

Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE:B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION: (2023-24)**  
**ENGLISH CORE**  
**CLASS : XI**

**Time: 3Hours**

**Maximum Marks : 80**

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**GENERAL INSTRUCTIONS:**

- 1. The Question Paper contains THREE sections-READING, GRAMMAR and WRITING and LITERATURE.*
  - 2. Attempt questions based on specific instructions for each part.*
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**SECTION A: READING SKILLS (26 marks)**

**Reading Comprehension Through Unseen Passages**

1. **Read the following text.**

10

- Suspense was over when my high school results finally came out. But I was upset. I hadn't done as well as I had expected. My father tried to console me. "Why are you worried? You have done very well my dear." "No, I haven't, Baba," I protested, controlling my tears, and wondering if I had disappointed him. "It doesn't really matter," he assured me. "Do you know what I got when I finished high school?" I looked into Baba's face and waited for the answer to his own question. "You know," he told me. "I've never told you this."
- I got just a third division. But, look at me, I've done quite

well.” Baba got a third division! I was almost in shock, but the thought of my having done a lot better than that made me realize that I had no reason to complain. I certainly felt better! “Everything is under control!” said Baba, smiling. That was his favorite phrase.

3. Posted in Kolkata, my father was then a senior official in the Indian Railway Service and an expert in goods traffic operations. He was soon to become a director with the Railway Board. By the time he retired in 1981, he was general manager of the Central Railways. By the time Baba passed away in November 2000, his name had found place in several hearts as well. He was open, easy to know, and full of life. We were extremely close, but I had so much more to learn about him from many things I came to know after his death.
4. In September 2000, he was in hospital for treatment of cancer and given just two months to live. When he found out, his reaction was an extremely rational one. He asked me to fetch files from his cupboard so that he could explain the details of my mother’s pension. He also dictated his will from his hospital bed. “Everything is under control!” After Baba’s death, Satish, our old family retainer, was inconsolable. We tried to cheer him up. “Your Baba had scolded me only once in all these years!” he cried. Satish pointed to the watch on his left hand. “I had been coming late for work and everyone in the family was complaining about it,” said Satish. “Then, one

day, your Baba gave me this watch and told me, ‘now that you have a watch, you can’t be late’.” That was the scolding Satish received.

5. On the fourth day after Baba’s death, my sister and I had to perform a ceremony. Since several relatives were expected, we decided to order lunch from a caterer in our locality, reputed for his home cooked food. But, when we went to pay the owner, we got a surprise. He refused to accept any money! “When I wanted to start my catering business, it was your father who lent me money,” he told us. It seems Baba never asked for it back. Now, after four or five years, the caterer wanted to repay that debt. Of course, we made him accept the full payment for the fine food and service. ‘It was Baba’s gift and it ought to remain so,’ I told him.
6. Some days later, there was yet another piece of information as we were preparing for the main ceremony. Vikram, my brother drove me to the local market. On recognizing our car, the parking assistant, in his twenties, came running towards us and asked why he had not seen its owner for long. We had to break the news to him and to our utter surprise, he started crying. We were really surprised by this reaction from a stranger – until the man told us that Baba used to pay his daughter’s school fees and buy her books.
7. It seems it was on my father’s advice that he’d even started sending the child to school. More than three years after Baba’s death, as we were looking into Baba’s personal things,

we came across an old file with Baba's certificates and I found among them, his high school diploma from 1937, the one he'd told me about 30 years earlier, about the third division that had made no difference in his life or career. It had made me see beyond mere marks and first classes as the main road to success. But there was one more fact. Baba had actually got a first division, a rare achievement in his day. Today, years after his passing, when I think of Baba, I see a man who was able to sympathize with others so easily and touch their lives in such a special way.

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

- (a) The narrator was in tears when her school results were declared, the reason being \_\_\_\_\_.
- i. she hadn't done as well as she had expected.
  - ii. she did not do well as was expected.
  - iii. her baba had not done well.
  - iv. she had disappointed her Baba.
- (b) "*I was almost in shock...*" The reason for her bewilderment was that \_\_\_\_\_.
- (i) the narrator got just a third division.
  - (ii) Baba got a third division
  - (iii) Both (i) and (ii)
  - (iv) she had things not under her control.

- (c) *“It doesn’t really matter,” he assured me.”* The father’s reaction can be called one of as \_\_\_\_\_.
- (i) casualness
  - (ii) assertion
  - (iii) nonchalance
  - (iv) comforting
- (d) Baba’s rise in his career speaks primarily of his –
- (i) merit
  - (ii) dedication
  - (iii) hard work
  - (iv) All of the above
- (e) The passage is a great lesson in –
- (i) Academic excellence is not the sole yardstick to success.
  - (ii) Life is about caring for and sympathizing with others.
  - (iii) Equanimity.
  - (iv) All of the above
- (f) *“I’ve never told you this.”* What was never confided?
- (g) Why, according to you, did the caterer refuse the payment from the narrator?
- (h) *“Today years after his passing…”*What has the narrator realized of her Baba?
- (i) *A man lives by his deeds and not in years.* Cite an instance from the text as justification to the statement.

- (j) **Find the word from the passage which means the same as:** 1  
reprimand (*para 4*)

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

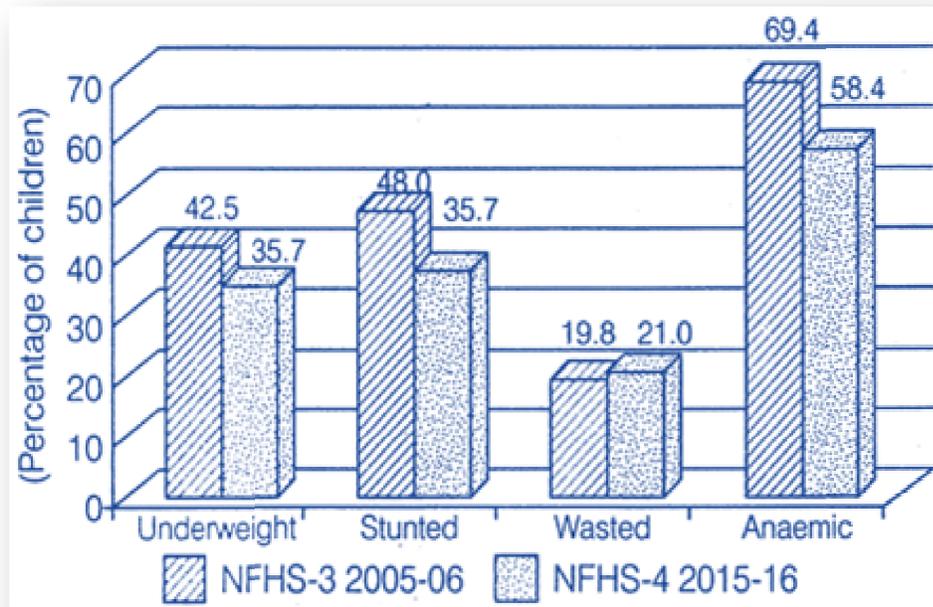
1. 'Good nutrition allows children to survive, grow, develop, learn, play, participate and contribute; while malnutrition robs children of their futures and leaves young lives hanging in the balance'.
2. It is a well-known fact that in some developing nations, India being one of them, nearly half of children under-5 years of age succumb to death every year due to poor nutrition. The irony is, India being the world's second largest food producer and yet is also home to the large number of undernourished children in the world.
3. It is well acknowledged that investment in human resource development is a pre requisite for any nation to progress. In year 2012, while releasing HUNGaMA (Hunger and Malnutrition) Report, 2011, the then Prime Minister of India, Dr. Manmohan Singh, expressed dismay at the 'unacceptably high' levels of malnutrition despite high and impressive GDP growth and said it was a matter of 'national shame'. He, being a renowned economist, also expressed that that 'the health of our economy and society lies in the health of this generation. We cannot hope for a healthy future for our country with a large number of malnourished children'.
4. India is home to 46.6 million stunted children, a third of world's total as per Global Nutrition Report, 2018. Nearly

half of all under-5 child mortality in India is attributable to under-nutrition. Children of today are citizens of tomorrow, and hence improving nutritional status of children becomes extremely important. Early childhood constitutes the most crucial period of life, when the foundations are laid for cognitive, social and emotional, language, physical/motor development and cumulative lifelong learning.

5. Malnutrition, a term that refers to any deficiency, excess or imbalance in somebody's intake of energy and/or nutrients, is a universal problem that has many forms. No country is untouched. It affects all geographies, all age groups, rich people and poor people and all sexes. All forms of malnutrition are associated with various forms of ill health and higher levels of mortality. Undernutrition explains around 45% of deaths among children under-5, mainly in low and middle-income countries.
6. As far as adverse effects of child malnutrition are concerned, growth failure and infections are quite important. Malnourished children do not attain their optimum potential in terms of growth and development, physical capacity to work and economic productivity in later phase of life. It is commonly observed that school absenteeism is much higher in such a child that leads to poor performance in the class. Cognitive impairment resulting from malnutrition may result in diminished productivity. As per estimates of World Bank, childhood stunting may result in a loss of height among adults by 1%, which may further lead to a reduction in individual's

economic productivity by 1.4%.

7. In India as per National Family Health Survey IV (2014-2015) 38.4, 21 and 35.7% of children below 5 years suffer from stunting, wasting and underweight respectively. Prevalence of severe acute malnutrition (SAM) in India is 7.5%.
  
8. Progress to tackle all forms of malnutrition remains unacceptably slow. The 2018 Global Nutrition Report tracks country's progress against the following global targets: child overweight, child wasting, child stunting, exclusive breastfeeding, diabetes among women and men, anaemia in women of reproductive age, obesity among women and obesity among men. As per this report, India is listed among those countries, which are on track for none of the nine targets. The key driver behind the goal to reach Zero Hunger and malnutrition is to ensure that no one is left behind in the pursuit of food and nutrition security.
  
9. In the Indian context, this will also mean greatly improving the health of women and children. Outcomes of these nutritional interventions are evident in the declining patterns in some of the India's key health variables as reported by National Family Health Surveys NFHS-3 (2005-2006) and NFHS-4 (2015-2016) data.



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

- (a) The excerpt states that India is \_\_\_\_\_.
- 1
- on track of reducing malnutrition
  - is too slow in tackling malnutrition problem
  - deprived of a good GDP due to malnutrition
  - in need of better policies for malnutrition
- (b) Which of the following statements is not substantiated by information in the passage?
- 1
- Malnutrition leads to various social and cognitive disorders.
  - Reducing malnutrition can have a great impact on the country's GDP.
  - India is fast rising towards zero Hunger.
  - Malnutrition is majorly a socio-economic problem.

- (c) *“In the Indian context, this will also mean greatly improving the health of women and children.”* The way lies in \_\_\_\_\_ . 1
- i. the country’s progress against the global targets.
  - ii. being in track for the nine targets listed in the passage.
  - iii. no countryman being left behind in the pursuit of food and nutrition security.
  - iv. All of the above.
- (d) **Based on the given graphical representation of data in the passage, choose the statement that is TRUE.** 1
- i. While the percentage of underweight children had reduced, the percentage of wasted children had increased.
  - ii. The percentage of stunted children and anaemic children are the same.
  - iii. The percentage of wasted children 10 years later had drastically increased.
  - iv. The percentage of stunted children had reduced by 10 %.
- (e) *As per 2018 Global Nutrition Report, India is listed among those countries, which are on track for none of the nine targets.* What can be inferred from the report statement? 1
- (f) The *'national shame'*, according to Dr. Manmohan Singh, lay in \_\_\_\_\_ . 1
- (g) Cite an evidence from the text that substantiates that malnutrition is a global problem. 1
- (h) A suitable title to the passage is \_\_\_\_\_ . 1

**Read the following text.**

1. Good decoration reflects the personality of the people who live in the home. It should, first of all, be distinctive, just as each person is distinctive. A home should have unity not only within each room but also throughout the house. Rooms should, to some degree, harmonize with each other. The colour and styling of each room, particularly, should fit into the colour and styling of the rooms which run out of it.
2. Attractive home furnishings set the stage for pleasant living. If they are an expression of yourself, you will have a feeling of satisfaction every time you enter your home, and friends will share your enjoyment.
3. However, furnishings and surroundings expressive of just the right note of restfulness, gay informality, or elegant simplicity are not often assembled by accident. Even enthusiasm alone is not enough. For most home decorators, it takes pouring over plans, trying colour schemes, finding ingenious ways to make the best of what you have, and shopping around to search out just the right purchases at prices you can afford to pay. But there is keen pleasure in striving for the perfect result, and great satisfaction in achieving it.
4. A successful house and successful rooms will depend upon the proper relationship of each element in it to the others and to the whole. Therefore, in selecting each piece it is well to consider the background, the usage, the draperies, the floor covering, the upholstering materials, the woods, shapes,

colour scheme, and the “feeling” you prefer for the room.

