bank Reconciliation Statement as on 31.03.2020 from the following information: 4

(a) Cash book balance (old) ₹12,500.

(b) Cheque deposited but not recorded in cash book ₹2,000.

(c) Cheque received but not sent to bank ₹1,500.

(d) Credit side of bank column of cash book has been overcast ₹60.

(e) Bank charges entered twice in pass book ₹75.

(f) B.R. directly collected by bank ₹4,000.

(g) Electricity bill paid by bank as per instruction ₹800.

(h) Cheque deposited but not cleared ₹3,200.

30. i. Why is it important to adopt a consistent basis for the preparation of financial statement. Explain 6

ii. Discuss the concept based on premise 'do not anticipate profits but provide for all losses.'

.

31. Prepare two column Cash Book from the following transactions: 6

| Date | Particulars |
|---|---|
| 2023<br>May | |
| 1 | Cash at office ₹72, Bank Overdraft ₹1,250 |
| 4 | Received from Prem Chand a cheque for ₹1,875 in full settlement of his A/c of ₹1,900. The cheque was banked on the same day. |
| 6 | Narindar settled his A/c of ₹2,700 by a cheque. This was banked on a same day. |
| 9 | Paid to M. Lal by a cheque for ₹420 and discount received ₹80. |
| 12 | Cash sales of ₹400 of which ₹300 were banked. |
| 20 | Received a cheque for ₹400 from Akash in full settlement of his account of ₹460. The cheque is endorsed to Suresh on 24th May in full settlement of his A/c of ₹420. |
| 21 | Sales made in cash of ₹5,000. |

32. Following balances were extracted from the books of Ravinder Associates as at 31.03.2020. You are required to prepare trial balance from the balance given below. 6

Sundry Debtors: ₹4,10,000; Sundry Creditors: ₹80,000
Rent & Taxes: ₹48,000; Purchases: ₹34,00,000; Sales: ₹56,00,000; Trade Expenses: ₹12,000; Return Outward: ₹80,000; Return Inward: ₹1,20,000; Expenses: ₹4,000; Motor Vehicle: ₹6,50,000; Electricity: ₹25,000; Stock (1.4.2019): ₹2,30,000; Premises: ₹12,00,000; Fixture & Fittings: ₹3,10,000; Bad debt: ₹8,000; Rent received from sublet of premises: ₹30,000; Loan from Mukul: ₹1,50,000; Interest on Mukul's loan: ₹15,000; Drawings: ₹40,000; Cash in hand: ₹75,000; Stock on 31.3.2020: ₹3,80,000

33. Pass entries in the books of Ray & Co assessing transactions have been entered within the state of West Bengal, charging CGST & SGST @6% each. 6

| Date | Particulars |
|---|---|
| 2022 | |
| Apr. 12 | Purchase goods for ₹1,50,000 from S.Banerjee |
| 16 | Sold goods for ₹2,50,000 to Aditya Saigal |
| 18 | Cash withdrawn by proprietor for personal use @20,000 |
| 30 | |

6

34. Enter the following transactions in the petty cash book of M/S Sagar & Co with appropriate analysis columns. Balance it on 15.5.2020 and show the amount which should be received from the ashier to make up the amount of the imprest of ₹5,000.

| Date | Particulars |
|---|---|
| 2020 | |
| May | |
| 1 | Received from cashier ₹4,720, the amount required to make up the amount of imprest viz. ₹5,000. |
| | Purchased stamp ₹400 |
| | Paid for carriage ₹300 |
| 3 | Paid for office cleaning ₹200 |
| | Paid for wages ₹250 |
| | Paid railway fare ₹250 |
| | Paid bus fare ₹400 |
| 8 | Paid for wages ₹240 |
| | Tea to office staff ₹220 |

| | |
|---|---|
| 10 | Paid reward to servant ₹150<br>Purchased short hand note book for office ₹580<br>Paid for wages ₹400 |
| 12 | Paid for repairs to typewriter ₹200 |

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**SET- B**

**Name: _____ Sec: ____ Roll No.: ____**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION: [2024-2025]
## ACCOUNTANCY
## CLASS: XI

**Time: 3 Hours** **Maximum Marks: 80**

==========

General Instructions:

Read the following instructions very carefully and strictly follow them.

(i) This question paper consists of 34 questions. All questions are **compulsory.**

(ii) Question no. 1-20 are very short type questions carrying 1 mark each.

(iii)Question no. 21-26 are short answer type- I questions carrying 3 marks each.

(iv)Question no. 27-29 are short answer type- II questions carrying 4 marks each.

(v) Question no. 30-34 are long answer type questions carrying 6 marks each.

(vi) Attempt all parts of a question together.

1. Which of the following is not an objective of accounting: 1
   (a) To provide information about assets, liabilities, and capital of the enterprise.
   (b) To provide information about private assets and liabilities of owner.
   (c) To maintain record of business.
   (d) To provide information regarding the P/L of the enterprise.

2. As a result of a following transactions Accounting Equation will be: 1
   (i) Started business with cash ₹5,00,000 (ii) Goods purchased for cash ₹2,00,000 (iii) Goods costing ₹1,50,000 sold in ₹ 1,60,000 in credit.
   (a) ₹4,60,000 (b) ₹7,10,000
   (c) ₹5,10,000 (d) ₹ 6,60,000

3. Credit purchases of furniture will be recorded through _____ vouchers. 1

4. Accounting Cycles starts with preparation of Trading A/c. True/False 1

5. Outstanding Expenses A/c is: 1
(a) Real A/c (b) Personal A/c
(c) Nominal A/c (d) Valuation A/c

6. When a transaction is completely omitted to be recorded in the book it is called: 1
(a) Error of Principle (b) Error of Omission
(c) Error of Commission (d) Error of Posting

7. Assertion (A): Any expenditure that gives benefit for one accounting period is known as Capital Expenditure. 1
Reason(R): A revenue expenditure that benefits of which will occur in more than one F.Y. has to be written off in more than one accounting period is called Deferred Revenue Expenditure.
(a) Both Assertion (A) and Reason(R) are correct and Reason(R) is the correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason(R) are correct but Reason(R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true and Reason(R) is false
(d) Assertion (A) is false and Reason(R) is true

8. If ₹2,000 received from Anil has been credited to Sunil, it will be called Error of Commission. True/False 1

9. Which item shows debit balance in the trial balance: 1
(a) Purchase Return (b) Salary Outstanding
(c) Sales (d) Prepaid Expenses

10. Livestock includes: 1
(a) Stock (b) Goods
(c) Animal (d) LIC

11. Trial Balance does not include_____. 1

12. Petty cash book is a _____ book of cash book. 1

13. Adapting of AS is mandatory for: 1
(a) Sole Trader (b) Partnership firm
(c) Companies (d) All of the above

14. The numbers of AS specified by the ICAI so far is: 1

(a) 29 (b) 30

(c) 31 (d) 32

15. Purchase of assets on credit is recorded in: 1

(a) Cash Book (b) Purchase Return Book

(c) Sales Return (d) All of the above

16. The balance of Sales column in the Sales Day Book is ₹30,000. ₹5,000 were recovered from debtors. Then balance of sales column will be transferred by which amount? 1

(a) ₹25,000 (b) ₹30,000

(c) ₹35,000 (d) ₹20,000

17. Current Liability does not include: 1

(a) Bills Payable (b) Creditors

(c) Outstanding Expenses (d) Debentures

18. Find out the amount of capital in opening entry if the following balances appear in the books of SK Sons? 1

Cash: ₹430; Bank ₹2,675; Sundry Debtor ₹7,495; Closing Stock ₹9,000; Machinery and Equipment ₹6,000, Creditors ₹5,600

(a) ₹20,000 (b) ₹10,600

(c) ₹25,600 (d) ₹15,000

19. Preparation of trial balance is _____. 1

20. Which of the following transactions is not of financial character? 1

(a) Purchase of asset on credit

(b) Purchase of asset for cash

(c) Withdrawing of money by proprietor from business

(d) Strike by employees

21. Enter the following transactions in the Purchase Return Book of Govind Traders, Jharkhand assuming CGST @6% & SGST 6% 3

| Date | Particulars |
|---|---|
| 2021 | |
| June 16 | Returned goods to ₹R.K. & Sons, New Delhi for ₹20,000. Trade Discount 10% (Debit Note 140) |
| 22 | Returned goods to Gopalsons, New Delhi for ₹50,000, as the goods were not according to sample (Debit Note 141) |
| 25 | Allowances claimed from Raghubir Prasad, New Delhi on account of mistake in the invoice of ₹10,000. |

22. Write a short note on GAAP. 3

23. Prepare the Accounting Equation from the following transaction: 3

(a) Started business with cash ₹1,40,000 and stock ₹2,50,000.
(b) Sold goods (costing ₹50,000) at a profit of 25% on cost.
(c) Deposited into bank ₹1,80,000
(d) Purchased goods for cash ₹30,000 and on credit ₹44,000
(e) Purchased a motor cycle for personal use of ₹25,000
(f) Goods costing ₹50,000 sold at a profit of 25% out of which ₹27,500 received in cash and balance in cheque.

24. Journalise the following transactions: 3

1.8.2021. Goods sold to X on credit of ₹6,00,000 at trade discount of 10%
4.8.2021. X returned $1/6^{th}$ of the goods sold to him.
10.8.2021. Paid rent of ₹7,000, Travel expenses of ₹3,800 by cash.

25. Pass Journal Entries in the books of Hari Shankar & Co from the following: 3

| Date | Particulars |
|---|---|
| 2021<br>June<br><br>3<br><br>6<br><br>10 | Purchased goods for cash of the list price of ₹80,000 at 10% trade discount and 2.5% cash discount.<br>Sold goods to Nagpal of the list price of ₹50,000 at a 20% trade discount.<br>Nagpal paid the account by paying cash under a discount of 15% |

3

26. Record the following transactions in the Journal Proper of M/S Jamuna Traders:

| Date | Particulars |
|---|---|
| 2022<br>Dec.<br><br>10.<br><br>12.<br><br>15. | Sunil who owed us ₹50,000 was declared insolvent and 40% is received as full and final payment.<br>Proprietor withdrew for personal use cash ₹10,000 and goods ₹4,000.<br>Goods worth ₹40,000 was destroyed by fire, insurance co admitted insurance claim of ₹25,000. |

27. Akash and Suresh are two friends who both are studying class XI. They are discussing about various aspect of accounting. They are discussing about various users of accounting. Akash says that he finds it interesting that accounting provides necessary information to employees. Suresh tells he finds more interesting that outsider party also get information valuable to them. Suresh further tells that even accounting helps owners to 4

compare one year's cost, expenses and sales with those of other years. However, they were quite shocked by the fact that the management worker relations were not taken inti consideration. Meanwhile their teacher came and they stop their discussion.