5. Work and plan to enjoy your house. Limit the expenditures of time, effort and money to the extent of your abilities, so that just running the house doesn't dominate your life. Elegance and delicate things may be a drain you can afford only in a limited way. If you can't afford outside help, select a house and furnishings that require less care. Plan your activities so that tumult and upset are limited to a few rooms — an activity room or a bedroom, or a comer of the dining room.

6. You'll get more pleasure out of a house if you have a hobby connected with it — collecting glass or antiques, gardening or indoor flower growing ceramics, art, cooking, decorating, flower arrangements, etc. And you'll get more satisfaction and a great deal of help from studying household activities.

- (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. **Complete the given passage by filling in each blank using one word only.** 4

Conversation is indeed the most easily teachable of (a) \_\_\_\_\_ arts. All you need to do in order to (b) \_\_\_\_\_ a good conversationalist is to find a subject that interests you and (c) \_\_\_\_\_ listeners. There are, for example, numberless hobbies to talk about. But the important thing is that you must talk (d) \_\_\_\_\_ other fellow's hobby rather than your own. Therein lies the secret of your popularity.

5. **Read the conversation given below and complete the passage that follows : (ANY 03 out of 04)** 3

*Father: You look worried. What's the matter?*

*Son: It's about my admission to an engineering college.*

*Father: When are your results expected?*

*Son: Within a week, Father.*

The father noticed that his son (a) \_\_\_\_\_. He asked him (b) \_\_\_\_\_. The son replied (c) \_\_\_\_\_. The father asked (d) \_\_\_\_\_. The son replied that they were expected within a week.

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

- (a) You are Barun Sarkar of 10, Parcus Road, Bardhaman. You want to dispose of your Maruti Swift car for purchase of a Toyota Innova. Draft an **advertisement** in not more than 50 words to be published in *'The Telegraph'*, under the "For Sale" column. Invent necessary details.

*OR*

- (b) Your neighbour's daughter, Nilima, aged 8, has been missing for two days. She was last seen walking by the New Market crossing to her drawing class in the morning at about 07:00 a.m. on Saturday, 13.01.2024. Draft an **advertisement** in not more than 50 words to be published in *'The Telegraph'*, under the "Missing" column. Invent necessary details. You are Mohan/Mahima of Bidhan Nagar, Kolkata.

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

- (a) You are making an effort to spread the message of Communal Harmony. Prepare a **poster** to this effect to be displayed at the city's prominent places. You are a member of National Foundation for Communal Harmony, Khan Market, New Delhi-03.

*OR*

- (b) Disha Eye Foundation wishes to build awareness among the citizens about blindness and the importance of donating one's

eyes after death. Design a **poster** to this effect to be displayed at the city's prominent places.

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

- (a) Parents play an important role in children's education and well-being. They are attributed as the first teachers of their child. They take every care to provide the best education / coaching to their wards. Even they sacrifice their joys and happiness for their children's sake. Draft a **speech**, to be delivered on the occasion of Parents' Day on the topic '*Role of Parents in Children's Education and Growth*'

OR

- (b) You have been chosen for representing your school at the regional level Inter-School Speech Contest. Prepare a **speech** to be delivered on the contest floor on the topic '*Newspapers ought to contain the right news*'.

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

- (a) You are the first speaker in the Inter-House Declamation contest being held in your school. The motion chosen for the contest is '*Child Labour is a necessary evil in India*'. Draft the text of your **debate** either in favour of or against the motion. You are Ashwini/Anuradha.

OR

- (b) Draft the text of a **debate** either in favour of or against the motion: '*We cannot do anything to help minimize the Generation Gap.*' 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

*When did my childhood go?*

*Was it the time I realised that adults were not  
all they seemed to be,...*

- (a) When did 'my childhood' go?
- i. The day 'I' ceased to be eleven.
  - ii. The day 'I' realized adulthood.
  - iii. The day 'I' grew tall as an adult
  - iv. All of the above
- (b) What did 'I' realize of the adults?
- (c) Did 'I' get an answer to "*When did my childhood go?*"

**OR**

*Till the goldfinch comes, with a twitching chirrup...*

- (a) “*Till the...*” refers to the moment \_\_\_\_\_.
- i. when the goldfinch arrived.
  - ii. before the moment the goldfinch had perched.
  - iii. when the tree was still.
  - iv. All of the above

(b) **Explain:** *twitching chirrup*.

(c) How does the Laburnum react to the goldfinch’s arrival?

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

*While she sat in the verandah breaking the bread into little bits, hundreds of little birds collected round her creating a veritable bedlam of chirrupings. Some came and perched on her legs, others on her shoulders. Some even sat on her head. She smiled but never shooed them away....*

- (a) The grandmother took to the feeding of sparrows when \_\_\_\_\_.
- i. when the author went up to University and was given a room of his own.
  - ii. the common link of friendship between the author and grandmother was snapped.
  - iii. the grandmother accepted her seclusion with resignation.
  - iv. All of the above

- (b) The expression ‘*bedlam of chirrupings*’ means \_\_\_\_\_.
- (c) What does the extract tell of the grandmother’s nature?

**OR**

*My experience in Hor came as a stark contrast to accounts I’d read of earlier travellers’ first encounters with Lake Manasarovar.*

- (a) The author’s experience in Hor was of \_\_\_\_\_.
- i. wonder and amazement.
  - ii. disbelief and disillusionment.
  - iii. grief and sadness.
  - iv. None of the above.
- (b) List an account of the earlier travellers’ first encounters with Lake *Manasarovar*.
- (c) What is very special of Lake *Manasarovar*?

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

*I had remembered it. But I had waited a long time to go there. Initially after the Liberation I was absolutely not interested in all that stored stuff, and naturally I was also rather afraid of it.*

(a) Identify 'I' in the given extract.

- i. The narrator
- ii. The poet
- iii. Mrs. S
- iv. Mrs. Dorling

(b) The “*stored stuff*” included \_\_\_\_\_.

- i. an old-fashioned iron Hanukkah candle-holder.
- ii. woollen table cloth
- iii. white tea pot.
- iv. All of the above.

(c) *I had remembered it.* The remembrance was of \_\_\_\_\_.

(d) What could the reason be of 'I's fear?

**OR**

*A desperate sense of defeat pressed on him, a raging hopelessness. He felt the midwife watching him in stark consternation, while there, pressed back against the wall where she had all the time remained — her hand pressed to her throat, uttering no sound, her eyes burning upon him — was the old woman.*

- (a) Identify 'I' in the given extract.
- i. The narrator
  - ii. Joe Morgan
  - iii. Dr. Edward Page
  - iv. Dr. Andrew Manson
- (b) '*...her eyes burning upon him...*' is an expression of the old woman's \_\_\_\_\_.
- i. vengeance.
  - ii. vehement ire.
  - iii. reproaching self.
  - iv. irritation.
- (c) Why had 'He' been there?
- (d) What does the '*defeat*', mentioned in the extract, refer to?

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

- (a) "*And of this circumstance/ There is nothing to say at all.*"  
What does "*this circumstance*" refer to? (*A Photograph*)
- (b) "*Silence surrounds us....*" Explain. (*Father to Son*)
- (c) Why do you think, did the narrator call lie Amsterdam '*the most beautiful island in the world*'?

- (d) *“In his defence, Carter really had little choice.”* How did Carter defend the indefensible?

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

- (a) *The address was correct. But now I didn't want to remember it any more.* What could be the reasons for a statement of this sort from the narrator?

- (b) *Doris had her reasons to be angry upon her mother.* Mention any 02 reasons.

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

*But we live in a unique world which has a unique history. This idea of 'it might have been' is okay for the sake of speculation but not for reality,”*  
*Gangadharpant said.*

What prompted Gangadharpant to arrive at such a conclusion?

OR

Narrate the difficulties and disillusionment faced by Nick Middleton during the course of his journey to Mount Kailash.

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

*My cousin Mourad put his arms around the horse, pressed his nose into the horse's nose, patted it, and then we went away.*

Narrate the turn of events that led Mourad and Aram to return the horse. What, according to you, prompted them to return the horse?

*OR*

*Are now our King,' the Ministers said,  
Crowning a melon. Then they led  
(Carried) the Melon to the throne  
And reverently set it down.*

How did a melon eventually happen to become the monarch of the state? How did the people receive it?

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_

CODE: A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUALEXAMINATION [2023 – 2024]**  
**MATHEMATICS**  
**CLASS - XI**

**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 18 MCQ's and 02 Assertion – Reason based questions of 1 mark each.*
  - 3. Section B has 05 Very Short Answer (VSA) – type questions of 2 marks each with sub parts*
  - 4. Section C has 06 Short Answer (SA) – type questions of 3 marks each.*
  - 5. Section D has 04 Long Answer (LA-I) – type questions of 5 marks each.*
  - 6. Section E has 03 Source Based / Case Based (CBQ) – type question of 4 marks each.*
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**SECTION - A**

**(Multiple Choice Questions)**

**Each question carries 1 mark.**

- Let  $S = \{1,2,3,\dots,10\}$ . The number of subsets of  $S$  containing only odd numbers is: 1
  - 15
  - 31
  - 63
  - 7
  
- If  $A$  and  $B$  are two sets, then  $A \cap (A - B)$  is equal to: 1
  - $A$
  - $B$
  - $\phi$
  - $A - B$

3. If A and B be two sets such that  $n(A) = 5$ ,  $n(B) = 4$ , then  $n(A \times B)$  is: 1  
 (a)18  
 (b)19  
 (c)20  
 (d)21
4. If  $2f(x) - 3f\left(\frac{1}{x}\right) = x^2 (x \neq 0)$ , then  $f(2)$  is equal to: 1  
 (a)-7/4  
 (b)5/2  
 (c)-1  
 (d)None of these.
5. The value of  $\left\{i^{18} + \left(\frac{1}{i}\right)^{24}\right\}^3$  is: 1  
 (a)0  
 (b)1  
 (c)-1  
 (d)-2
6. If  $-3x + 17 < -13$ , then: 1  
 (a) $x \in (10, \infty)$   
 (b) $x \in [10, \infty)$   
 (c) $x \in (-\infty, 10]$   
 (d) $x \in [-10, 10]$
7. If  $(n + 2)! = 2550 \times n!$ , then the value of  $n$  is equal to: 1  
 (a)48  
 (b)49  
 (c)50  
 (d)51
8. The total number of terms in the expansion of  $(x + a)^{100} + (x - a)^{100}$  after simplification is: 1  
 (a)50  
 (b)51  
 (c)100  
 (d)101
9. If  $x, 2y, 3z$  are in A.P., where the distinct numbers  $x, y, z$  are in G.P., then the common ratio of the G.P. is: 1  
 (a)3  
 (b) $\frac{1}{3}$   
 (c)2  
 (d) $\frac{1}{2}$

10. Find the value of : 1  
 $\sin(40^\circ + \theta) \cos(10^\circ + \theta) - \cos(40^\circ + \theta) \sin(10^\circ + \theta)$   
a)  $\frac{1}{2}$   
b)  $\frac{1}{4}$   
c) 1  
d) 0
11. The distance of the point P(1, -3) from the line  $2y - 3x = 4$  is: 1  
(a) 13 units  
(b)  $\frac{7}{13} \sqrt{13}$  units  
(c)  $\sqrt{13}$  units  
(d) None of these
12. The centre of the circle  $(x - a)(x - c) + (y - b)(y - d) = 0$  is: 1  
a) (a,a)  
b) (c, d)  
c)  $\left(\frac{a+c}{2}, \frac{b+d}{2}\right)$   
d) None of these
13. The eccentricity of the ellipse  $12x^2 + 7y^2 = 84$  is equal to: 1  
a)  $\frac{\sqrt{5}}{7}$   
b)  $\sqrt{\frac{5}{12}}$   
c)  $\frac{\sqrt{5}}{12}$   
d)  $\frac{5}{7}$
14. The coordinates of the focus of the parabola  $y^2 = 12x$  are: 1  
(a) (0,3)  
(b) (-3,0)  
(c) (0,-3)  
(d) (3,0)

15. The eccentricity of the hyperbola  $x^2 - 4y^2 = 1$  is: 1
- (a)  $\frac{\sqrt{3}}{2}$
- (b)  $\frac{\sqrt{5}}{2}$
- (c)  $\frac{2}{\sqrt{3}}$
- (d)  $\frac{2}{\sqrt{5}}$
16. The octant in which the point (4,-2,-3) lie is: 1
- (a) V
- (b) VI
- (c) VII
- (d) VIII
17.  $\lim_{x \rightarrow \pi} \frac{\sin(\pi-x)}{\pi(\pi-x)}$  is equal to: 1
- (a)  $\pi$
- (b)  $1/\pi$
- (c)  $2\pi$
- (d)  $1/2\pi$
18. A card is drawn from the pack of 52 cards. The probability that it is a king or a queen is: 1
- (a)  $\frac{1}{2}$
- (b)  $\frac{3}{8}$
- (c)  $\frac{3}{7}$
- (d)  $\frac{2}{13}$

### ASSERTION – REASON BASED QUESTIONS

19. Assertion (A): The sum of n arithmetic means between two given numbers is n times the single arithmetic mean between them. 1
- Reason (R): n<sup>th</sup> term of an A.P. with first term 'a' and common difference 'd' is  $a + (n + 1)d$ .
- (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):  $\sec^2\theta = \frac{4xy}{(x+y)^2}$  is for all real values of x and y only 1  
 when  $x = y$ .  
 Reason (R):  $\sec^2\theta \geq 1$ .  
 (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 comprise of Short Answer type – questions (SA) of 2 marks each.**

21. If  $y = f(x) = \frac{3x+1}{5x-3}$ , prove that  $x = f(y)$ . 2

22. Find the real value of  $\theta$  such that  $\frac{3+2i \sin \theta}{1-2i \sin \theta}$  is purely real. 2  
**OR**

If  $z_1$  and  $z_2$  are  $1 - i$ ,  $-2 + 4i$ , respectively, then find  $\text{Im}\left(\frac{z_1 z_2}{z_1}\right)$ .

23. Show that  $9^{n+1} - 8n - 9$  is divisible by 64, whenever n is a positive integer. 2

**OR** 2

Prove that  $\sum_{r=0}^n 3^r {}^n C_r = 4^n$

24. Find the equation of a circle which passes through (3,6) and touches both the axes. 2
25. Find the equation of the ellipse whose foci are (2,3), (-2,3) and whose semi-minor axis is  $\sqrt{5}$ . 2

### SECTION - C

**This section comprise of Short Answer type – questions (SA) of 3 marks each.**

26. Define a relation R on the set N of natural numbers by  $R = \{(x, y): y = x + 5, x \text{ is a natural number less than } 4; x, y \in N\}$ . Depict this relationship using roster form. Write down the domain and the range. 3
27. Prove that:  $(\cos x - \cos y)^2 + (\sin x - \sin y)^2 = 4\sin^2\left(\frac{x-y}{2}\right)$ . 3

**OR**

If  $\cos\alpha + \cos\beta = 0 = \sin\alpha + \sin\beta$ , then prove that  $\cos 2\alpha + \cos 2\beta = -2\cos(\alpha + \beta)$ .

28. If the image of the point (2,1) in a line is (4,3), then find the equation of the line. 3
29. Let  $f(x) = \begin{cases} \frac{k \cos x}{\pi - 2x}, & \text{when } x \neq \frac{\pi}{2} \\ 3, & \text{when } x = \frac{\pi}{2} \end{cases}$  and if  $\lim_{x \rightarrow \frac{\pi}{2}} f(x) = f\left(\frac{\pi}{2}\right)$ , find the value of k. 3

**OR**

Suppose  $f(x) = \begin{cases} a + bx, & x < 1 \\ 4, & x = 1 \\ b - ax, & x > 1 \end{cases}$ , and if  $\lim_{x \rightarrow 1} f(x) = f(1)$ , then what are the values of a and b?

30. If  $y = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \dots + \frac{x^n}{n!}$ , then show that  $\frac{dy}{dx} - y + \frac{x^n}{n!} = 0$ . 3
31. A basket contains 20 apples and 10 oranges out of which 5 apples and 3 oranges are rotten. If a person takes out 2 fruits at random, then what is the probability that either both are apples or both are good? 3

### SECTION - D

**This section comprise of Long Answer type – questions (LA) of 5 marks each.**

32. In a survey, it was found that 10% people don't use Facebook, Twitter or Whatsapp. 8% uses all the three. There are 15% who use only Facebook and Twitter, 20% who use only Twitter and Whatsapp and 20% who use only Facebook and Whatsapp. Number of people who use only Facebook, only Twitter and only Whatsapp are equal. If the survey was conducted on 1000 people, answer the following questions: 2
- (i) How many people use Whatsapp only? 2
- (ii) What is the ratio of number of people who use Whatsapp only to the people using either Whatsapp or Facebook or both? 3

**OR**

There are 60 employees who work for ABC Learning Media Pvt. Ltd., out of which 25 are women. Also:

- (i) 28 employees are married.
- (ii) 26 Employees are graduate.
- (iii) 20 married employees are graduate of which 9 are men
- (iv) 15 men are graduate
- (v) 15 men are married.

Answer the following questions:

- (a) How many unmarried women are graduate? 2  
(b) How many unmarried women work in the company? 1  
(c) How many graduate men are unmarried? 2

33. A milkman has 80% milk in his stock of 800 litres of adulterated milk. How much 100% pure milk is to be added to it so that purity is between 90% and 95%. How much pure milk he should add to his stock to obtain 99% pure milk? 5

**OR**

Solve:  $|x - 1| + |x - 2| \geq 4$ ,  $x \in \mathbb{R}$ .

34. Find the derivative of  $\cos(x^2 + 1)$  w.r.t.  $x$  from the first principle. 5  
35. Find the mean deviation about the median of the following distribution: 5

Marks obtained	10	11	12	14	15
Number of students	2	3	8	3	4

**SECTION – E**

**This section comprise of Case Based type – questions (CBQ) of 4 marks each**

36. Raveena, a class 12 student invited her friends Bharti, Ravi, Aarush and Ekta for her birthday party. After cutting cake they all want to take a group photograph sitting in a row.



Based on the given information, answer the following question:

- (i) In how many of the photographs Raveena be sitting in middle? 1  
(ii) In how many of the photographs would, Raveena and Aarush be sitting next to each other? 2

**OR**

If Ravi Ekta were not sitting together then how many photographs can be taken?

(iii) If Ekta can sit on any place except the middle one, then how many distinct photographs are possible? 1

37. Ram and Ankit are cousins. They study in the same school but different in classes. Ram is older than Ankit. If the ages of Ram and Ankit are  $x$  and  $y$  respectively. Then answer the following questions:



(i) If  $n$  geometric means be inserted between  $x$  and  $y$ , then what will be the  $n^{\text{th}}$  geometric mean? 1

(ii) What is the product of  $n$  geometric means between  $x$  and  $1/x$ ? 2

**OR**

What are the two geometric means between the number 1 and 64?

(iii) If arithmetic mean of their ages exceed the geometric mean of their ages by 2 and Ram is 12 years older than Ankit, then what will be the ages of Ram and Ankit? 1

38. The probability that a new railway bridge will get an award for its design is 0.48, and the probability that it will get an award for the efficient use of material is 0.36, and it will get both awards is 0.2. What is the probability that

(i) It will get at least one of the two awards? 2

(ii) It will get only one of the awards? 2

=====

Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE:A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**ANNUAL EXAMINATION: [2023-2024]**

**PHYSICS**

**CLASS : XI**

**Time: 3 Hrs.**

**Maximum Marks : 70**

**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 sixteen questions, twelve MCQ and four Assertion Reasoning based of 1 mark each, Section B contains five questions of two marks each, Section C contains seven questions of three marks each, Section D contains two case study based questions of four marks each and Section E contains three long answer questions of five marks each.
- (5) There is no overall choice. However, an internal choice has been provided in some of the questions. You have to attempt only one of the choices in such questions.
- (6) Use of calculators is not allowed.
- (7) You may use the following values of physical constants where ever necessary
  - i.  $c = 3 \times 10^8 \text{ m/s}$
  - ii.  $m_e = 9.1 \times 10^{-31} \text{ kg}$
  - iii.  $e = 1.6 \times 10^{-19} \text{ C}$
  - iv.  $\mu_0 = 4\pi \times 10^{-7} \text{ Tm A}^{-1}$
  - v.  $h = 6.63 \times 10^{-34} \text{ Js}$
  - vi.  $\epsilon_0 = 8.854 \times 10^{-12} \text{ C}^2 \text{ N}^{-1} \text{ m}^{-2}$
  - vii. Avogadro's number =  $6.023 \times 10^{23}$  per gram mole

## SECTION : A

1. A particle located at  $x=0$  at time  $t=0$ , starts moving along the positive  $x$ - direction with velocity  $v$  that varies as  $v = \alpha(x)^{1/2}$ . The displacement of the particle varies with time as  
  - (a)  $t^{1/2}$
  - (b)  $t^3$
  - (c)  $t^2$
  - (d)  $t$
2. A partly hanging uniform chain of length  $L$  is resting on a rough horizontal table.  $l$  is the maximum possible length that can hung in equilibrium. The coefficient of friction between the chain and the table is :  
  - (a)  $l/(L-l)$
  - (b)  $L/l$
  - (c)  $l/L$
  - (d)  $L/(L+l)$
3. Three masses of 2kg, 4kg and 4kg are placed at three points  $(1,0,0)$ ,  $(1,1,0)$  and  $(0,1,0)$  respectively. The position vector of its center of mass is  
  - (a)  $3/5 \hat{i} + 4/5 \hat{j}$
  - (b)  $3 \hat{i} + \hat{j}$
  - (c)  $2/5 \hat{i} + 4/5 \hat{j}$
  - (d)  $1/5 \hat{i} + 3/5 \hat{j}$
4. The escape velocity on a planet is  $v$ . If the radius of the planet contracts to  $1/4$  th of present value without any change in its mass, the escape velocity will be  
  - (a) Halved
  - (b) Doubled
  - (c) Quadrupled
  - (d) One – fourth

5. The minimum energy required to launch a  $m$  kg satellite from earth's surface in a circular orbit at an altitude of  $5R$ ,  $R$  is the radius of earth, will be 1
- (a)  $3mgR$
  - (b)  $5mgR/6$
  - (c)  $2mgR$
  - (d)  $5mgR/12$
6. The Bulk Modulus of a spherical object is 'B'. If it is subjected to a uniform pressure 'p', the fractional decrease in radius is 1
- (a)  $p/B$
  - (b)  $B/3p$
  - (c)  $3p/B$
  - (d)  $p/3B$
7. A cylinder of height 20m is completely filled with water. The velocity of efflux of water (in m/s) through a small hole on the side wall of the cylinder near its bottom is: 1
- (a) 10
  - (b) 20
  - (c) 25.5
  - (d) 5
8. A spherical solid ball of volume  $V$  is made of a material of density  $\rho_1$ . It is falling through a liquid of density  $\rho_2$  ( $\rho_2 < \rho_1$ ). Assume that the liquid applies a viscous force on the ball that is proportional to square of its speed  $v$ , ( $F_{\text{viscous}} = -kv^2$ ) where  $k > 0$ . The terminal speed of the ball is 1
- (a)  $Vg(\rho_1 - \rho_2)/k$
  - (b)  $[Vg(\rho_1 - \rho_2)/k]^{1/2}$
  - (c)  $Vg\rho_1/k$
  - (d)  $[Vg\rho_1/k]^{1/2}$

9. A cube is subjected to a uniform volume compression. If the side of the cube decreases by 2%, the bulk strain is 1
- (a) 0.02
  - (b) 0.03
  - (c) 0.04
  - (d) 0.06
10. The first overtone frequency of an open organ pipe is equal to the fundamental frequency of a closed organ pipe. If the length of the closed organ pipe is 20 cm, then the length of the open organ pipe is : 1
- (a) 20cm
  - (b) 40cm
  - (c) 60cm
  - (d) 80cm
11. A wave  $y=a \sin (\omega t - kx)$  on a string meets with another wave producing a node at  $x=0$ . Then the equation of the unknown wave is 1
- (a)  $y=a \sin (\omega t + kx)$
  - (b)  $y= -a \sin (\omega t + kx)$
  - (c)  $y=a \sin (\omega t - kx)$
  - (d)  $y= -a \sin (\omega t - kx)$
12. If the density of oxygen is 16 times that of hydrogen, what will be the corresponding ratio of their velocities of sound wave? 1
- (a) 1:4
  - (b) 16:1
  - (c) 4:1
  - (d) 1:16