Answer the following questions on basis of above case study:
(i) Which type of accounting users are said by Suresh?
(ii) Which limitation are talked about by them?
(iii) Which advantages are discussed by them?

28. Complete the following rectification entries: 4

| Date | Particulars | L.F. | ₹ (Dr) | ₹ (Cr) |
|---|---|---|---|---|
| 2020 May 1 | _____A/c….Dr<br>To _____A/c<br>(Sales of machinery wrongly recorded in sales book, now rectified) | | 2,000 | <br>2,000 |
| 3 | _____A/c….Dr<br>To _____A/c<br>(Purchase book was undercast by ₹1,000) | | ? | <br>? |

29. Prepare a Bank Reconciliation Statement as on 31.03.2020 from the following information: 4
(a) Cash book balance (old) ₹12,500.
(b) Cheque deposited but not recorded in cash book ₹2,000.
(c) Cheque received but not sent to bank ₹1,500.
(d) Credit side of bank column of cash book has been overcast ₹60.
(e) Bank charges entered twice in pass book ₹75.

(f) B.R. directly collected by bank ₹4,000.
(g) Electricity bill paid by bank as per instruction ₹800.
(h) Cheque deposited but not cleared ₹3,200.

30. i. Why is it important to adopt a consistent basis for the preparation of financial statement. Explain 6

ii. Discuss the concept based on premise 'do not anticipate profits but provide for all losses.'

31. Prepare a Cash book with cash and bank column from the following information in the books of O'Neil 6

| Date | Particulars |
|---|---|
| 2022 Dec. | |
| 1 | Cash in hand ₹34,000; Bank ₹25,000 |
| 11 | The cheque which was received from Prakash on 7th December of ₹600 was endorsed in favor of Avinash together with ₹1,400 in cash |
| 15 | A cheque for ₹10,000 which was received from Mohan and was deposited in the bank on 16th December is dishonored and the bank debited ₹100 as bank charges on this cheque and bank charges are received from Mohan on 16th December |
| 18 | Paid wages ₹1,000; Electricity bill ₹2,000 |
| 20 | Y's paid ₹8,000 by cheque and 2.5% was deducted from the amount and returned to him as cash discount. |

6

32. Following balances were extracted from the books of Ravinder Associates as at 31.03.2020.
Sundry Debtors: ₹4,10,000; Sundry Creditors: ₹80,000
Rent & Taxes: ₹48,000; Purchases: ₹34,00,000; Sales: ₹56,00,000; Trade Expenses: ₹12,000; Return Outward: ₹80,000; Return Inward: ₹1,20,000; Expenses: ₹4,000; Motor Vehicle: ₹6,50,000; Electricity: ₹25,000; Stock (1.4.2019): ₹2,30,000; Premises: ₹12,00,000; Fixture & Fittings: ₹3,10,000; Bad debt: ₹8,000; Rent received from sublet of premises: ₹30,000; Loan from Mukul: ₹1,50,000; Interest on Mukul's loan: ₹15,000; Drawings: ₹40,000; Cash in hand: ₹75,000; Stock on 31.3.2020: ₹3,80,000
You are required to prepare trial balance from the above balances.

33. Pass entries in the books of Ray & Co assessing transactions have been entered within the state of West Bengal, charging CGST & SGST @6% each. 6

| Date | Particulars |
|---|---|
| 2022 | |
| Apr. 12 | Purchase goods for ₹1,50,000 from S.Banerjee |
| 16 | Sold goods for ₹2,50,000 to Aditya Saigal |
| 18 | Cash withdrawn by proprietor for personal use @20,000 |
| 30 | |

6

34.

Enter the following transactions in the petty cash book of M/S Sagar & Co with appropriate analysis columns. Balance it on 15.5.2020 and show the amount which should be received from the ashier to makeup the amount of the imprest of ₹5,000.

| Date | Particulars |
|---|---|
| 2020 | |
| May | |
| 1 | Received from cashier ₹4,720, the amount required to make up the amount of imprest viz. ₹5,000. |
| | Purchased stamp ₹400 |
| | Paid for carriage ₹300 |
| 3 | Paid for office cleaning ₹200 |
| | Paid for wages ₹250 |
| | Paid railway fare ₹250 |
| | Paid bus fare ₹400 |
| 8 | Paid for wages ₹240 |
| | Tea to office staff ₹220 |
| 10 | Paid reward to servant ₹150 |
| | Purchased short hand note book for office ₹580 |
| | Paid for wages ₹400 |
| 12 | Paid for repairs to typewriter ₹200 |

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**CODE- A**

**Name: _____ Sec: ____ Roll No.: ____**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION : [2024-2025]
## BUSINESS STUDIES
## CLASS: XI

**Time: 3 Hours** **Maximum Marks: 80**

==========

General Instruction:

Read the following instructions very carefully and strictly follow them.

(i) This question paper consists of **34** questions. All questions are **compulsory.**

(ii) Marks are indicating against each question.

(iii) Answers should be brief and to the point.

(iv) Answer to the question carrying 3 marks may be from 50-75 words.

(v) Answer to the question carrying 4 marks may be about150words.

(vi) Answer to the question carrying 6 marks may be about 200 words

(vii) Attempt all parts of a question together.

==========

1. Which of the following does not characterize business activity? 1
   (a) Production of goods & services
   (b) Presence of risk
   (c) Sale or exchange of goods & services
   (d) Salary or wages
2. Strategic industries like defence and atomic power work as _____. 1
3. Government company is completely owned, managed, and controlled by a government ministry. True/False 1
4. Ethical enterprises often define the principles of conduct to be followed by entire organization. They are in the form of written documents and are termed as code. Such code of conduct is to be followed by: 1
   (a) Top level (b) Middle level
   (c) Operational level (d) All of the above

5. Maximum degree of autonomy is enjoyed by: 1

(a) Government Company (b) Statutory Corporation
(c) Departmental Undertaking (d) None of the above

6. Match the statement of A with correct option of B. 1

| A | B |
|---|---|
| (i) Advertisement | (a) Hinderance of persons |
| (ii) Warehousing | (b) Hinderance of place |
| (iii) Trade | (c) Hinderance of time |
| (iv) Transport | (d) Hinderance of knowledge |

(a) i-b ii-c iii-a iv-d (b) i-d ii-c iii-a iv-b
(c) i-b ii-a iii-c iv-d (d) i-a ii-b iii-c iv-d

7. Strikes come under: 1

(a) Natural Risk (b) Human Risk
(c) Economic Risk (d) Legal Risk

8. Partnership between public sector and private sector is called: 1

(a) Partnership (b) Joint venture
(c) Global Enterprise (d) PPP

9. In which type of company there is no restriction on transfer of share? 1

(a) One Person Company (b) Public Company
(c) Private Company (d) None of the above

10. Automobile and computer industry are the example of: 1

(a) Processing Industry (b) Assembling Industry
(c) Synthetic Industry (d) Both b & c

11. Which of the following is not applicable in LIC contract? 1

(a) Conditional Contract (b) Unilateral Contract
(c) Indemnity Contract (d) Both a & c

12. Minimum number of members to form a public company is: 1

(a) 5 (b) 7 (c) 12 (d) 21

13. Profits do not have to be shared. This statement belongs to: 1

(a) Partnership (b) Joint HUF
(c) Sole proprietorship (d) Company

14. Marin insurance policy is a contract of indemnity. True/False 1

15. A contract has been entered between government and private business firm for provision of public assets and public services for the benefit of the public: 1

(a) PPP (b) Joint Venture

(c) General partnership (d) None of these

16. Provision of residential accommodation to the members at reasonable rates is the objective of: 1

(a) Producers' Cooperative

(b) Consumers' Cooperative

(c) Housing Cooperative

(d) Credit Cooperative

17. Prajakta sold her old scooty on www.buynsells.com. It is an example of: 1

(a) B2C Commerce (b) C2C Commerce

(c) Intra B Commerce (d) B2B Commerce

18. Business risks is not likely arisen due to: 1

(a) Change in government policy

(b) Good management

(c) Employees' dishonesty

(d) Profit earning

19. The scope of e-business is _____ than that of e-commerce. 1

20. Match the statement of A with correct option of B. 1

| A | B |
|---|---|
| (i) Departmental Undertaking | (a) SAIL |
| (ii) Government Company | (b) LIC |
| (iii) Statutory Corporation | (c) Post & Telegraph |