**For Questions 13 to 16, two statements are given – one labelled Assertion (A) and other labelled Reason (R). Select the correct answer to these questions from the options as given below.**

**a) If both Assertion and Reason are true and Reason is correct explanation of Assertion.**

**b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.**

**c) If Assertion is true but Reason is false.**

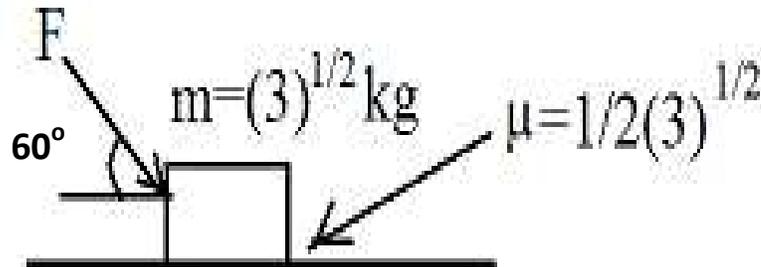
**d) If both Assertion and Reason are false.**

13. **Assertion (A):** Heat energy is completely transformed into work during the isothermal expansion of a gas. 1  
**Reason (R):** During an isothermal process, the change in internal energy of a gas due to decrease in pressure is nullified by the change due to increase in volume
14. **Assertion (A):** In non – uniform circular motion, the acceleration of the particle is equal to sum of the tangential acceleration and the centripetal acceleration. 1  
**Reason (R):** The two accelerations are perpendicular to each other.
15. **Assertion (A):** If there is no external torque on a body about its center of mass, then the velocity of the center of mass remains constant. 1  
**Reason (R):** The linear momentum of an isolated system does not remains constant.
16. **Assertion (A):** An astronaut in an orbiting space station above the earth experiences weightlessness. 1  
**Reason (R):** An object moving around the earth under the influence of earth's gravitational field is in a state of free fall.

### SECTION : B

17. The frequency of vibration of stretched string ( $\nu$ ) depends on 2  
(i) its length 'l'  
(ii) its mass per unit length 'm' and  
(iii) the tension in the string 'T'.  
Obtain dimensionally the expression for frequency  $\nu$ .

18. Find the value of 60 J per min on a system that has 100g, 100cm and 1min as the base unit. 2
19. What is the maximum value of force  $F$  such that the block shown in the arrangement does not move. 2



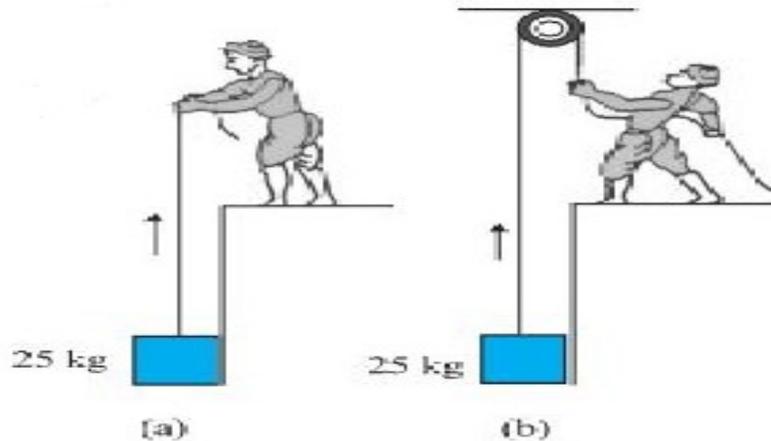
OR

A uniform rope of length  $L$ , resting on a frictionless horizontal surface is pulled at one end by a force  $F$ . What is the tension in the rope at a distance  $l$  from the end where the force is applied.

20. Derive an expression for gravitational potential energy of a body of mass  $m$  located at a distance  $r$  from the center of the earth. 2
21. Determine the possible harmonics in the longitudinal vibration of a rod clamped in the middle. 2

**SECTION : C**

22. Two balls are thrown simultaneously, A vertically upwards with a speed of  $20\text{m/s}$  from the ground, and B vertically downwards from a height of  $40\text{m}$  with the same speed and along the same line of motion. At what points do the two balls collide? (take  $g=9.8\text{m/s}^2$ ) 3
23. Determine the angle of banking so as to minimize the wear and tear of the tyres of a car negotiating a banked curve ( take friction into account) 3
24. A block of mass  $25 \text{ kg}$  is raised by a  $50 \text{ kg}$  man in two different ways as shown in figure. What is the action on the floor by the man in the two cases? If the floor yields to a normal force of  $700 \text{ N}$ , which mode should the man adopt to lift the block without the floor yielding? 3



25. A sphere is dropped under gravity through a fluid of viscosity  $\eta$ . Taking the average acceleration as half of the initial acceleration; show that the time taken to attain the terminal velocity is independent of the fluid density. 3
26. State and prove Bernoulli's principle for the flow of non-viscous fluid. 3
27. One end of a copper rod of uniform cross section and of length 1.5m is kept in contact with ice and the other end with water at  $100^{\circ}\text{C}$ . At what point along its length should a temperature of  $200^{\circ}\text{C}$  be maintained so that in steady state, the mass of ice melted be equal to that of the steam produced in the same interval of time? 3  
 Assume that the whole system is insulated from the surroundings.  
 Latent heat of fusion of ice = 80 cal/g  
 Latent heat of vapourization of water = 540 cal/g
28. Derive an expression for the work done during the adiabatic expansion of an ideal gas. 3  
 OR  
 Derive an expression for the work done during the isothermal expansion of an ideal gas.

## SECTION-D

### Case Study Based Questions

Read the following paragraph and answer the questions that follow.

29. When a wire is stretched, interatomic forces come into play which oppose the change. Work has to be done against these restoring forces. This work done in stretching the wire is stored as its elastic potential energy. When a wire of original length  $l$  and area of cross section  $A$  is subjected to a deforming force  $F$  along the length of the wire, suppose the length of the wire increases by  $\Delta l$ . Initially the internal restoring force is zero. When the length increases by  $\Delta l$ , this force increases from 0 to  $F$  (= applied force).  
Work done on the wire is  
 $W = \text{Average force} \times \text{increases in length}$ . 4
- (i) If in a wire of Young's modulus  $Y$ , longitudinal strain  $X$  is produced, then the value of potential energy stored in its unit volume will be  
(a)  $YX^2$   
(b)  $2YX^2$   
(c)  $0.5Y^2X$   
(d)  $0.5 YX^2$
- (ii) A body of weight  $mg$  is hanging on a string which extends in length by  $l$ . The work done in extending the string is:  
(a)  $mgl$   
(b)  $mgl/2$   
(c)  $2mgl$   
(d) none of these
- (iii) If the work done in stretching a wire by 1 mm is 2J, the work necessary for stretching another wire of same material but with double radius of cross section and half the length by 1 mm is  
(a) 16J  
(b) 8J  
(c) 1/16 J  
(d) 1/8 J

- (iv) The length of a rod is 20 cm and area of cross section is  $2 \text{ cm}^2$ . The Young's modulus of the material of the wire is  $1.4 \times 10^{11} \text{ Nm}^{-2}$ . If the rod is compressed by 5 kg-wt along its length, then increase in the energy of the rod in joules will be
- (a)  $8.57 \times 10^{-6}$   
 (b)  $22.5 \times 10^{-4}$   
 (c)  $9.8 \times 10^{-5}$   
 (d)  $45.0 \times 10^{-5}$

30. Degrees of freedom of a dynamical system are defined 4

as the total number of coordinates or independent variables required to describe completely the position and configuration of the system. If  $N$  is the number of particles in the system and  $k$  is the number of independent relations between the particles, then the number of degrees of the system is  $f=2N-k$ .

- (i) If  $\gamma$  be the ratio of specific heats of a perfect gas, the number of degrees of freedom of a molecule of a gas is:
- (a)  $25(\gamma-1)/2$   
 (b)  $(3\gamma-1)/(2\gamma-1)$   
 (c)  $2/(\gamma-1)$   
 (d)  $9(\gamma-1)/2$
- (ii) Specific heats at constant volume ( $C_v$ ) and at constant pressure ( $C_p$ ) of an ideal gas have been reported as shown below. Which of the following sets are most reliable? The unit is  $\text{cal mol}^{-1}\text{K}^{-1}$ .
- (a)  $C_v = 5$  ;  $C_p = 3$   
 (b)  $C_v = 3$  ;  $C_p = 4$   
 (c)  $C_v = 5$  ;  $C_p = 8$   
 (d)  $C_v = 3$  ;  $C_p = 5$
- (iii) The gases CO and  $\text{N}_2$  at the same temperature have kinetic energies  $E_1$  and  $E_2$  respectively. Then
- (a)  $E_1 = E_2$   
 (b)  $E_1 > E_2$   
 (c)  $E_1 < E_2$   
 (d)  $E_1$  and  $E_2$  cannot be compared.

- (iv) One mole of monoatomic gas and three mole of diatomic gas are put together in a container. The molar specific heat ( in  $\text{JK}^{-1}\text{mol}^{-1}$ ) at constant volume is:  
 ( $R=8.3 \text{ JK}^{-1}\text{mol}^{-1}$ )  
 (a) 18.7  
 (b) 18.9  
 (c) 19.2  
 (d) none of the above

**SECTION : E**

31. A projectile fired with a velocity  $u$  making an angle  $\theta$  with the horizontal. Derive expression for: 5  
 (i) time of flight  
 (ii) maximum height  
 (iii) horizontal range

OR

Two vectors  $\vec{A}$  and  $\vec{B}$  are inclined to each other at angle  $\theta$ . Using parallelogram law of vector addition find the magnitude and direction of their resultant.

32. Prove that in an elastic one-dimensional collision between two bodies, the relative velocity of approach between collision is equal to the relative velocity of separation after the collision. Also derive the expression for the velocities of the two bodies in terms of their initial velocities before collision. 5

OR

Three bodies a ring, a solid cylinder and a solid sphere roll down the same inclined plane without slipping. They start from rest. The radii of bodies are identical. Which of the bodies reaches the ground with maximum velocity?

33. (a) One end of a U tube containing mercury is connected to a suction pump and the other end is connected to the atmosphere. A small pressure difference is maintained between the two columns. Show that when the suction pump is removed, the liquid in the U tube executes SHM. 5

- (b) Two simple harmonic motions are represented by:  
 $x_1 = 5\sin(2\pi t + \pi/4)$  and  $5\sqrt{2}(\sin 2\pi t + \cos 2\pi t)$   
what is the ratio of their amplitudes?

OR

- (i) A cylindrical piece of cork of base area  $A$  and height  $h$  and density  $\rho$  floats in a liquid of density  $\rho_1$ . The cork is depressed slightly and then released. Show that the cork oscillates up and down simple harmonically. Also find the time period of oscillation.
- (ii) A simple pendulum has time period  $T_1$ . The point of suspension is now moved upward according to the relation  $y = Kt^2$  ( $K = 1\text{m/s}^2$ ) where  $y$  is the vertical displacement. The time period now becomes  $T_2$ . Calculate the ratio  $T_1^2 / T_2^2$ ? given  $g = 10\text{m/s}^2$ .

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE:A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**ANNUAL EXAMINATION: [2023-2024]**

**CHEMISTRY**

**CLASS :XI**

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

=====  
**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 | Two different oxides of a metal contain 20% and 27% oxygen by weight. This is in accordance with the law of:<br>a) conservation of mass<br>b) constant composition<br>c) multiple proportion<br>d) reciprocal proportion | 1 |
| 2 | Total number of orbitals associated with third shell will be:<br>a) 2 b) 4 c) 9 d) 3   | 1 |
| 3 | A recently discovered element, Meitnerium( $Z = 109$ ) belongs to:<br>a) s-block b) p-block c) d-block d) f-block  | 1 |

- 4 Which of the following molecule has net dipole moment? 1  
a)  $\text{CCl}_4$  b)  $\text{C}_2\text{H}_2$  c)  $\text{BF}_3$  d)  $\text{NH}_3$
- 5 For a spontaneous reaction,  $\Delta G$  should be: 1  
a) positive  
b) negative  
c) equal to zero  
d) may be positive or negative
- 6 Which of the following effect is permanent? 1  
a) Inductive effect  
b) Electrometric effect  
c) Both (a) and (b)  
d) None of these
- 7 The value of n in the following equation is: 1  
 $\text{Cr}_2\text{O}_7^{2-} + 14 \text{H}^+ + n\text{e}^- \longrightarrow 2\text{Cr}^{3+} + 7\text{H}_2\text{O}$   
a) 2 b) 3 c) 4 d) 6
- 8 In a reversible reaction, two substances are in equilibrium. If the concentration of each one is doubled the equilibrium is : 1  
a) reduced to half to its original value.  
b) reduced to 1/4th of original value  
c) doubled  
d) constant
- 9 Soda lime is specific reagent for 1  
a) Dehalogenation  
b) Decarboxylation  
c) Dehydration  
d) Dehydrogenation
- 10 Two electrons occupying the same orbital are distinguished by: 1  
a) spin quantum number  
b) azimuthal quantum number  
c) magnetic quantum number  
d) principal quantum number

- 11 Which of the following statement is correct? 1  
a) 1st and 2nd IE of nitrogen is more than 1st and 2nd IE of oxygen  
b)  $IE_1$  of oxygen is greater than  $IE_1$  of nitrogen  
c)  $IE_2$  of oxygen is greater than  $IE_2$  of nitrogen  
d) all statements are correct.

- 12 The angle between covalent bonds is maximum in 1  
a)  $CH_4$  b)  $BF_3$  c)  $PF_3$  d)  $NH_3$

**For questions given below, two statements are given- one labelled Assertion (A) and the other labelled 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:** Simple distillation cannot be used to separate acetone and methanol. 1

**Reason:** Boiling points of acetone and methanol are close to each other.

- 14 **Assertion:** In a galvanic cell, the salt bridge is used only to complete the circuit. 1

**Reason:** The completion of circuit is important for the flow of electric current.

- 15 **Assertion:** All Bronsted acids are Arrhenius acids. 1

**Reason:** All Bronsted bases are Arrhenius bases.

- 16 **Assertion:** Boiling point of n-butane is higher than propane. 1

**Reason:** Melting point of alkane with even number of carbon atoms is higher than melting point of alkane with odd number of carbon atoms.

### **SECTION-B**

- 17 Presence of lone pairs distorts the geometry of a molecule. Explain with example. 2

- 18 a) Convert but-2-yne to trans but-2-ene. 2  
 b) Write a balanced chemical equation for combustion reaction of butene.
- 19 Classify the following pairs as position, chain, functional isomers or metamers: 2  
 a) Diethylamine and Methylpropylamine.  
 b) Ethanol and Dimethylether.
- 20 Two bulbs A and B of equal capacity contain 10 g of oxygen (O<sub>2</sub>) and ozone (O<sub>3</sub>) respectively. Which bulb will have 2  
 i) larger number of molecules?  
 ii) larger number of oxygen atoms?
- 21 What will be the enthalpy change for the following reaction. 2  

$$\text{H}_2(\text{g}) + \text{Br}_2(\text{g}) \longrightarrow 2\text{HBr}(\text{g})$$
 Given that bond energy of H<sub>2</sub>, Br<sub>2</sub> and HBr is 435 kJ/mol, 192 kJ/mol and 368 kJ/mol respectively.

**OR**

Define enthalpy of combustion. How is it measured?

**SECTION-C**

- 22 Calculate the amount in gram of KClO<sub>3</sub> needed to supply sufficient oxygen for burning 112 L of CO gas at N.T.P( atomic mass of K = 39u, Cl = 35.5u, O = 16u, C= 12u) 3
- 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<sub>H</sub> = 109678 cm<sup>-1</sup>) 3
- 24 Predict whether the following changes involve an increase or decrease of entropy: 3  
 a)  $\text{Br}_2(\text{g}) \longrightarrow 2\text{Br}(\text{g})$   
 b) Crystallization of salt from brine solution  
 c) Sublimation of ammonium chloride  
 d)  $\text{Cr}^{3+}(\text{aq}) + 6 \text{H}_2\text{O} \longrightarrow [\text{Cr}(\text{H}_2\text{O})_6]^{3+}(\text{aq})$   
 e)  $\text{NaCl}(\text{s}) \longrightarrow \text{NaCl}(\text{aq})$   
 f) Naphthalene dissolves in benzene

- 25 In a Dumas nitrogen estimation method, 0.30 g of an organic compound gave  $50 \text{ cm}^3$  of  $\text{N}_2$  collected at 300 K and 715 mm Hg pressure. Calculate the percentage composition of nitrogen in the compound. ( Vapour pressure of water at 300 K is 15 mm Hg). 3
- 26 Two moles of  $\text{PCl}_5$  were introduced in a 2L flask and heated at 600 K to attain the equilibrium.  $\text{PCl}_5$  was found to be 40% dissociated into  $\text{PCl}_3$  and  $\text{Cl}_2$  . Calculate the value of  $K_c$  . 3
- 27 What are the various factors due to which the ionisation enthalpy of the main group elements tends to decrease down a group? 3
- 28 a) What is the oxidation number of O in  $\text{CaO}_2$  ? 3  
 b) Justify that the reaction:  $2\text{Na(s)} + \text{H}_2\text{(g)} \rightarrow 2\text{NaH(s)}$  is a redox reaction.  
 c) What are direct and indirect redox reactions?

### SECTION-D

- 29 **Read the passage given below and answer the following questions:** 4  
 The organic reactions involve breaking and making of covalent bonds. A covalent bond may be cleaved by homolytic or heterolytic fashion. A heterolytic cleavage yield carbocation or carbanion, while a homolytic cleavage yield free radicals as reaction intermediates. The inductive, resonance, electrometric and hyperconjugation effects results in the polarization of a bond making certain atomic positions as places of low and high electron densities.
- a) What is the hybridisation of carbon atom in carbocation .  
 b) In which C---C bond of  $\text{CH}_3\text{CH}_2\text{CH}_2\text{Br}$ , the inductive effect is expected to be the least?  
 c) What are nucleophiles and electrophiles? Explain with examples.

**OR**

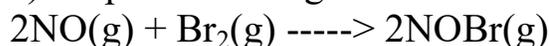
- c) Comment on the relative stability of isopropyl carbocation and tert-butyl carbocation. Give two reasons.

30 **Read the passage given below and answer the following questions:** 4  
Any reaction at equilibrium is characterized by an equilibrium constant whose magnitude depends on various parameters viz mode of reaction representation, reaction stoichiometry and temperature. The quantitative description of temperature dependence of equilibrium constant is given by van't Hoff equation in 1884.

- a) For the reaction:  $\text{H}_2(\text{g}) + \text{I}_2(\text{g}) \rightleftharpoons 2\text{HI}(\text{g})$ . What is the relationship between  $K_p$  and  $K_c$ ?  
b) State Le Chatelier's principle.  
c) How does catalyst affect the equilibrium constant? Give reason in support of your answer.

**OR**

c) As per reaction given below:



When 0.087 mol of NO and 0.0437 mol of  $\text{Br}_2$  are mixed in a closed container at constant temperature, 0.0518 mol of NOBr is obtained at equilibrium. Calculate equilibrium amount of NO and  $\text{Br}_2$ .

### SECTION-E

31 Explain the following: 5  
a) Gay Lussac law  
b) Law of definite composition  
c) Empirical and molecular formula  
d) Relation between mole and volume of gases  
e) Limiting reagent

32 Discuss the shapes of the following molecules on the basis of VSEPR theory: 5  
a)  $\text{CH}_4$  b)  $\text{PF}_5$  c)  $\text{NH}_3$  d)  $\text{H}_2\text{O}$  e)  $\text{SF}_6$

**OR**

With the help of molecular orbital theory, show that  $\text{N}_2$  molecule has triple bond,  $\text{O}_2$  molecule has double bond. Compare their bond strengths.

33 i) What happens when (Write equations only): 5  
a) Ethyne is passed through red hot iron tube at 873 K.  
b) Phenol is heated with Zn dust.  
c) Benzene treated with chlorine in the presence of U.V. light at 500K.

- ii) Why is addition reaction of bromine to benzene difficult?
- iii) Name the electrophile involved in the sulphonation of benzene.

**OR**

- i) What are the necessary conditions for any compound to show aromaticity ?
- ii) Why does benzene undergo electrophilic substitution reaction easily and nucleophilic substitution with difficulty?
- iii) How many primary and secondary carbons are there in 2,2-Dimethylbutane?

=====



Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_

CODE: B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**ANNUAL EXAMINATION: [2023-2024]**

**BIOLOGY (044)**

**CLASS : XI**

**Time 3 Hours**

**Maximum Marks : 70**

=====

**General Instructions:**

- i All questions are compulsory.*
  - ii The question paper contains four 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 7 questions of 3 marks each and section D is case based has 2 questions of 4 marks each. Section E has 3 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 causes potato spindle tuber disease? 1  
a) Virioids b) Fungi c) Parasite d) Mineral deficiency
- 2. Asexual reproduction by means of gemma cups can be seen in 1  
a) Pteridophytes b) Liverworts  
c) Algae d) Angiosperms
- 3. Incomplete digestive system is observed in 1  
a) Echinodermata b) Mollusca  
c) Platyhelminthes d) Annelida.
- 4. Which one of the following compounds is mainly synthesised by SER? 1  
a) Carbohydrates b) Organic acids  
b) c) Vitamins d) Lipids

5. Number of Carbon atoms in Palmatic Acid is 1  
a) 16 b)18 c) 20 d)22
6. Which stage shows split in centromeres followed by separation of chromosomes 1  
a)Prophase b) metaphase c) Anaphase d) Telophase.
7. Locale of glycolysis is in 1  
a) Cytoplasm b) Mitochondria c)2 Ribosomes d) Lysosomes
8. 2,4-D is an 1  
a) Auxin b)Cytokinin c) Gibberellin d) Abscisic Acid.
9. Alveoli become enlarged and damaged with lesser surface area for gaseous exchange in heavy smokers.This condition is 1  
a) Asthma b) Emphysema c)Sickle cell Anaemia d) Duchenne Muscular Dystrophy
10. GFR of human is:- 1  
a) 180lit/day b) 280lit/day c) 90lit/day d)100lit/day
11. Which of the following remains constant during a sarcomere contraction? 1  
a) A band b)I band c)D band d) H zone.
12. During the propagation of a nerve impulse,the action potential develops due to which of the following ions:- 1  
a)  $\text{Na}^+$  b)  $\text{Cl}^-$  c)  $\text{Ca}^{++}$  d)  $\text{Mg}^{++}$

**Question No. 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 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:** - Pericycle,Vascular Bundle and Pith constitute the Stele. 1  
**Reason:** - Pith is present between the epidermis and cortex.

14. **Assertion:** -Oxygen is a bi-product of photosynthesis. 1  
**Reason:** -Oxygen comes from splitting of carbondioxide in Photosynthesis.
15. **Assertion:** - Arthropods have open circulatory system. 1  
**Reason:** - Blood is directly pumped into the body cavities.
16. **Assertion:** - Vasopressin is also called ADH.  
**Reason:** -Deficiency of ADH is leads to diuresis.

### SECTION-B

17. Mention any two rules of biological nomenclature. 2
18. What are actinomorphic and zygomorphic flowers? 2
19. Why frog is said to be ureotelic animal? Mention the parts of its excretory system. 2
20. Mention any two functions of Auxin. 2
21. Calculate the respiratory quotient of Glucose. 2

OR

Why is Krebs Cycle considered to be amphibolic in nature?

### SECTION-C

22. What are diatoms?Mention its economic importance. 3
23. Differentiate between Green, Brown and Red algae on the basis of major pigments and stored food. 3
24. Classify the various types of chromosome on the basis of centromere. 3
25. Enlist the features of Fluid Mosaic Membrane. 3
26. Briefly discuss the substeps of Prophase I in Meiosis. 3
27. Heart is said to be auto-excitabile. Briefly explain the impulse conduction starting from SA node. 3
28. Briefly describe the various levels of structure found in proteins. 3

OR

Describe the role of pH, temp and substrate concentration on Enzyme activity.

## **SECTION-D (CASE STUDY)**

29

Ctenophores are ectothermic, meaning their body temperature is influenced by their environment. As oceans warm, it can affect their metabolism, reproduction, and overall physiology.

4

### Acidification Effects:

Ocean acidification, caused by increased carbon dioxide absorption, can affect the calcareous structures of some ctenophores. Those with fragile structures may be particularly vulnerable.

### Altered Food Web Dynamics:

Ctenophores play a role in marine food webs, preying on small zooplankton. Changes in their abundance or distribution could have cascading effects on the entire ecosystem, influencing the populations of both predators and prey.