(i) i-c ii-a iii-b (b) i-a ii-b iii-c

(c) i-c ii-a iii-b (d) i-b ii-a iii-c

21. Distinguish between e-Business and Traditional Business. 3

| | | |
|---|---|---|
| 22. | Identify type of e-business transaction is highlighted in the following cases:<br>(i) Employees send their daily report through e-mail.<br>(ii) Sales of used books through e-Buy.com.<br>(iii) Conducting surveys to determine customers' preference. | 3 |
| 23. | Explain features of sole-proprietorship | 3 |
| 24. | Aquasuar Ltd. manufactures RO water purifies. In order to increase sales of their product, they encouraged their salesman to make false claims to customers about quality of their RO. This increased the sale of their water purifiers.<br>Identify the group whose interest is being ignored by Aquasuar Ltd? Also state any two responsibilities which the company should followed towards this group. | 3 |
| 25. | Steel Authority of India(SAIL) is one of the largest steel making companies in India and one of the Maharatnas of the country's Central Public Sector Enterprises. Vision of SAIL is to be a respected world class corporation and the leader in Indian steel business in quality, productivity, profitability, and customer satisfaction. SAIL was incorporated on 24$^{th}$ January, 1973 with an authorized capital of ₹2,000 crore and was made responsible for managing five integrated steel plant of Bhilai, Bokaro, Durgapur, Rourkela, Burnpur, the Aloy steel plant and Salem Steel Plant. As government is major shareholder (with 75% stake), it exercises control over affairs of the company.<br>State the features of such public sector enterprise. | 4 |
| 26. | Govind is manufacturer of readymade kids' garments. He sells his products through various dealers across the country. However, his sales are decreasing over the years. Recently his wife gifted him a jacket which she had ordered through online. This gave Govind an idea to start selling his product online.<br>State any four benefits that Govind can get through online business. | 4 |

| | | |
|---|---|---|
| 27. | Distinguish between company and partnership. | 4 |
| 28. | Is registration of a partnership firm is compulsory? Justify your answer. | 4 |
| 29. | Discussed social responsibilities of a business organization towards following groups:<br>(a) Shareholders (b) Worker | 4 |
| 30. | Discuss the process of online trading from customers' point of view. | 4 |
| 31. | Identify the form of public sector enterprise for the following cases:<br>(i) It is under the control of concerned minister of department.<br>(ii) It enjoys maximum autonomy in all management activities.<br>(iii) LIC & Air India are example of this form of enterprise.<br>(iv) Minimum 51% paid up capital held by government.<br>(v) This enterprise is most suitable when national security concerned.<br>(vi) These enterprises are setup under a special act of parliament. | 6 |
| 32. | Discuss merits & limitation of Cooperative form of organization. | 6 |
| 33. | Anubhab took a fire insurance policy for his property worth ₹5,00,000 with two insurers: ICICI Lombard General Insurance Co. Ltd for ₹4,00,000 & Bajaj Allianz General Insurance Co. Ltd for ₹2,00,000. An electric short circuit in his property caused fire and it's resulted in a loss of ₹1,50,000 against each of the two insurance companies.<br>On the basis of above situation answer the following questions:<br>(i) Can Anubhab recover ₹1,50,000 from two insurers?<br>Give reason.<br>(ii) Determine the liability of each of the two insurers. | 6 |
| 34. | In the first year of operation, the revenue generated by Smart Enterprise from sale of its products are the cost of production and after recovering the cost balance left is minimum.<br>(i) Identify the objective which is fulfilled in the given case by quoting line.<br>(ii) What are two other objectives which the company is yet to achieve. Explain briefly. | 6 |

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**CODE-B**

**Name: _____ Sec: ____ Roll No.: ____**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
## HALF YEARLY EXAMINATION: [2024-2025]
## BUSINESS STUDIES
## CLASS: XI

**Time: 3 Hours** **Maximum Marks: 80**

==========

General Instruction:

Read the following instructions very carefully and strictly follow them.

(i) This question paper consists of **34** questions. All questions are **compulsory.**

(ii) Marks are indicating against each question.

(iii) Answers should be brief and to the point.

(iv) Answer to the question carrying 3 marks may be from 50-75 words.

(v) Answer to the question carrying 4 marks may be about150words.

(vi) Answer to the question carrying 6 marks may be about 200 words

(vii) Attempt all parts of a question together.

==========

1. Which of the following does not characterize business activity? 1
   (a) Production of goods & services
   (b) Presence of risk
   (c) Sale or exchange of goods & services
   (d) Salary or wages
2. Strategic industries like defence and atomic power work as _____. 1
3. Government company is completely owned, managed, and controlled by a government ministry. True/False 1
4. Ethical enterprises often define the principles of conduct to be followed by entire organization. They are in the form of written documents and are termed as code. Such code of conduct is to be followed by: 1
   (a) Top level (b) Middle level
   (c) Operational level (d) All of the above

5. Maximum degree of autonomy is enjoyed by: 1

(a) Government Company (b) Statutory Corporation
(c) Departmental Undertaking (d) None of the above

6. Match the statement of A with correct option of B. 1

| A | B |
|---|---|
| (i) Advertisement | (a) Hinderance of persons |
| (ii) Warehousing | (b) Hinderance of place |
| (iii) Trade | (c) Hinderance of time |
| (iv) Transport | (d) Hinderance of knowledge |

(a) i-b ii-c iii-a iv-d (b) i-d ii-c iii-a iv-b
(c) i-b ii-a iii-c iv-d (d) i-a ii-b iii-c iv-d

7. Strikes come under: 1

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13. Profits do not have to be shared. This statement belongs to: 1

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(c) Sole proprietorship (d) Company

14. Marin insurance policy is a contract of indemnity. True/False 1

15. A contract has been entered between government and private business firm for provision of public assets and public services for the benefit of the public: 1

(a) PPP (b) Joint Venture

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16. Provision of residential accommodation to the members at reasonable rates is the objective of: 1

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19. The scope of e-business is _____ than that of e-commerce. 1

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| A | B |
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| (i) Departmental Undertaking | (a) SAIL |
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| (iii) Statutory Corporation | (c) Post & Telegraph |

(i) i-c ii-a iii-b (b) i-a ii-b iii-c

(c) i-c ii-a iii-b (d) i-b ii-a iii-c

21. Distinguish between e-Business and Traditional Business. 3

| | | |
|---|---|---|
| 22. | Identify type of e-business transaction is highlighted in the following cases:<br>(i) Complaint lodged by customer at the company's call center.<br>(ii) Withdraw of money from ATM.<br>(iii) Inventory and cash management of an organization. | 3 |
| 23. | Explain features of sole-proprietorship | 3 |
| 24. | The management of Mars Ltd manipulated its financial statement to show lesser earnings so that low rate of dividend can be given.<br>(i) Do you think this act of Mars Ltd is justified? Identify the group whose interest is being ignored.<br>(ii) State any two responsibilities which the company should followed towards this group. | 3 |
| 25. | Steel Authority of India (SAIL) is one of the largest steel making companies in India and one of the Maharatnas of the country's Central Public Sector Enterprises. Vision of SAIL is to be a respected world class corporation and the leader in Indian steel business in quality, productivity, profitability, and customer satisfaction. SAIL was incorporated on 24$^{th}$ January, 1973 with an authorized capital of ₹2,000 crore and was made responsible for managing five integrated steel plant of Bhilai, Bokaro, Durgapur, Rourkela, Burnpur, the Aloy steel plant and Salem Steel Plant. As government is major shareholder (with 75% stake), it exercises control over affairs of the company.<br>State the features of such public sector enterprise. | 4 |
| 26. | Govind is manufacturer of readymade kids' garments. He sells his products through various dealers across the country. However, his sales are decreasing over the years. Recently his wife gifted him a jacket which she had ordered through online. This gave Govind an idea to start selling his product online.<br>State any four benefits that Govind can get through online business. | 4 |
| 27. | Distinguish between sole proprietorship and partnership. | 4 |

| | | |
|---|---|---|
| 28. | Is registration of a partnership firm is compulsory? Justify your answer. | 4 |
| 29. | Discussed social responsibilities of a business organization towards following groups:<br>(a) Community (b) Government | 4 |
| 30. | Discuss the limitation of e-banking services. | 4 |
| 31. | Identify the form of public sector enterprise for the following cases:<br>(i) It is under the control of concerned minister of department.<br>(ii) It enjoys maximum autonomy in all management activities.<br>(iii) LIC & Air India are example of this form of enterprise.<br>(iv) Minimum 51% paid up capital held by government.<br>(v) This enterprise is most suitable when national security concerned.<br>(vi) These enterprises are setup under a special act of parliament. | 6 |
| 32. | Discuss merits & limitation of Joint Hindu Family business. | 6 |
| 33. | Anubhab took a fire insurance policy for his property worth ₹5,00,000 with two insurers: ICICI Lombard General Insurance Co. Ltd for ₹4,00,000 & Bajaj Allianz General Insurance Co. Ltd for ₹2,00,000. An electric short circuit in his property caused fire and it's resulted in a loss of ₹1,50,000 against each of the two insurance companies.<br>On the basis of above situation answer the following questions:<br>(i) Can Anubhab recover ₹1,50,000 from two insurers?<br>Give reason.<br>(ii) Determine the liability of each of the two insurers. | 6 |
| 34. | Three friends Amar, Akbar and Anthony completed their studies and planned to join their father's business. Amar got engaged in his sugarcane firm. Akbar joined his father's sugar mill and Anthony joined the transport business of his father.<br>Identify different types of industries being discussed in the given case and explain briefly. | 6 |

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**Name: _____ Sec: ____ Roll No.: ____**

**SET-A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF-YEARLY EXAMINATION : [2024-2025]**
**ECONOMICS(030)**
**CLASS : XI**

**Time: 3 Hrs.** **Maximum Marks : 80**

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**General Instructions :**

*1) This question paper contains two sections:*

*Section A- Statistics for Economics*
*Section B- Micro Economics*

*2) This paper contains 20 Multiple Choice Questions type questions of 1mark each.*
*3) This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.*
*4) This paper contains 6 Short Answer Questions type questions of 4 marks is to be answered in 80 to 100 words.*
*5) This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.*

==========

## SECTION A-STATISTICS FOR ECONOMICS

**1.** Kshitij is employed in a Multi NationalCompany as a marketing executive. He is a_____ **1**

**Alternatives:**
a. Producer
b. Consumer
c. Service provider
d. Service holder

**2.** **Primary Data Collection Methods** **1**

| | | | |
|---|---|---|---|
| Direct personal Investigation | _____ | Mailing(Questionnaire) Surveys | Enumerator's method |

Fill in the blank to complete the table given above regarding methods of primary data collection.
a.Indirect oral investigation
b.Reports of NSSO
c. Statistical abstract of India
d.Annual survey of industries

**3.** Find the missing figures and choose the correct alternatives: **1**

| **Marks** | **No.of students(f)** | **M** | **fm** |
|---|---|---|---|
| 10-20 | 8 | 15 | ____ |
| 20-30 | 9 | ____ | 225 |
| 30-40 | ____ | 35 | 350 |
| 40-50 | 12 | 45 | ____ |

a. 120,20,11,540
b. 120,25,10,540
c. 80,20,10,500
d. 150,30,11,480

**4.** Read the following statements carefully. **1**
**Statement 1: Random sampling is not in accordance with the rules of sampling.**
**Statement 2: Haphazard sampling allows every item an equal chance of being selected in the sample.**
In light of the given statements, choose the correct alternative from the following:
a. Statement 1 is true and Statement 2 is false
b. Statement 1 is false and Statement 2 is true
c. Both statements are true
d. Both statements are false

**5.** Match the options of column I with correct options in column II. **1**

| Column I | Column II |
|---|---|
| A.Arithmetic Mean | i. Assign different importance for different items of series |
| B. Combined Mean | ii. Based upon all items |
| C. Corrected Mean | iii. Gives composite mean |
| D. Weighted Mean | iv. Rectified actual mean |

**CODES**:

| | A. | B. | C. | D. |
|---|---|---|---|---|
| a. | ii. | iv. | i. | iii. |
| b. | ii. | iii. | iv. | i. |
| c. | i. | ii. | iii. | iv. |
| d. | iv. | iii. | i. | ii. |

**6.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-Arithmetic Mean reduces the sampling fluctuations in both symmetric and assymetric distribution**

**Reason(R)- Arithmetic Mean is a representative of the whole set of observations.**

**Alternatives:**

a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).

b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).

c. Assertion (**A**) is true but Reason (**R**) is false.

d. Assertion (**A**) is false but Reason(**R**) is true.

**7.** A continuous series can be of which of the following types? **1**

a. Inclusive series
b. Exclusive series
c. Mid value series
d. Both a and b

**8.** If there are two groups with mean 10 and 15 and number of items is 6 each, combined mean will be? **1**

a. 12.5
b. 25
c. 20
d. 30

**9.** The total of the deviation of a set of observation from their mean is always **1**

a. 0
b. 1
c. -1
d. -2

**10.** Which of the following statements is incorrect? **1**

a. Head note is not required in a table
b. A table should be simple and compact
c. A table should be complete and self explanatory
d. Both b and c

**11.** Calculate Arithmetic Mean from the data given below by shortcut method:- **3**

| **Marks** | 1-9 | 10-19 | 20-29 | 30-39 | 40-49 |
|---|---|---|---|---|---|
| **No.of students** | 5 | 4 | 6 | 10 | 5 |

**12.** "***In certain conditions, sampling becomes a necessity***". **3**
Explain this statement.

**OR** **3**

Mailing questionnaire and schedule filled by enumerators are suitable for certain specific cases. Enumerate those cases.

**13.** Construct a frequency polygon with histogram for the following data:- **4**

| **Class Interval** | **Frequency** |
|---|---|
| 0-10 | 4 |
| 10-20 | 6 |
| 20-30 | 7 |
| 30-40 | 14 |
| 40-50 | 16 |

| | |
|---|---|
| 50-60 | 14 |
| 60-70 | 8 |
| 70-80 | 6 |
| 80-90 | 5 |

**14** In the following frequency distribution, the frequency of the class interval (40-50) is not known. Find it, if the Arithmetic mean of the distribution is 50. **4**

| **Wages(Rs)** | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
|---|---|---|---|---|---|---|---|
| **No.of workers** | 5 | 3 | 4 | ? | 2 | 6 | 13 |

**15** Construct time series graph for the following data:- **4**

| **Years** | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| **Exports(Rs.in lakh)** | 16 | 20 | 36 | 24 | 12 |

**OR**

Construct a Pie diagram to represent the cost of construction of a house:

| **Items** | **Labour** | **Bricks** | **Cement** | **Steel** | **Timber** | **Supervision** |
|---|---|---|---|---|---|---|
| **Expenditure(%)** | 25 | 15 | 20 | 15 | 10 | 15 |

**16.** Use '**Less than**' Ogive' curves on the graph paper for the following data:- **3**

**A.**

| **Income** | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
|---|---|---|---|---|---|
| **No.of persons** | 5 | 15 | 25 | 3 | 2 |

**B.** What kind of diagrams are more effective in representing the following? **3**

i. Components of cost in a factory
ii. Composition of population of Mumbai by religion
iii. Agriculture output of 6 states of India

**17A.** Calculate the average marks of students given below by step deviation method: **3**

| **Marks** | 10 | 20 | 30 | 40 | 50 |
|---|---|---|---|---|---|
| **No.of students** | 15 | 10 | 40 | 20 | 15 |

**B.** Enumerate the main objectives for computing an average. **3**

3

**OR**

**A.** Calculate weighted mean of the following data:-

| **Marks(X)** | 100 | 200 | 300 | 400 | 500 | 600 |
|---|---|---|---|---|---|---|
| **Weights(W)** | 2 | 3 | 6 | 7 | 3 | 9 |

**B.** "***Arithmetic average lack in values as these do not do justice to all the values of the variables***". 3
In your opinion, how is this statement correct?

## SECTION B- MICRO ECONOMICS

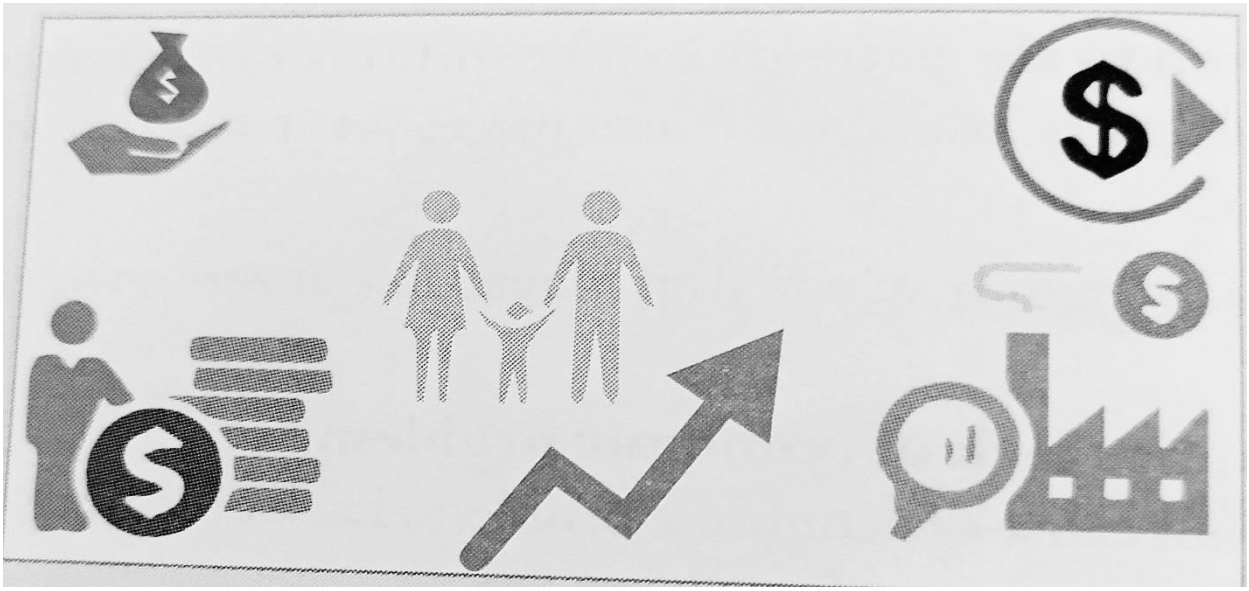
**18.** According to economic growth, production possibility Frontier will show_____ **1**
a.a downward shift
b. an inward shift
c. an outward shift
d. No effect

**19.** Read the following statements carefully. **1**
**Statement 1: Law of diminishing utility doesn't hold true in absence of continuous consumption.**
**Statement 2: A consumer consumes one good and is an equilibrium. He will get more utility when the price of the good falls.**
In light of the given statements, choose the correct alternative from the following:
**Alternatives:**
a. Statement 1 is true and Statement 2 is false
b. Statement 1 is false and Statement 2 is true
c. Both statements are true
d. Both statements are false

**20.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**
**Assertion(A)-Demand curve shows the inverse relation between own price of a good and its quantity demanded.**
**Reason(R)- Law of diminishing marginal utility advocates that consumer gets lesser satisfaction for each additional units consumed.**
**Alternatives:**

a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**21.** **1**



Take the clue from the image above suggest which of the following branch of economics is also known as the Theory of Price.
a. Micro economics
b. Macro economics
c. Both a and b
d. None of these

**22.** Which of the following is not an exception of '***Law of Demand***'? **1**
a.Veblen goods
b. Inferior goods
c. Giffen goods
d. Conspicuous necessity goods

**23.** Choose the incorrect pair: **1**

| **Column I** | **Column II** |
|---|---|
| A. Convex PPC | i. Diminishing MRT |
| B. Economic Problems | ii. Problem of choice |
| C. MOC | iii. Cost of alternative |
| D. Market Economy | iv. Invisible hands of demand and supply |

**CODES**:
a. A-i
b. B-ii
c. C-iii
d. D-iv

**24.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-A straight line Production Possibility Frontier is a representative of substitute goods.**
**Reason(R)- When the economy is willing to sacrifice equal quantities of both goods, PPC is straight line.**
**Alternatives:**
a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**25.** The ratio of exchange between two goods on an indifference curve analysis is shown by the_____ **1**
a.MRS
b. IC
c. Price line
d. Income consumption curve

**26.** In economics, scarcity refers to a situation when:- **1**
**Alternatives**
a. Demand for good exceeds its supply
b. Supply of goods exceed its demand
c. Supply of goods is equal to its demand
d. Either a or b

**27.** Price elasticity of demand is _____ in number because price and quantity demanded are inversely related. **1**
a. Positive
b. Negative
c. Constant price
d. None of these

**28.** A consumer consumes only two goods X and Y is in equilibrium. Show that when the price of good Xrises, the consumer buys less of good X. Use utility analysis. **3**

**29.** Which technology of production would you prefer in rural India, a '***labour intensive***' one, which would curtail the problem of unemployment to certain extent or a '***capital intensive'*** one, which is very highly productive in nature. **3**

**OR**

Explain the problem of' '***for whom to produce'***. **3**

**30.** What will be the impact of improvement in technology of good X while deterioration of technology of good Y simultaneously, on the PPC of home country? **4**

**31.** Explain the conditions of consumer's equilibrium with the help of indifference curve analysis. **4**

**32.** A 5% fall in price of a good leads to 10% rise in its demand. A consumer buys 40 units of a good at a price of rupees 10 per unit.How many units will he buy at a price of rupees 12 per unit? **4**

**OR**

Explain with the help of diagrams, the effect of the following changes on the demand for a commodity. **4**

i. A fall in the price of substitute goods .
ii. A fall in the income of its buyer.