### Competitive Interactions:

Altered environmental conditions might favor certain ctenophore species over others. This can lead to changes in the composition and dominance within ctenophore communities, influencing interactions with other marine organisms.

### Habitat Shifts:

Ctenophores are pelagic organisms, and their distribution may change in response to oceanic changes. This can impact the availability of their preferred habitats and influence the communities of organisms in those areas.

Understanding these implications is crucial for predicting the future of marine ecosystems, as ctenophores are integral components of ocean food webs. Research on their responses to changing conditions aids in broader assessments of ecosystem

health and resilience.

- a) How can global warming affect Ctenophorans? (1)
- b) Mention the example of the prey and the predator from the above paragraph. (1)
- c) What is Bioluminescence in Ctenophorans? Give an example of an organism under Phylum Ctenophora. (2)

Or

(c) Mention any two characteristics feature of Phylum Ctenophora (2)

30 The thyroid gland produces hormones that regulate metabolism. Common diseases include hypothyroidism (underactive thyroid) and hyperthyroidism (overactive thyroid). Hashimoto's thyroiditis is a common cause of hypothyroidism, while Graves' disease often leads to hyperthyroidism. Thyroid nodules and thyroid cancer are also possible conditions. Regular check-ups and proper medical guidance are crucial for managing thyroid health. 4

- a) Name at least two hormones produced by thyroid? (1)
- b) Mention the tissue which connects the two lobes of thyroid. (1)
- c) What is hypothyroidism? Mention its symptoms. (2)

OR

c) Mention any two functions of thyroid hormones. (2)

### **SECTION-E**

31. Mention the various types of aestivations found in corolla along with their feature and diagram. 5

OR

With the help of a suitable diagram elaborate the various types of placentation.

32. Explain the mechanism of CO<sub>2</sub> fixation in Calvin Cycle. 5

OR

Explain the “Z scheme” of Photosynthesis.

33. Explain the working of the counter current mechanism in concentration of urine. 5

OR

With the help of a labeled diagram represent the longitudinal section of the Kidney.

=====

Name: \_\_\_\_\_ Sec: \_\_\_\_\_ RollNo.: \_\_\_\_\_

CODE:A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**ANNUAL EXAMINATION: [2023-2024]**

**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 / False [1]  
The two smaller units of the processor are CU and ALU.
2. Flash memory is a type of \_\_\_\_\_ memory. [1]  
a)Primary      b)RAM      c)secondary      d)all of these
3. What will the following expression be evaluated to in Python? [1]  
print(15.0 / 4 + (8 + 3.0))  
a) 14.75      b)14.0      c) 15      d) 15.5
4. The binary equivalent of the decimal number 10 is [1]  
a)0010      b)10      c)1010      d)010
5. What will the following code produce ? [1]  
a,b = 8.6,2  
print(a//b)  
a)4.3      b)4.0      c)4      d)Error

6. Which of the following is valid arithmetic operator in Python ? [1]  
a) //                      b) ?                      c) <                      d) and
7. Which of the following is not a valid loop in python ? [1]  
a) for                      b) while                      c) do-while                      d) if-else
8. Which of the following are jump statements ? [1]  
a) if                      b) break                      c) while                      d) continue
9. Python code can run a variety of a platform, it means Python is a \_\_\_\_\_ language. [1]  
a) graphical                      b) cross-platform  
c) independent                      d) all of these.
10. Function range(10,5,2) will yield an iterable sequence like [1]  
a) [ ]                      b) [10,8,6]                      c) [2,5,8]                      d) [8,5,2]
11. Which of the functions will return the string in all caps ? [1]  
a) upper ()                      b) toupper()                      c) isupper()                      d) to-upper()
12. 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
13. Which of the following can add a list of elements to a list? [1]  
a) add()                      b) append()  
c) extend()                      d) none of these
14. The keys of a dictionary must be of \_\_\_\_\_ types . [1]  
a) integer                      b) mutable                      c) immutable                      d) any of these
15. A \_\_\_\_\_ is a computer program that can replicate itself and spread from one computer to another. [1]  
a) Antivirus                      b) Pendrive  
c) Mouse                      d) Computer Virus

16. Which of the following is not a social networking site? [1]  
a) Twitter b) Facebook c) Instagram d) Gmail  
Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as  
(a) Both A and R is 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 (or partly true)  
(d) A is false (or partly true) but R is True  
(e) Both A and R are false or not fully true

17. **Assertion:** The for loop is a counting loop that works with sequences of values. [1]

**Reason:** The range ( ) function generates a sequence of list type.

18. Assertion: A tuple slice is a tuple in itself. [1]  
Reason: All extracted slices are list.

### **SECTION-B**

19. Convert  $(72905)_{10}$  to hexadecimal [2]  
20. Convert  $(EB4A)_{16}$  to decimal [2]  
21. Convert  $(FACE)_{16}$  to binary [2]  
22. What is De-Morgan's law? Explain with example [2]  
23. What are intellectual property rights? [2]  
24. What are the similarity and difference between partition () and split() ? [2]  
25. What is the difference between interactive mode and script mode in python ? [2]

## SECTION-C

26. What will be the **output** of the following code? [3]

```
tuple1 = (111, 222, 333, 444, 555 ,666)
list1 =list(tuple1)
new_list = []
for i in list1:
    if i%2==0:
new_list.append(i)
new_tuple = tuple(new_list)
print(new_tuple)
```

27. Predict the **output** of the code given below: [3]

```
s="welcome2csWORLD"
n = len(s)
m=""
for i in range(0, n):
    if (s[i] >= 'a' and s[i] <= 'm'):
        m = m +s[i].upper()
    elif (s[i] >= 'n' and s[i] <= 'z'):
        m = m +s[i-1]
    elif (s[i].isupper()):
        m = m + s[i].lower()
    else:
        m = m +'&'
print(m)
```

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

29. What do you understand by plagiarism? Why is it a punishable offence? [2+1]

30. How many ways are there in Python to represent an integer literals ? [3]

### SECTION-D

31. i) Write a program to input a tuple and check if it contains the all elements as same. [2]  
ii) A tuple t1 stores (11,21,31,42,51), where its second last element is mistyped. Write a program to correct its second last element as 41. [2]
32. Draw a flow chart to calculate the factorial of a number (N) [4]

### SECTION-E

33. i) How are lists different from the strings when both are sequences? [2]  
ii) Write a program to input a list and an element, and remove all occurrences of the given element from the list. [3]
34. i) Rewrite the following code in python after removing all syntax error(s). Underline each correction done in the code. [2]
- ```
30=To
for K in range(0,To)
IF k%4==0:
print (K*4)
Else:
print (K+3)
```
- ii) Write a program to print Fibonacci series. [3]
35. Write a program that reads a line and prints its statistics like: [5]  
Number of uppercase letters.  
Number of lowercase letters.  
Number of alphabets.  
Number of digits.  
Number of symbol
-



Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_

CODE : A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**ANNUAL EXAMINATION: [2023-2024]**

**PHYSICAL EDUCATION**

**CLASS – XI**

**Time: 3 Hrs.**

**Maximum Marks: 70**

**General Instructions:-**

1) The question paper consists of 5 sections and 34 questions. .

2) Section A consists of question 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.

3) Sections B consist of questions 19-23 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. There is internal choice available.

4) Sections C consist of question 24-28 carrying 3 marks each and are short answer types and should not exceed 100-150 words. There is internal choice available.

5) Section D consists of question 29-31 carrying 4 marks each and is case studies. There is internal choice available.

6) Sections E consist of question 32-34 carrying 5 marks each and are short answer types and should not exceed 200-300 words. There is internal choice available.

**SECTION – A**

- |    |                                                                   |   |
|----|-------------------------------------------------------------------|---|
| 1  | Fit India movement was launched on the birth anniversary of ..... | 1 |
|    | a. Major Dhyan Chand    b. Subhas Chandra Bose                    |   |
|    | c. Flying Sikh Milkha Singh    d. None of these                   |   |
| 2. | In which year, the Olympic anthem was adopted by IOC?             | 1 |
|    | a. 1928    b. 1958    c. 1996    d. 1904                          |   |

3. Which one of the following kriyas is done to purify and cleanse the stomach? 1  
 a. Dugdhnети b. Jai Neti c. Dhouti d. Trataka

4. The process to concentrate on some object or print without blinking is called. 1  
 a. Basti b. Dhouti c. Trataka d. Neti

5. Match the following: 1

| List I                | List                                       |
|-----------------------|--------------------------------------------|
| A. Plate Tapping Test | 1. Upper Body strength endurance of boys   |
| B. Push up            | 2. Speed and coordination of limb movement |
| C. Partial Curl up    | 3. Upper body strength endurance of girls  |
| D. Modified push up   | 4. Abdominal Strength                      |

Codes:

- A B C D  
 (a) 2 1 4 3  
 (b) 2 3 1 4  
 (c) 1 3 2 4  
 (d) 2 3 4 1

6. World Disability Day is celebrated on 1  
 a. 2<sup>nd</sup> April b. 21<sup>st</sup> June  
 c. 29<sup>th</sup> August d. 3<sup>rd</sup> December

7. Which of the following is not a component of health related physical fitness? 1  
 a. Cardio respiratory fitness b. Balance  
 c. Flexibility d. Body composition

8. Given below are the two statements labeled Assertion (A) and Reason (R). 1  
 Assertion (A): Physical health is incomplete without mental health.  
 Reason (R): Mental health is related to mind's happiness, satisfaction and peace.

In the context of the 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 (R) is not the correct explanation of (A).
- c. (A) is true, but (R) is false.
- d. (A) is false but (R) is true.

9. Identify the test.

1



- a. Cardiovascular Test
- b. Anthropometric Test
- c. Achievement Test
- d. Muscular Endurance Test

10. What of the following physical traits are associated with an Endomorph?

1

- a. Narrow waist
- b. Lean and thin
- c. Fatty roundness
- d. Thinner joints

11. Which is called the study of human movements?

1

- a. Anatomy
- b. Kinesiology
- b. Biomechanics
- c. Physiology

12. The point through which the whole weight or mass of the body acts is called \_\_\_\_\_

1

- a. Inertial Point
- b. centre of mass
- c. Centroid
- d. Centre of gravity

13. Which one of the following affects team cohesion?

1

- a. Satisfaction
- b. Popularity
- c. Similarity
- d. All of these

14. Psychology may be described as the scientific study of \_\_\_\_\_ and \_\_\_\_\_. 1
- Behaviour and Emotions
  - Mental and Physical process
  - Personal and Mental Process
  - Behaviour and Mental Process
15. Doping is \_\_\_\_\_. 1
- Use of prohibited substance
  - Use of Alcohol
  - Use of Carbohydrate loading
  - All the above
16. Sports training is a \_\_\_\_\_. 1
- Planning
  - Physical Activities
  - Movement Training
  - Pedagogical Process
17. The Khelo India Programme was introduced by \_\_\_\_\_. 1
- Sports Authority of India
  - Indian Olympic Association
  - Ministry of Youth Affairs and Sports
  - Sports Federation of India.
18. When were the first Olympic Games held? 1
- Atlanta
  - Mexico
  - Athens
  - Sydney

**SECTION-B**

19. What do mean by technological advancement in sports? 2
20. What are the three men constituents of Olympic movement? 2
21. What is the use of cardio vascular test? 2
22. Define Kinesiology and Biomechanics. 2
23. What is blood doping? 2

OR

What is the meaning of adaptation?

**SECTION-C**

24. Discuss the meaning and concept of sports training. 3
25. Discuss the role of physical education teacher for children with special needs. 3
26. What are the traits of Endomorphs? 3
27. Define the classifications of bones. 3
28. Discuss about abduction, adduction and circumduction. 3

OR

Elucidate the disadvantage of doping.

### SECTION-D

- 29 As the head girl of her school, Shalini has to deliver a talk on career 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 shalini. 4\*1
- a. Are there opportunities to become a physical education teacher?
  - b. How does training in physical education help develop a career in media?
  - c. What opportunities should be explored in the wellness industry?
  - d. What scope should be available for the students good in sports?
- 30 Rahul, your specially - abled classmate, has just comeback after participating in competition for people with intellectual disabilities. These, he explained, are labeled Special Olympics and, in his opinion, are vital to enable the specially- abled to be part of the mainstream. He felt that the idea behind this is to include people with certain disabilities to feel normal and appreciated. 4\*1
- a. When were the Special Olympic started and why?
  - b. What are the criteria to allow a person to take part in these games?
  - c. What events are parts of these games?
  - d. Who initiated to start the Special Olympic?
- 31 A few students were questioning the teacher about the need for extra physical education classes as they felt it was increasing their workload. Explaining the need for extra classes, the teacher said that modern way of life has eroded our life style. Appreciating that though we have access to many facilities, we also suffer from a few disadvantages. He then went on to explain how physical fitness has a distinct role to play in helping enhance our current lifestyle. 4\*1
- a. How would you define lifestyle?
  - b. What advantages does the modern lifestyle offer?
  - c. What are the disadvantages of our current lifestyle?
  - d. Enlist the common lifestyle diseases.