**33.**

**A.** Explain the relationship between total utility and marginal utility with the help of a diagram. **3**

**B.** A consumer consumes only two goods. Explain consumers equilibrium with the help of utility analysis. **3**

**OR**

**A.** A convex indifference curve has a negative slope. Comment **3**

**B.** Enlist the three major conditions associated with consumer equilibrium under indifference curve approach. **3**

**34.** Read the following hypothetical text and answer the given questions:

**A scientific study shows that consumption of milk is beneficial for healthy bones.**

First of all, latest analyse the effect that this event would have on the quantity demanded of milk on the market. According to the law of demand, quantity demanded of a good decreases when the price of this good increases, other things equal. So, price and demand are inversely related. However, price is not the only factor that influences changes in demand. In this example, the results of the scientific study increased the value of milk in the eyes of the customers, and they would want to buy more of this good even though the price did not drop.
Consequently, this discovery would increase the quantity demanded of milk. Now, at any given price, the buyers would be willing to purchase more milk. Because of the increase in demand, the demand curve would shift to the right. Naturally, customers would be winning to pay more for milk only up to a certain point, after which the price would become too high for them. As a result, at a certain price, quantity supplied and quantity demanded would settle.
Therefore, in the event of a scientific discovery that milk is substantially more beneficial for healthy bones than thought initially
, both quantity demanded and supply of milk would increase as well as the price, and the demand and supply curves would shift to the right until a new point of equilibrium would be reached..
**There is an outbreak of mad cow disease**
This unfortunate event would have a completely opposite effect on the price and quantity of milk. Quantity demanded of milk would drop because household become extremely causes in regards to this good. As a result, the demand curve would shift to the left. Sellers would react correspondingly. Reduced demand would force the suppliers to decrease price, and consequently, produce less milk.
Therefore, if there was an outbreak of mad cow disease, both quantity demanded and quantity supplied of milk would decrease, as well as its price.

***Source****https://www.wowessays.com/free-samples/free-price-and-quantity-of-milk-case-study-sample/*

A)Suppose Johnny drinks 4 cups of milk everyday no matter what the price. What kind of elasticity does it have? **2**

B) Suppose that when the price of milk increases by 40%, the percentage change in quantity demanded by consumer is reduced by 10%. Calculate the elasticity of demand. **4**

**********

**Name: _____ Sec: ____ Roll No.: ____**

**SET-B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF -YEARLY EXAMINATION : [2024-2025]**
**ECONOMICS(030)**
**CLASS : XI**

**Time: 3 Hrs.** **Maximum Marks : 80**

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**General Instructions :**

***1) This question paper contains two sections:***

***Section A- Statistics for Economics***
***Section B- Micro Economics***

***2) This paper contains 20 Multiple Choice Questions type questions of 1mark each.***
***3) This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.***
***4) This paper contains 6 Short Answer Questions type questions of 4 marks is to be answered in 80 to 100 words.***
***5) This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.***

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## SECTION A-STATISTICS FOR ECONOMICS

**1.** Stage IV of statistical study is known as _____ **1**

**Alternatives:**
a. Layering of data
b. Analysis of data
c. Classification of data
d. Layout of data

**2.** Pradhan wants to find the average height of 4 of his friends. Which source of data collection would be suitable for him? **1**
a. Internal source
b. External source
c. Primary source
d. Secondary source

**3.** Study the following table carefully and answer the question on the basis of the same:- **1**

| **Marks:** | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
|---|---|---|---|---|---|
| **No.of students** | 20 | 24 | 40 | 36 | 20 |

**fm** for the third class interval in the above table is_____

a. 800
b. 1000
c. 1200
d. 600

**4.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-Census method of conducting survey includes each and every item of the universe.**
**Reason(R)- Samples are the representatives of the groups of homogeneous data.**
**Alternatives:**
a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**5.** Choose the incorrect pair: **1**

| **Column I** | **Column II** |
|---|---|
| A. Assumed mean method | i. Shortcut method |
| B. Equal weights assigned to each number | ii. A.M=W.M |
| C. Mid values of a given class | iii. It is average of the whole observation |
| D. Mid value of an exclusive series | iv. Mid values of an inclusive series |

CODES:-
a. A-i
b. B-ii
c. C-iii
d. D-iv

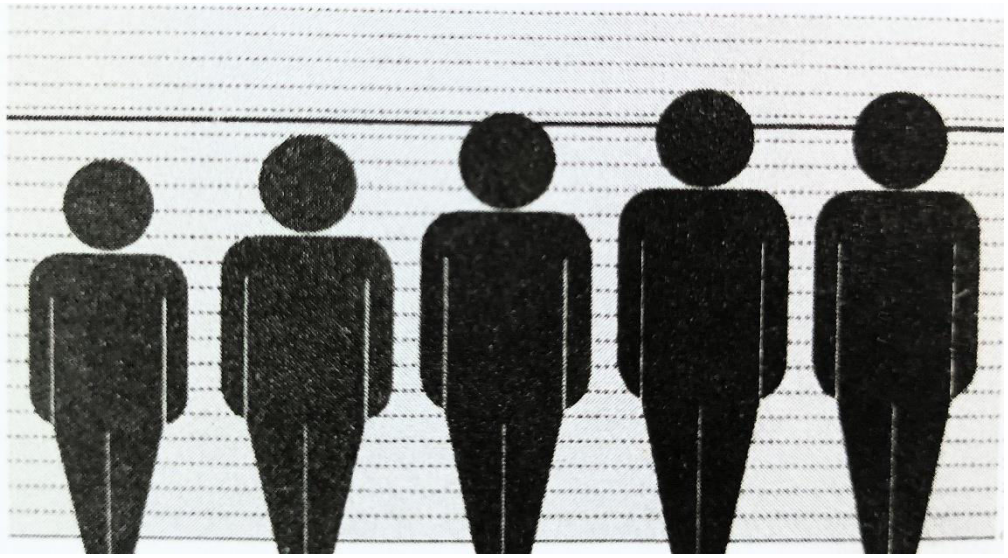
**6.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-Sum of squares of deviations taken from actual mean is always zero in case of symmetrical distribution.**
**Reason(R)- Arithmetic Mean gives more stress to highest items as compared to lowest items of the series.**
**Alternatives:**
a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**7.** Range of a frequency distribution is equal to **1**
a. Largest value-Smallest value
b. No.of classes × Class Interval(when class intervals are the same)
c. Both a and b
d. None of the above

**8.** Simple Arithmetic Mean is also known as **1**
a. Weighted mean
b. Corrected mean
c. Combined mean
d. Unweighted mean

**9.** Which of the following measures are indicated by the dark line in the image given below? **1**



a. Arithmetic Mean
b. Average
c. Positional Average
d. Both a and b

**10.** 35% of students in a college enrolled in Business Administration, 35% in Management and 30% in Accounting. This information can be presented with the help of **1**
a. A line graph
b. Only a bar graph
c. Only a pie chart
d. Both a bar graph and a pie chart

**11.** The sales of a balloon seller in 7 days of a week are as given below: **3**

| **Days** | **Mon** | **Tues** | **Wed** | **Thu** | **Fri** | **Sat** | **Sun** |
|---|---|---|---|---|---|---|---|
| **Sales** | 100 | 150 | 125 | 140 | 160 | 200 | 250 |

If the profit is 20% of sales, then find his average profit per day.

**12.** "***A good sample is generally based on correctness and continuity***". **3**
In the context of above statement, explain the characteristics of good sample.

**OR**

What is '***Loss of Information***' in classified data? **3**

**13.** Draw Pie diagram to represent the following information of expenditure by a family: **4**

| **Items of expenditure:** | **Food** | **Education** | **Housing** | **Clothing** | **Misc.** |
|---|---|---|---|---|---|
| **% of total expenditure:** | 60 | 15 | 10 | 10 | 5 |

**14.** 80 students of Section A of class 11, obtained 40 mean marks in statistics, 40 students of Section B obtained 50 mean marks in statistics. Find out mean marks in statistics for class 11 as a whole. **4**

**15.** Construct a time series graph to represent the following data relating to expenditure and income of the persons in a town. **4**

| **Year** | **2014** | **2015** | **2016** | **2017** | **2018** |
|---|---|---|---|---|---|
| **Expenditure (Rs. Lakh)** | 14 | 18 | 28 | 20 | 10 |
| **Income(Rs. Lakh)** | 16 | 20 | 32 | 24 | 12 |

**OR**

Explain briefly, the principles to be followed while preparing a table. **4**

**16.** Use '**Less than**' Ogive' and '**More than Ogive**' curves on the graph paper for the following data. Also determine the value of median. **3**

**A.**

| **Marks** | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 | 40-45 | 45-50 |
|---|---|---|---|---|---|---|---|---|---|---|
| **No.of students** | 4 | 6 | 8 | 9 | 8 | 5 | 3 | 8 | 5 | 4 |

**B.** Represent estimated sectoral real growth rates as multiple time series graph. **3**

| **Year** | **Agriculture and allied sectors** | **Industry** | **Services** |
|---|---|---|---|
| 1994-95 | 5.0 | 9.2 | 7.0 |
| 1995-96 | -0.9 | 11.8 | 10.3 |
| 1996-97 | 9.6 | 6.0 | 7.1 |
| 1997-98 | -1.9 | 5.9 | 9.0 |
| 1998-99 | 7.2 | 4.0 | 8.3 |
| 1999-2000 | 0.8 | 6.9 | 8.2 |

**17A.** If Arithmetic Mean of the following series is 16 and number of observations is 20, find out missing frequencies:- **3**

| **X:** | 0-10 | 10-20 | 20-30 | 30-40 |
|---|---|---|---|---|
| **f:** | x | 4 | y | 2 |

**B.** The following table shows monthly wage rate of workers in a factory. Find out the average wage rate. **3**

| **Wage rate(Rs):** | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 |
|---|---|---|---|---|---|
| **No.of workers:** | 20 | 10 | 6 | 4 | 5 |

**OR**

**A.** "***The Arithmetic Mean gets distorted by extreme values in the series and that the value of Arithmetic mean may not be a figure in the series at all***". **3**

Write the limitations of mean with the help of above statement.

**B.** How is arithmetic mean calculated in specific cases? **3**

## SECTION B- MICRO ECONOMICS

**18.** _____ is the problem which is concerned with the distribution of national income, among those who have helped to produce it. **1**

**Alternatives:**

a. How to produce?
b. What to produce?
c. Why to produce?
d. For whom to produce?