**SECTION-E**

- |    |                                                                           |   |
|----|---------------------------------------------------------------------------|---|
| 32 | Discuss the concept of Physical Education with suitable example.          | 5 |
| 33 | Discuss the position of Padmasana and its benefits and contraindications. | 5 |
| 34 | Explain the meaning of training and its principles in sports.             | 5 |

OR

What is the meaning of doping according to IOC and WADA?



Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_

CODE - A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION :[2023-2024]**  
**ACCOUNTANCY**  
**CLASS – XI**

Time : 3 Hrs.

Maximum Marks : 80

**General Instructions :**

1. *This question paper contains 34 questions. All questions are compulsory.*
2. *Questions from 1 to 20 carries 1 mark each.*
3. *Questions from 21 to 26 carries 3 marks each.*
4. *Questions from 27 to 29 carries 4 marks each.*
5. *Questions from 30 to 34 carries 6 marks each.*
6. *There is no overall choice. However, an internal choice has been provided in 7 questions of one mark, 2 questions of three marks, 1 question of four marks and 2 questions of six marks.*
7. *All parts of a question should be attempted at one place.*

- 
- 1 Original cost of an asset is ₹126,000; salvage value is ₹6,000; useful life is 6 years. The rate of depreciation under Straight Line Method will be: 1  
(a) 15.87% (b) 16.67% (c) 15.80% (d) 16.56%
- 2 What type of ledger accounts are not carried forward to next year? 1  
(a) Personal Accounts (b) Nominal Accounts  
(c) Real Accounts (d) All of these

OR

Paid to J ₹11,500 in full settlement of ₹ 12,000. Posting will be made in J's A/c:

- (a) ₹ 12,000 on Debit side (b) ₹ 12,000 on Credit side (c) ₹ 11,500 on debit side (d) ₹ 111,500 on credit side.

- 3 Depreciation is 1  
 (a) Capital Expenditure (b) Revenue Expenditure (c) Deferred Revenue Expenditure (d) None of these
- OR
- Depreciation on assets charged at the end of the year will be credited to  
 (a) Assets A/c (b) Depreciation A/c (c) Profit & Loss A/c (d) Goods A/c
- 4 According to Accrual Concept 1  
 (a) Transactions and events are recorded in the books at the time of their settlement in cash  
 (b) transactions and events are recorded in the books at the time when they are entered into  
 (c) transaction and events may be recorded at the time of settlement or when they are entered into  
 (d) None of the above
- 5 The total of Purchases Return column of Purchase Return Book will be 1  
 posted to the  
 (a) Debit of Purchases A/c (b) Credit of Purchases A/c (c) Debit side of Purchases Return A/c (d) Credit side of Purchases Return A/c
- 6 Errors of omission permit 1  
 (a) Correct totalling of the Balance Sheet (b) Correct totalling of the Trial Balance (c) the Trial Balance to match (d) none of these
- OR
- ₹2,000 received from Sourish whose account was previously written off as Bad Debt should be credited to  
 (a) Bad Debt Recovered A/c (b) Sourish A/c (c) Cash A/c (d) None of these
- 7 If the amount of any known liability cannot be determined accurately, 1  
 (a) Definite liability should be created (b) Reserve should be created  
 (c) Should be shown as a contingent liability (d) Provision can be created.
- 8 Which of the following statements correctly described the cost concept? 1  
 (a) Assets are shown in the books at the price at which it was purchased plus cost of improvement minus depreciation till date.  
 (b) Assets are shown in the books at the price it was purchased

- (c) Assets are shown in the books at the price it was purchased plus cost of improvement
- (d) Assets are shown in the books at the price it was purchased or market price whichever is lower.

Read the following hypothetical text and answer the questions 9 and 10

Mr. X is engaged in the business of manufacturing and supplying glass bottles at an appropriate price. He has capital of ₹ 800,000 on 1<sup>st</sup> April,2020. On 1<sup>st</sup> October,2020 a loan was obtained from X's friend, Y ₹ 100,000 to carry out the routine expenses of the business smoothly. During the year, X withdrew ₹ 20,000 for his personal expenses. The firm also invested ₹ 40,000 in the shares of ABC Ltd. He spent ₹ 5,000 on advertisement of his products. On 31<sup>st</sup> March,2021 the firm has debtors of ₹ 18,000.

There are outstanding expenses as follows-

Office Expenses ₹ 7,800; Legal Expenses ₹ 9,000

X has paid the insurance premium upto 30<sup>th</sup> September,2021.

Stock on 31<sup>st</sup> March,2021 was ₹20,000. Maintain provision for doubtful debts of 5% on Debtors. ₹ 1,000 paid as arrears of salary to an employee were debited to his personal account and included in the list of debtors. ₹ 4,000 of advertising expenses are to be carried forward to next year. During the year goods worth ₹ 300 were withdrawn for X's personal use. Net profit earned during the year is ₹ 15,000.

- 9 At what amount, X's capital is shown in the Balance Sheet as at 31<sup>st</sup> March, 2021? 1  
(a) ₹ 760,000 (b) ₹ 765,000 (c) ₹ 755,000 (d) none of these
- 10 Calculate amount of 'Debtors' to be shown in the Balance sheet as at 31<sup>st</sup> March, 2021? 1  
(a) ₹ 16,150 (b) ₹ 17,100 (c) ₹ 17,150 (d) none of these
- 11 Which of the followings is of a financial character and will be recorded in the business? 1  
(a) Interviewing the candidates for employment  
(b) Sale of Household furniture ₹ 5000  
(c) Goods taken from business by the proprietor for his personal use  
(d) Received an order for sale of goods

OR

Which of the following is not a qualitative characteristics of accounting information?

(a) Reliability (b) Understandability (c) Comparability (d) Materiality

12 Which of the following balance is true, Given: 1

(i) Dr. balance as per Cash Book ₹ 32,000;  
(ii) Cheques sent for collection but not yet collected ₹ 10,000  
(iii) Cheques issued but not yet presented for payment ₹ 12,000

(a) Dr. Balance as per Pass Book ₹34,000  
(b) Cr. Balance as per Pass Book ₹30,000  
(c) Cr. Balance as per Pass Book ₹34,000  
(d) Dr. Balance as per Pass Book ₹30,000

OR

Which of the following balance is true, Given:

(i) Overdraft balance as per Pass Book ₹ 10,000;  
(ii) Cheques drawn for ₹8,000, of which cheques for ₹ 3,000 were cashed.  
(iii) Cheques paid in for collection ₹50,000, of which cheques for ₹ 22,800 were not credited.

(a) Dr. Balance as per Cash Book ₹ 12,200  
(b) Overdraft Balance as per Cash Book ₹ 7,800  
(c) Dr. Balance as per Cash Book ₹ 7,800  
(d) Overdraft Balance as per Cash Book ₹ 27,800.

13 Following information is taken from the Trial Balance of a business. 1

Sales ₹ 100,000; Purchases ₹ 60,000; Wages ₹ 7,000.

Closing Stock was ₹ 3000 more than opening stock. What was the gross profit?

(a) ₹ 30,000 (b) ₹ 33,000 (c) ₹ 36,000 (d) ₹ 40,000

14 Suspense Account will give the 1

(a) Debit balance (b) Credit balance  
(c) Debit or credit balance as the case may be (d) None of these

- 15 Reserve created by undervaluation of closing stock is called 1  
(a) Secret Reserve (b) General Reserve (c) Specific Reserve (d) Capital Reserve
- 16 When total of debit side of an account exceeds than that of its credit side, 1  
it is called  
(a) Debit balance (b) Credit balance (c) Expenses (d) Income
- 17 Expenditure incurred on a fixed asset which increases the earning capacity 1  
is accounted as  
(a) Capital Expenditure (b) Revenue Expenditure  
(c) General Expenditure (d) Deferred Revenue Expenditure

OR

Computer purchased for resale is

- (a) Capital Expenditure (b) Revenue Expenditure  
(c) General Expenditure (d) Deferred Revenue Expenditure
- 18 If capital at the end of the year is ₹40,000; capital introduced during the 1  
year ₹30,000; drawings for the year ₹20,000 and loss for the year is  
₹50,000, then capital at the beginning of the year was:  
(a) ₹ 90,000 (b) ₹ 80,000 (c) ₹70,000 (d) ₹10,000
- 19 What is the amount of difference between the closing balances of two 1  
machines after two years assuming both machines were purchased on the  
same date with same amount ₹100,000? Machine I is depreciated by  
20%pa under Straight Line method and machine II is depreciated by  
20%pa under Diminishing Balance method  
(a) Value of Machine II is more by ₹ 2,000 (b) Value of Machine I is  
more by ₹ 4,000 (c) Value of Machine II is more by ₹ 4,000 (d) Value of  
Machine II is less by ₹ 2,000
- 20 During the life-time of an entity, accounting produces financial statements 1  
in accordance with which of the following accounting concept?  
(a) Matching (b) Conservatism (c) Accounting Period (d) Cost

OR

According to Convention of Full Disclosure

- (a) All secrets of the business must be disclosed
- (b) All significant information should be completely disclosed
- (c) All accounts should be maintained honestly
- (d) All accounts should be prepared quickly.

- 21 Pass necessary journal entries to rectify the following errors: 3
- (a) On 31<sup>st</sup> March, 2023, goods of the value of ₹ 21,000 were returned by M and were taken into stock but no entry was passed in the books.
  - (b) ₹ 17,000 paid in cash for a typewriter was charged to office expenses account.
  - (c) Purchase book was under-cast by ₹ 1,000

OR

Pass necessary journal entries to rectify the following errors:

- (a) Bought Radio for ₹ 1,000 for the proprietor was debited to General Expenses account.
  - (b) Goods return to Rai ₹ 3000 recorded through Sales Book as ₹ 1000
  - (c) Cash received ₹ 5000 from AB & Co. was wrongly recorded as received from BA & Co.
- 22 Calculate the amount of gross profit/loss and operating profit/loss on the basis of following balances extracted from the books of Mr.Sen for the year ended 31.03.2023. 3
- Opening Stock ₹ 70,000; Net Sales ₹11,20,000; Net Purchases ₹ 6,20,000; Direct Expenses ₹ 80,000; Administrative Expenses ₹ 65,000; Selling and Distribution Expenses ₹ 85,000; Loss due to fire ₹ 40,000; Closing stock ₹ 90,000.
- 23 From the following extract of the Trial Balance as at 31<sup>st</sup> March,2023, show the treatment of bad debts and provision for doubtful debts in the relevant accounts. 3

| Particulars                  | Dr.(₹)   | Cr.(₹) |
|------------------------------|----------|--------|
| Sundry Debtors               | 5,20,000 |        |
| Provision for Doubtful Debts |          | 30,000 |
| Bad Debts                    | 5,000    |        |

Additional Information:

- (a) Further Bad Debts were for ₹ 20,000
- (b) Provision for Doubtful Debts is to be maintained at 10% on Sundry Debtors.

- 24 Show Accounting equation on the basis of following transactions. 3
- (a) S started a business with cash ₹ 100,000
  - (b) Purchased goods in cash ₹ 50,000
  - (c) Purchased furniture from M/s Samrat& Sons ₹ 20,000
  - (d) Sold goods costing ₹ 25,000 for ₹35,000 in cash
  - (e) M/s Samrat& Sons was paid his dues in cash
  - (f) Depreciate furniture @20%

OR

Show Accounting equation on the basis of following transactions.