**19.** Read the following statements carefully. **1**

**Statement 1: Indifference map is a set of indifference curves representing different levels of satisfaction.**
**Statement 2: Total utility initially increases at an increasing rate.**
In light of the given statements, choose the correct alternative from the following:

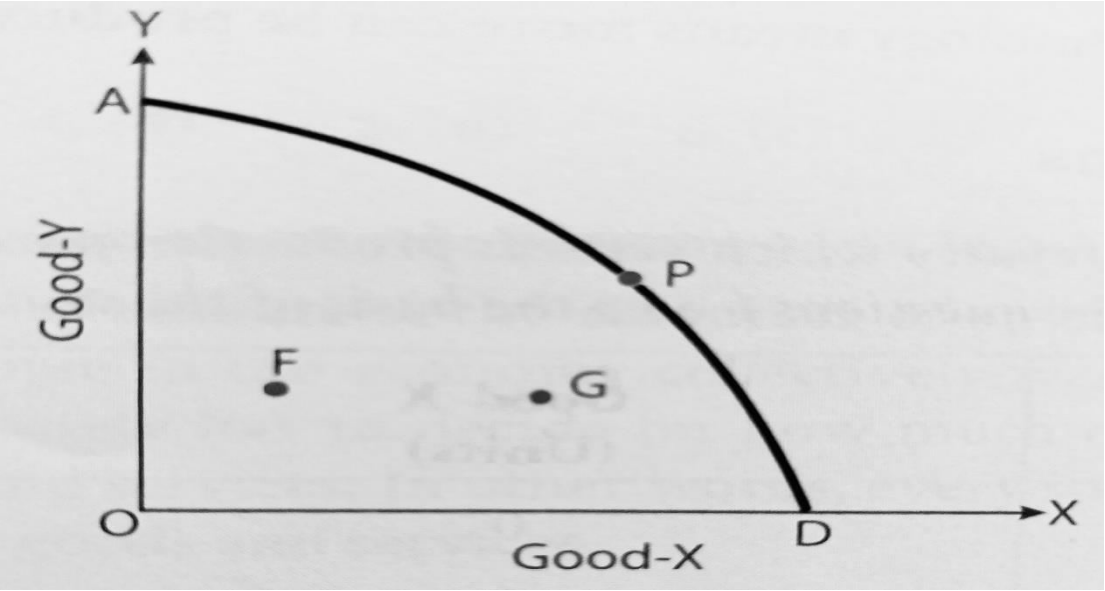
a. Statement 1 is true and Statement 2 is false
b. Statement 1 is false and Statement 2 is true
c. Both statements are true
d. Both statements are false

**20.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-A commodity which can be put to several use, is price inelastic.**
**Reason(R)- As price falls, number of buyers increase in the market.**
**Alternatives:**

a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**21.** On the basis of the given diagram, state which point indicates fuller utilisation of resources. **1**




a. Point F
b. Point G
c. Point P
d. Points F and G

**22.** How are the two goods apples and oranges related when, as a result of rise in the price of apples, demand for oranges increases? **1**

**Alternatives**:
a. Substitute goods
b. Complementary goods
c. Normal goods
d. Inferior goods

**23.** Identify the correct sequence of alternatives given in column II by matching them with respective items in column I. **1**

| Column I | Column II |
|---|---|
| A. Economic problems | 1. Value of a factor in its next best alternative use |
| B. Centrally planned economies | 2. Central problems are solved by the central authority |
| C. Opportunity cost | 3. All points on and inside the PPC |
| D. Attainable combinations of output | 4. Problem concerning the allocation of the resources to different uses |

**Codes**

a. A-ii B-iii. C-iv. D-i.
b. A-ii. B-i. C-iv. D-iii
c. A-iv. B-ii. C-i. D-iii
d. A-iii. B-iv. C-ii. D-i

**24.** Read the following statements-Assertion(**A**) and Reason(**R**). Choose one of the correct alternatives given below:- **1**

**Assertion(A)-How much to produce is not one of the dimensions of what to produce.**

**Reason(R)- Rich or poor, developed or undeveloped, every economy faces Central problems.**

**Alternatives:**

a. Both Assertion (**A**) and Reason(**R**) are true and Reason(**R**) is the correct explanation of Assertion (**A**).
b. Both Assertion (**A**) and Reason(**R**)are true but Reason(**R**) is not the correct explanation of Assertion (**A**).
c. Assertion (**A**) is true but Reason (**R**) is false.
d. Assertion (**A**) is false but Reason(**R**) is true.

**25.** Marginal utility of a particular commodity at the point of saturation is:- **1**

a. Zero
b. Unity
c. Greater than unity
d. Less than unity

**26.** The opportunity cost of 100 kg of rice produced on a land which can also produce 80 tonnes of wheat is: **1**

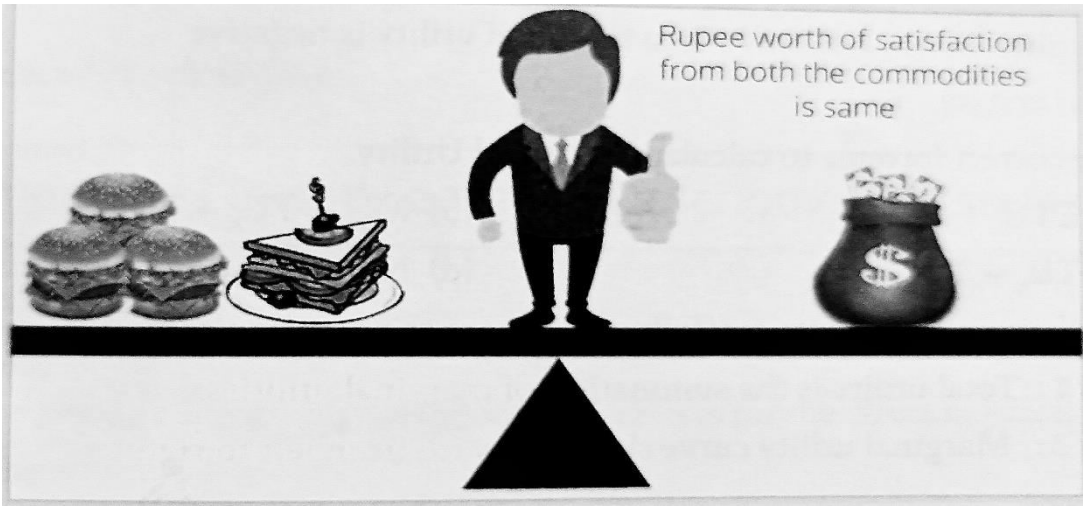
**Alternatives:**

a. 100 kg of wheat
b. 80 tonnes of wheat
c. 8000 tonnes of wheat
d. None of these

**27.** Shift in demand curve means: **1**

a. Fall in demand due to rise in own price of the good.
b. Rise in demand due to fall in own price of the good.
c. Change in demand due to factors other than own price of the good
d. None of these.

**28.** **3**




Identify the concept depicted in the above image and also state its conditions in case of two commodities.

**29.** " ***Economics is about making choices in the presence of scarcity***". Explain. **3**

**OR**

Why marginal opportunity cost must rise as resources are shifted from Use 1 to Use 2, even when given resources are fully and efficiently utilised? **3**

**30.** If more and more resources are constantly explored and new techniques of production and constantly discovered, don't you think a day will come when our central problems will be solved once for all? **4**

**31.** How does a consumer reach equilibrium position when he is buying only one commodity? Explain with the help of marginal utility schedule. **4**

**32.** Consider the demand for a good. At price rupees 4, the demand for the good is 25 units. Suppose, price of the good increases to rupees 5, and as a result, the demand for the good falls to 20 units. Calculate the price elasticity. **4**

**OR**

What is elasticity of demand in a situation when percentage change in quantity is infinite in response to a finite change in price? Draw a diagram, and support your answer logically. **4**

**33.**

**A.** Marginal rate of substitution tends to diminish because of the law of diminishing marginal utility. Comment. **3**

**B.** Show diagrammatically consumer's equilibrium using indifference curve analysis. Also, analyse the conditions of consumers equilibrium. **3**

**OR**

**A.** Explain the reaction of the consumer when:

i. Price ratio is higher than the marginal rate of substitution.

ii. Price ratio is lower than the marginal rate of substitution. **3**

**B.** How would you, as a consumer, change your consumption basket when the rate at which you are willing to substitute good X for good Y is lower than the rate at which the market allows you to do it? **3**

**34.** Read the following hypothetical text and answer the given questions:

The elasticity of demand is great for high prices, and great, or at least considerable, for medium prices; but it decline as the price falls; and gradually fades away if the fall goes so far that satiety level is reached. Water is one of the few things the consumption of which we are able to observe at all prices, from the very highest down to nothing at all. At moderate prices the demand for it is very elastic. But the uses to which it can be put are capable of being completely filled: and as it's price sinks towards zero the demand for it loses its elasticity. Nearly the same may be said of salt. It's price in England is so low that the demand for it as an article of food is very inelastic: but in India the price is comparatively high and the demand is comparatively elastic.

***Source: The Elasticity of wants, Alfred Marshall Book III, Principles of Economics.***

A) From a point of intersection of the two demand curves, a flatter demand curve shows higher elasticity of demand. Do you agree? **2**

B) Higher the price level, higher should be the elasticity of demand. Comment. **4**

**********

Name :_____ Sec:_____ Roll No:_____

**SET-A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**
**HALF YEARLY EXAMINATION: [2024-2025]**
**GEOGRAPHY**
**Class: XI**

**TimeAllowed-3 Hours** **Maximum Marks-70**

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**General Instructions:**

1. This question paper contains **30** questions. **All questions are compulsory.**
2. This question paper is divided into five sections. **Sections-A, B, C, D and E.**
3. Section **A** - Question number **1** to **17** are Multiple Choice type questions carrying 1 mark each.
4. Section **B** - Question number **18** and **19** are Source based questions carrying 3 marks each.
5. Section **C**- Question number **20** to **23** are Short Answer type questions carrying 3 marks each. Answer to these questions shall be written in 80 to 100 words.
6. Section **D**-Question number **24** to **28** are Long Answer type questions carrying 5 marks each. Answer to these questions shall be written in 120 to 150 words.
7. Section **E** Question number **29** and **30** are Map based questions.

## SECTION-A

**Question numbers 1 to 17 are Multiple Choice Questions**

1 Which one of the following scholar coined the term 'Geography'? 1

a) Herodotus
b) Erathosthenese
c) Galileo
d) Aristotle

2 Which river is known as the 'sorrow of Bengal'? 1

a) Damodar
b) Kosi
c) Son

d) Gandak

3 Which of the following country is not included in the Indian subcontinent? 1

a) Pakistan
b) Nepal
c) Bhutan
d) Afghanistan

4 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** India borders the Indian ocean and its two arms extending in the form of Bay of Bengal and the Arabian Sea.
**REASON(R):** India is located in the south-central part of the continent of Asia.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

5 Which of the following fact regarding the study of Geography is true? 1

a) It is the description of the vegetation cover.
b) Geography is the description of the earth as the abode of human being.
c) Geography in not a study of areal differentiation.
d) Geography is only the study of human interaction with the nature.

6 Read the following information carefully and identify the correct option for the physical feature: 1

- It lies south of Bhabar.
- Most of the streams and rivers re-emerge.
- It has marshy and swampy conditions

**OPTIONS**

a) Tarai
b) Bhangar
c) Khadar
d) Alluvial plain

7 The near horizontal bodies of the intrusive igneous rocks are called 1

a) Dykes
b) Sill
c) Batholiths
d) Lacoliths

8 Which one of the following processes is a gradation process? 1

a) Deposition
b) Diastrophism
c) Volcanism
d) Erosion

9 Which of the following rivers and their feature is correctly matched? 1

| | **( RIVERS )** | **(FEATURE )** |
|---|---|---|
| a) | Indus | - enter plains at Devprayag |
| b) | Ganga | - known as 'Singi Khamban' |
| c) | Narmada | - flowing in a rift valley |
| d) | Yamuna | - famous for its badland topography |

10 Match Column-I with Column-II and choose the correct option: 1

| **Column-I (GEOMORPHIC AGENTS)** | **Column-II (LANDFORMS)** |
|---|---|
| A) Waves and currents | i) Serrated ridges |
| B) Glaciers | ii) Sea stacks |
| C) Running Water | iii) Deflation Hollows |
| D) Winds | iv) Alluvial Fans |

**OPTIONS**

| | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| a) | (i) | (iii) | (iv) | (ii) |
| b) | (ii) | (i) | (iv) | (iii) |
| c) | (iv) | (iii) | (ii) | (i) |
| d) | (iii) | (i) | (ii) | (iv) |

11 On which of the following hill range is the 'Dodabeta' peak situated? 1

a) Nilgiri hills
b) Anaimalai hills
c) Cardamom hills
d) Nallamala hills

12 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** A galaxy contains a large number of stars.
**REASON(R):** Galaxies spread over vast distances that are measured in thousands of metres.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

13 In which of the following stages of landform development, downcutting is dominated? 1

a) Youth stage
b) Early mature stage
c) Late mature stage
d) Old stage

14 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** Body waves are generated due to the release of energy at the focus.
**REASON(R):** P-wave is a type of surface wave.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

**Read the following paragraph and answer question no 15 to 17.**

Since the advent of the concept of sea floor spreading, the interest in the problem of distribution of oceans and continents was revived. It was in 1967, McKenzie and Parker and also Morgan, independently collected the available ideas and came out with another concept termed Plate Tectonics. A tectonic plate (also called lithospheric plate) is a massive, irregularly-shaped slab of solid rock, generally composed of both continental and oceanic lithosphere. Plates move horizontally over the asthenosphere as rigid units. The lithosphere includes the crust and top mantle with its thickness range varying between 5 and100 km in oceanic parts and about 200 km in the continental areas. A plate may be referred to as the continental plate or oceanic plate depending on which of the two occupy a larger portion of the plate. Pacific plate is largely an oceanic plate whereas the Eurasian plate may be called a continental plate. The theory of plate tectonics proposes that the earth's lithosphere is divided into seven major and some minor plates. Young Fold Mountain ridges, trenches, and/or faults surround these major plates.

15 Plates move over which layer of the earth? 1

a) Crust
b) Asthenosphere
c) Inner core
d) Outer core

16 How many major plates are there? 1

a) Seven
b) Ten
c) Five
d) Twelve

17 Pacific plate is a type of 1

a) Continental plate
b) Oceanic plate
c) Both a and b
d) None of these

## SECTION-B

**Question 18 & 19 are Source based questions.**

18 **Read the given Passage carefully and answer the questions that follow:**

Valleys start as small and narrow rills; the rills will gradually develop into long and wide gullies; the gullies will further deepen, widen and lengthen to give rise to valleys. Depending upon dimensions and shape, many types of valleys like V-shaped valley, gorge, canyon, etc. can be recognised. A gorge is a deep valley with very steep to straight sides and a canyon is characterised by steep step-like side slopes and may be as deep as a gorge. A gorge is almost equal in width at its top as well as its bottom. In contrast, a canyon is wider at its top than at its bottom. In fact, a canyon is a variant of gorge. Valley types depend upon the type and structure of rocks in which they form. For example, canyons commonly form in horizontal bedded sedimentary rocks and gorges form in hard rocks.

i Through which of the following geomorphic agent valleys are formed? 1

a) Wind
b) Running water
c) Ground water
d) Waves and currents

ii Valley is a type of 1
a) Erosional landform
b) Depositional landform
c) Both a and b
d) High rock coast

iii Which of the following is not a type of valley? 1
a) Gorge
b) Canyon
c) V-shaped valley
d) Delta

19 **Read the given Passage carefully and answer the questions that follow:**

The North and Northeastern Mountains consist of the Himalayas and the Northeastern hills. The Himalayas consist of a series of parallel mountain ranges. Some of the important ranges are the Greater Himalayan range, which includes the Great Himalayas and the Shiwalik. The general orientation of these ranges is from northwest to the southeast direction in the northwestern part of India. Himalayas in the Darjiling and Sikkim regions lie in an eastwest direction, while in Arunachal Pradesh they are from southwest to the northwest direction. In Nagaland, Manipur and Mizoram, they are in the northsouth direction. The approximate length of the Great Himalayan range, also known as the central axial range, is 2,500 km from east to west, and their width varies between 160-400 km from north to south. It is also evident from the map that the Himalayas stand almost like a strong and long wall between the Indian subcontinent and the Central and East Asian countries. Himalayas are not only the physical barrier, they are also a climatic, drainage and cultural divide.

i Which of the following landform act as a geoenvironmental divide between India and Central Asia? 1
a) Peninsular plateau
b) Himalayan mountain
c) Indian desert
d) Western ghat

| | | |
|---|---|---|
| ii | In which of the following state Himalaya do not run in north south direction?<br>a) Nagaland<br>b) Mizoram<br>c) Arunachal Pradesh<br>d) Manipur | 1 |
| iii | The width of Great Himalayan range varies between<br>a) 250-400 km<br>b) 160-400 km<br>c) 2500 km<br>d) 400 km | 1 |

## SECTION-C

**Question numbers 20 to 23 are Short Answer type questions.**

| | | |
|---|---|---|
| 20 | What are the different types of an Earthquake? | 3 |
| | **OR** | |
| | What do you mean by shadow zone of an earthquake? Describe the shadow zone of P-waves and S-waves. | |
| 21 | " The ocean floor may be segmented into three major divisions based on the depth as well as the forms of reliefs". Explain these three major divisions. | 3 |
| 22 | What are the implications of India having a long coastline? | 3 |
| 23 | Write the different features of the Peninsular River. | 3 |
| | **OR** | |
| | Which river is known as the Dakshin Ganga? Mention two features of this river? | |

## SECTION-D

**Question numbers 24 to 28 are Long Answer Type questions.**

| | | |
|---|---|---|
| 24 | "Life become possible on the earth when it changed from rocky, barren and hot earth to a beautiful planet with ample amount of water and conducive atmosphere". How? | 5 |
| | **OR** | |
| | "There are three stages in the evolution of the present atmosphere". Explain. | |
| 25 | What is weathering? Explain different types of weathering. | 5 |
| 26 | Write a short note on the coastal plains of India. | 5 |

**OR**

Which is the oldest and the most stable landmass of India. Explain different features of this landmass.

27 What are the different problems in using river water? Mention the different steps to reduce water pollution. 5

**OR**

Which river has its origin from a glacier near Bokhar Chu? Mention its tributaries and the region of its flow?

28 The latitudinal and longitudinal extent of India are roughly 30 degrees but there is difference in actual distance. How? 2+3

"India, as a country, is a physically diverse land providing occurrence of varied resources". Explain.

## SECTION-E

**Question numbers 29 & 30 are Map based questions having 5 sub-parts each.**

29 **On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F, G. Identify any five with the help of the following information and write their correct names on the lines drawn near each feature.** 5

A A major ocean of the world
B A continent of the world
C A major ocean of the world
D A major lithospheric plate
E A minor lithospheric plate
F A continent of the world
G A major lithospheric plate

30 **Locate and label any five of the following geographical features on the political outline map of India with appropriate symbols.** 5

30.1 The subdivision of Meghalaya plateau
30.2 A peninsular river flowing through rift valley
30.3 The highest peak in India
30.4 An island lying in the Bay of Bengal
30.5 A Himalayan River flowing through Assam.
30.6 The southernmost part of western coastal plain.
30.7 The longest tributary of river Ganga.

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**SET-B**

# BURNPUR RIVERSIDE SCHOOL, BURNPUR
# HALF YEARLY EXAMINATION: [2024-2025]
# GEOGRAPHY
# Class: XI

**TimeAllowed-3 Hours** **Maximum Marks-70**

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**General Instructions:**

1. This question paper contains **30** questions. **All questions are compulsory.**
2. This question paper is divided into five sections. **Sections-A, B, C, D and E.**
3. Section **A** - Question number **1** to **17** are Multiple Choice type questions carrying 1 mark each.
4. Section **B** - Question number **18** and **19** are Source based questions carrying 3 marks each.
5. Section **C**- Question number **20** to **23** are Short Answer type questions carrying 3 marks each. Answer to these questions shall be written in 80 to 100 words.
6. Section **D**-Question number **24** to **28** are Long Answer type questions carrying 5 marks each. Answer to these questions shall be written in 120 to 150 words.
7. Section **E** Question number **29** and **30** are Map based questions.

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## SECTION-A
## Question numbers 1 to 17 are Multiple Choice Questions

1 Which one of the following disciplines attempts temporal synthesis? 1

a) Sociology
b) Geography
c) Anthropology
d) History

2 Which river is known as the 'sorrow of Bihar'? 1

a) Damodar
b) Kosi
c) Son
d) Gandak

3 Indian Standard Time is ahead of Greenwich Mean Time by 1

a) 7 hours and 30 minutes
b) 5 hours and 10 minutes
c) 8 hours and 30 minutes
d) 5 hours and 30 minutes

4 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** India is a physically diverse land.
**REASON(R):** India have a long coast line of 6,100 km, in the mainland.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

5 Which of the following fact, about physical geography, is true? 1

a) Population and Settlement Geography are studied under physical geography.
b) Political Science is related with Physical Geography.
c) Physical Geography is linked with geology, pedology and meteorology.
d) The study of society is included in Physical Geography.

6 Read the following information carefully and identify the correct option for the physical feature: 1

- It is irregular triangle
- This is the oldest and most stable landmass of India
- The general elevation is from west to the east

**OPTIONS**

a) The Northern Plains
b) The Himalayas
c) The Coastal Plains
d) The Peninsular Plateau

7 Which one of the following is not an indirect source of information about the earth's interior? 1

a) Mining
b) Gravitational force
c) Magnetic field
d) Seismic activity

8 A type of bacteria lives in the root nodules of leguminous plants and fixes nitrogen to the host plant. 1

a) Termites
b) Rhizobium
c) Rodents
d) Earthworm

9 Which of the following rivers and their origins are correctly matched? 1

| | **( RIVERS )** | **(ORIGIN )** |
|---|---|---|
| a) | Ganga | - Bokhar Chu |
| b) | Narmada | - Amarkantak Plateau |
| c) | Yamuna | - Mahendragiri |
| d) | Brahmaputra | - Darjiling hills |

10 Match Column-I with Column-II and choose the correct option: 1

| **Column-I (GEOMORPHIC AGENTS)** | **Column-II (LANDFORMS)** |
|---|---|
| A) Groundwater | i) Mushroom rocks |
| B) Glaciers | ii) River Terraces |
| C) Running Water | iii) Cirque |
| D) Winds | iv) Caves |

**OPTIONS**

| | (A) | (B) | (C) | (D) |
|---|---|---|---|---|
| a) | (i) | (iii) | (iv) | (ii) |
| b) | (ii) | (iv) | (i) | (iii) |
| c) | (iv) | (iii) | (ii) | (i) |
| d) | (iii) | (i) | (ii) | (iv) |

11 The Meghalaya plateau is a part of which plateau? 1

a) The Central Highland
b) The Peninsular Plateau
c) Chotanagpur Plateau
d) The Northeastern Plateau

12 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** The earth was initially a barren, rocky and hot object with a thin atmosphere of hydrogen and helium.

**REASON(R):** The composition of the atmosphere was modified by the living world through the process of photosynthesis.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

13 Which of the following is not a landform but is only a type of channel pattern form by running water? 1

a) Alluvial plains.
b) Meanders.
c) Deltas.
d) Natural Levees.

14 **Two statements are given below. They are Assertion (A) and Reason (R). Read them carefully and choose the correct option.** 1

**ASSERTION(A):** Continental crust is thinner as compared to the Oceanic crust.

**REASON(R):** The mantle extends from Moho's discontinuity to a depth of 2900 km.

**OPTIONS**

a) (A) is correct, but (R) is incorrect.
b) (A) is incorrect, but (R) is correct.
c) Both (A) and (R) are correct and (R) is correct explanation of (A).
d) Both (A) and (R) are correct and (R) is not correct explanation of (A).

**Read the following paragraph and answer question no 15 to 17.**

**CONTINENTAL DRIFT**

Observe the shape of the coastline of the Atlantic Ocean. You will be surprised by the symmetry of the coastlines on either side of the ocean. No wonder, many scientists thought of this similarity and considered the possibility of the two Americas, Europe and Africa, to be once joined together. From the known records of the history of science, it was Abraham Ortelius, a Dutch map maker, who first proposed such a possibility as early as 1596. Antonio Pellegrini drew a map showing the three continents together. However, it was Alfred Wegener—a German meteorologist who put forth a comprehensive argument in the form of "the continental drift theory" in 1912. This was regarding the distribution of the oceans and the continents. According to Wegener, all the continents formed a single continental mass and mega ocean surrounded the same. The super continent was named PANGAEA, which meant all earth. The mega-ocean was called PANTHALASSA, meaning all water. He argued that, around 200 million years ago, the super continent, Pangaea, began to split. Pangaea first broke into two large continental masses as Laurasia and Gondwanaland forming the northern and southern components respectively. Subsequently, Laurasia and Gondwanaland continued to break into various smaller continents that exist today. A variety of evidence was offered in support of the continental drift.

15 Who drew a map showing the three continents together? 1

a) Abraham Ortalius
b) Antonio Pellengrini
c) Alfred Wegener
d) Eratosthenese

16 Two large continental masses formed from PANGAEA are 1

a) Laurasia and Panthalassa
b) Panthalassa and Gondwanaland
c) Laurasia and Gondwanaland
d) Laurasia and Africa

17 Continental Drift Theory was put forth in the year 1

a) 1812
b) 1821
c) 1921
d) 1912

## SECTION-B
## Question 18 & 19 are Source based questions.

18 **Read the given Passage carefully and answer the questions that follow:**

Drumlins are smooth oval shaped ridge-like features composed mainly of glacial till with some masses of gravel and sand. The long axes of drumlins are parallel to the direction of ice movement. They may measure up to km in length and 30 m or so in height. One end of the drumlins facing the glacier called the stoss end is blunter and steeper than the other end called tail. The drumlins form due to dumping of rock debris beneath heavily loaded ice through fissures in the glacier. The stoss end gets blunted due to pushing by moving ice. Drumlins give an indication of direction of glacier movement.

i Through which of the following geomorphic agent drumlins are formed? 1
a) Groundwater
b) Glaciers
c) Running Water
d) Waves and Currents

ii Drumlin is a type of 1
a) Erosional landform
b) Depositional landform
c) Both a and b
d) None of these

iii What are the two ends of drumlin? 1
a) Glacial till and stoss
b) Stoss and tail
c) Glacial till and tail
d) Stoss and head

19 **Read the given Passage carefully and answer the questions that follow:**

The Deccan Plateau is bordered by the Western Ghats in the west, Eastern Ghats in the east and the Satpura, Maikal range and Mahadeo hills in the north. Western Ghats are locally known by different names such as Sahyadri in Maharashtra, Nilgiri hills in Karnataka and Tamil Nadu and Anaimalai hills and Cardamom hills in Kerala. Western Ghats

are comparatively higher in elevation and more continuous than the Eastern Ghats. Their average elevation is about 1,500 m with the height increasing from north to south. 'Anaimudi' (2,695 m), the highest peak of Peninsular plateau is located on the Anaimalai hills of the Western Ghats followed by Dodabetta (2,637 m) on the Nilgiri hills. Most of the Peninsular rivers have their origin in the Western Ghats. Eastern Ghats comprising the discontinuous and low hills are highly eroded by the rivers such as the Mahanadi, the Godavari, the Krishna, the Kaveri, etc. Some of the important ranges include the Javadi hills, the Palconda range, the Nallamala hills, the Mahendragiri hills, etc. The Eastern and the Western Ghats meet each other at the Nilgiri hills.

i Which of the following do not form a border of deccan plateau? 1
a) Maikal range
b) Mahadeo hill
c) Jaintia hill
d) Satpura

ii The highest peak of the western ghat is 1
a) Anaimudi
b) Dodabetta
c) Javadi
d) Palconda

iii Western ghat is known locally by which name in Tamil Nadu? 1
a) Nilgiri hill
b) Anaimalai hill
c) Cardamom hill
d) Sahyadri

## SECTION-C

**Question numbers 20 to 23 are Short Answer type questions.**

20 Explain any three intrusive forms of volcanoes. 3

**OR**

What are body waves? Differentiate between P-waves and S-waves.

21 "Laurasia and Gondwanaland broke into smaller continents that exist today". Provide evidences in support of it. 3

22 Which longitude is been selected as the 'standard meridian' of India? Why? 3

23 How the Himalayan drainage system is different from peninsular drainage system? 3

**OR**

Explain the important drainage patterns.

## SECTION-D

**Question numbers 24 to 28 are Long Answer Type questions.**

24 "Life become possible on the earth when it changed from rocky, barren and hot earth to a beautiful planet with ample amount of water and conducive atmosphere". How? 5

**OR**

"Big Bang Theory is also known as expanding universe hypothesis". Why?

25 How parent material and climate influence the formation of soil? 5

26 How northern plain is divided from north to south into three zones? Explain each zones characteristic features. 5

**OR**

Explain the island groups in Bay of Bengal and Arabian Sea.

27 Which is the most important river of India from the point of view of its basin and cultural significance? Mention its features? 5

**OR**

Which river has its origin in the Chemayungdung glacier? Mention its tributaries and the region of its flow?

28 Does India need to have more than one standard time? Support the answer by giving reason. 2+3

While the sun rises earlier in the east, say Nagaland and also sets earlier, how do the watches at Kohima and New Delhi show the same time?

## SECTION-E

**Question numbers 29 & 30 are Map based questions having 5 sub-parts each.**

29 **On the given political map of the World, seven geographical features have been marked as A, B, C, D, E, F, G. Identify any five with the help of the following information and write their correct names on the lines drawn near each feature.** 5

A A major ocean of the world
B A continent of the world
C A major ocean of the world
D A major lithospheric plate
E A minor lithospheric plate
F A continent of the world

G A major lithospheric plate

30 **Locate and label any five of the following geographical features on the political outline map of India with appropriate symbols.** 5

30.1 Southern most point of mainland of India
30.2 The largest peninsular river
30.3 The highest peak in the western ghat
30.4 The coral island in India
30.5 A major Himalayan River in India.
30.6 The strait separating Sri Lanka from India.
30.7 The river flowing in the southern part of Indian desert

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