- (a) T started a business with cash ₹ 150,000
- (b) Purchased goods from M ₹ 25,000
- (c) Sold goods costing ₹ 10,000 to Sohan for ₹ 14,000 in cash
- (d) Commission received in advance ₹ 2,000
- (e) Sold goods costing ₹ 15,000 for 18000 out of which ₹ 5,000 received in cash.
- (f) Paid to M in full settlement ₹ 22,500

- 25 Prepare Bank Reconciliation Statement as on 31<sup>st</sup> March 2022 from the following information: 3
- Bank statement should a credit balance of ₹ 9214
- (a) On 29<sup>th</sup> March 2022 bank credited a sum of ₹ 1,650 in error.
  - (b) Checks totalling ₹ 4,500 issued on 29<sup>th</sup> March 2022 were not cleared
  - (c) Life insurance premium of ₹ 950 paid by a standing order was not recorded in the cash book.
  - (d) A cheque of ₹600 received, deposited and credited by bank was accounted as a receipt in the cash column of the Cash Book
  - (e) Other cheques for ₹ 8500 were deposited on 27<sup>th</sup> March,2022 but cheques for ₹ 6,000 were collected by the bank on 31<sup>st</sup> March,2022 and remaining on 2<sup>nd</sup> April,2022.

- 26 Explain any three features of transaction with example. 3

- 27 Prepare a Trial Balance as at 31<sup>st</sup> March,2022 based on following 4  
balances:

| Particulars     | ₹        | Particulars                 | ₹      |
|-----------------|----------|-----------------------------|--------|
| Capital         | 1,00,000 | Interest Received           | 15,000 |
| Drawings        | 16,000   | Discount Allowed            | 6,000  |
| Machinery       | 20,000   | Bank Overdraft              | 22,000 |
| Sales           | 2,00,000 | Bank Loan                   | 90,000 |
| Purchases       | 2,10,000 | Debtors                     | 75,000 |
| Returns Inward  | 20,000   | Creditors                   | 60,000 |
| Returns Outward | 30,000   | Cash                        | 54,000 |
| Wages           | 40,000   | Stock as at 1.st April 2021 | 16,000 |
| Goodwill        | 60,000   |                             |        |

- 28 Differentiate between Single entry and Double entry System on the basis 4  
of (a) Accounts maintained (b) Profit or Loss (c) Use and (d) Authenticity.

OR

Mr. S runs a small business, He records his business transactions using Single Entry System. His accounts summarisation provides the following information.

| Particulars          | 01.04.2022(₹) | 31.03.2023(₹) |
|----------------------|---------------|---------------|
| Cash at Bank         | 20,000        | 21,000        |
| Sundry Debtors       | 17,000        | 25,000        |
| Stock                | 40,000        | 60,000        |
| Furniture            | 29,000        | 29,000        |
| Sundry Creditors     | 32,000        | 22,000        |
| 10% Loan from Mrs. S | 30,000        | 30,000        |

Mr. S withdrew ₹ 5000 from his business every month for meeting medical expenses. During the year, he sold investments held by him privately for ₹ 35,000 and invested the amount in his business.

At the end of the year 2022-23, it was found that full year's interest on loan taken from Mrs. S had not been paid. Depreciation @ 10% pa was to be provided on furniture for full year. S decided that the shop assistant was to be given a share of 5% of the profits ascertained before charging such share as it will help to boost the shop assistant's morale.

Prepare a statement of Profit and Loss for showing net profit/loss of the business.

29 Record the following transactions of M/s K.Sons, New Delhi in their Sales Book 4

Sold to M/s Gupta & Verma, New Delhi

30 shirts @ ₹ 400 each

20 trousers @ ₹600 each

Less Trade Discount @ 10%

Sold old furniture to M/s Sehgal & Co., New Delhi for ₹ 8,000

Sold 50 shirts to M/s Jain & Sons, Kanpur @ ₹ 400 each

Sold to M/s Mathur & Jain, Kolkata

100 shirts @ ₹ 400 each

10 overcoats @ ₹ 1,000 each

Less Trade Discount @ 10%

30 Explain any four qualitative characteristics of accounting information. 6

OR

Define the term 'Accounting'. Explain any five limitations of accounting

31 From the following Trial Balance and adjustments of Mr Pankaj, you are required to prepare Trading and Profit and Loss A/c for the year ended 31<sup>st</sup> March, 2023. 6

| Particulars                                 | Dr.(₹) | Cr.(₹) |
|---------------------------------------------|--------|--------|
| Capital                                     |        | 50,000 |
| Drawings                                    | 10,000 |        |
| Debtors and Creditors                       | 24,000 | 16,000 |
| 6% Loan                                     |        | 10,000 |
| Interest on Loan                            | 300    |        |
| Cash                                        | 3,000  |        |
| Provision for Doubtful Debts as at 1.4.2022 |        | 1,000  |
| Wages                                       | 6,000  |        |
| Stock as on 1.4.2022                        | 16,700 |        |
| Computer                                    | 10,000 |        |
| Bank                                        | 7,500  |        |
| Furniture                                   | 20,000 |        |
| Carriage Outward                            | 4,500  |        |
| Carriage Inward                             | 5,000  |        |
| Salaries                                    | 12,000 |        |
| Rent                                        | 8,000  |        |

|                                    |                 |                 |
|------------------------------------|-----------------|-----------------|
| Bad Debts                          | 600             |                 |
| Purchases and Sales                | 60,000          | 1,16,000        |
| Returns                            | 2,000           | 1,000           |
| Advertising                        | 4,500           |                 |
| Discount                           |                 | 2,600           |
| Insurance Premium                  | 2,000           |                 |
| Bills Receivable and Bills Payable | 10,000          | 8,000           |
| Commission                         |                 | <u>1,500</u>    |
|                                    | <u>2,06,100</u> | <u>2,06,100</u> |

Adjustments:

- Depreciate Furniture by 5% and Computer by 10%
- Salaries outstanding ₹ 1,200
- Insurance premium is paid for the year ending 30<sup>th</sup> June 2023.
- Wages have been paid upto 30<sup>th</sup> June,2023.
- Provision for doubtful debts is to be maintained at 5% on debtors
- Stock on 31<sup>st</sup> March,2023 was valued at ₹19,400.

- 32 Post the following transactions into Ledger and prepare Trial Balance 2022 ₹ 6
- |         |                                         |          |
|---------|-----------------------------------------|----------|
| April 1 | Som started business with cash          | 1,00,000 |
| 6       | Deposited into bank                     | 70,000   |
| 15      | Bought goods for cash                   | 5,000    |
| 22      | Drew cash from bank for office use      | 1,000    |
| 30      | Sold goods to Krishna (costing ₹ 1,000) | 1,500    |
- 33 A firm purchased on 1.4.2020 a second hand machinery for ₹ 36,000 and spent ₹4,000 on its installation. On 1.10.2020 another machinery costing ₹20,000 was purchased. On 1.10.2022 machinery bought on 1.04.2020 was sold for ₹ 12,000 and a new machinery was purchased for ₹ 64,000 on the same date. Depreciation is provided annually on 31<sup>st</sup> March @10% pa on Written Down Value method. Show Machinery A/c for relevant periods. 6

OR

You are given following balances as on 1<sup>st</sup> April,2022

Machinery A/c ₹ 500,000

Provision for Depreciation A/c ₹ 116,000

Depreciation is charged on machinery @ 20%pa by Diminishing Balance method. Part of machinery purchased on 1<sup>st</sup> April 2020 for ₹ 100,000 was sold on 1<sup>st</sup> October 2022 for ₹ 60,000.

Prepare Machinery A/c, Provision for Depreciation A/c for the year ended 31<sup>st</sup> March,2023. Also prepare the Machinery Disposal A/c.

34 Prepare Cash Book with Cash and Bank column from the following 6 transactions.

2022

March 1 Cash in hand ₹ 15000 , Cash at Bank ₹ 50,000

3 Purchased goods for cash ₹ 6,000

5 Deposited into bank ₹ 5,000

8 Cash Sales ₹10,000

10 Cash withdrew from bank for office use ₹ 2,000

12 Received Cash from D ₹ 3,000, allowed him discount ₹ 100

15 Received cheque from N ₹ 2,000 and allowed him discount ₹ 75

18 Received a post dated ( dated 23.03.2022) from Deep for ₹ 5,000

23 Cheque received from Deep deposited into bank.

24 Issued cheque of ₹ 2,500 to C, he allowed discount ₹ 125

27 Withdrew from bank for personal use ₹ 1,500

28 Sold goods to A.Mitra ₹ 40,000

30 Purchased goods from C ₹ 50,000

31 Received cheque from A.Mitra ₹ 2,000 and deposited into bank.

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_

CODE - A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION:[2023-2024]**  
**BUSINESS STUDIES**

**CLASS – XI**

**Time : 3Hrs.**

**Maximum Marks : 80**

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**General Instructions :**

- 1. This question paper contains 34 questions.**
  - All questions are compulsory.**
  - 2. Marks are indicated against each question**
  - 3. Answers should be brief and to the point.**
  - 4. Answers to questions 1 mark may be in one word or one sentence.**
  - 5. Answers to questions 3 marks may be from 50 to 75 words.**
  - 6. Answers to questions 4 marks may be about 150 words.**
  - 7. Answers to questions 6 marks may be about 200 words.**
  - 8. Attempt all parts of the questions together.**
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- 1 Which of the following is not a feature of a departmental undertaking 1  
(a) The employees of the enterprise are not civil servants (b) They are generally considered to be a major subdivision of the government department (c) Funding of these enterprises comes directly from the government treasury (d) All of the above
  
- 2 In case of insurance of a property, the insurable interest of the insured in 1  
the subject matter of the insurance must exist  
(a) At the time of taking the policy (b) At the time of happening of the event (c) Both of these (d) None of these

- 3 Mrs.Sen has initiated a food chain specialising in different varieties of baked snacks in India with branches in Delhi, Chennai and Kolkata. She managed the initial capital for starting the business by investing her personal savings and resources . Identify the funding method used by Mrs.Sen for her start-ups 1
- (a) Bootstrapping (b) Crowd funding  
(c) Angle investment (d) Venture capital
- 4 The Mining industry in India is a major economic activity which contributes significantly to the economy of India. Indian mining industry provides job opportunities to around 7,00,000 individuals. Identify the type of industry being described in the above lines. 1
- (a) Genetic industries (b) Extractive industries  
(c) Manufacturing industries (d) Tertiary industries
- 5 Which of the following is not a benefit of international business to firms? 1
- (a) Earning of foreign exchange  
(b) More efficient use of resources  
(c) Depletion of natural resources in the home country  
(d) Increased standard of living.
- 6 Which of the following is not a feature of preference shares? 1
- (a) Payment of dividend on preference shares is compulsory.  
(b) The preference shareholders have preferential claim over dividend and repayment of capital  
(c) Preference shares are also known as hybrid securities  
(d) Preference shares do not create a charge on the assets of the company.
- 7 The government does not interfere in the workings of a start-up for the first three years; it is related to which scheme of start-up 1
- (a) Tax exemption (b) Capital gain exemption  
(c) No inspection (d) None of these
- 8 The management and control in a global enterprise centralised and is exercised by 1
- (a) Branch managers (b) Subsidiaries (c) Headquarters (d) Parliament

- 9 Match the following by choosing correct option 1
- | Column A                                                | Column B        |
|---------------------------------------------------------|-----------------|
| (i) Withdraws money from ATM                            | (A)C2C Commerce |
| (ii) Registering complaint on online portal of the firm | (B)B2C Commerce |
| (iii)Selling old electronics on e-bay                   | (C)B2B Commerce |
| (iv)Automated Production is a factory                   | (D)C2B Commerce |
- (a) (i)-(D); (ii)-(A); (iii)-(B); (iv)-(C)  
 (b) (i)-(B); (ii)-(C); (iii)-(D); (iv)-(A)  
 (c) (i)-(B); (ii)-(D); (iii)-(A); (iv)-(C)  
 (d) (i)-(D); (ii)-(C); (iii)-(B); (iv)-(A)
- 10 In which type(s) of economic activities, the transfer of interest is possible with some formalities. 1
- (a) Business (b) Employment (c) Profession (d) All of these
- 11 The document containing detailed information regarding price, quality, size, weight, shape etc. of products which the exporter can supply 1
- (a) Commercial Invoice (b) Performa Invoice  
 (c) Both (a) and (b)(d) None of these
- 12 Asit got his office insured for ₹ 5 crore against fire. Due to short circuit a fire broke out in the office and the amount of loss was estimated to be ₹ 20 lakh. What is the amount of claim payable by the insurance company in this case 1
- (a) ₹5 crore (b) ₹4.8 crore (c) ₹ 20 lakh (d) none of these
- 13 Mr.Sen runs a small business unit. He emphasis on providing fair labour practices for his employees which includes equal pay for equal work. This is not only good for his business image, but it also helps to build a positive work culture with good morale and high productivity. Identify the kind of social responsibility being described in the above lines. 1
- (a) Economic responsibility (b) Legal responsibility  
 (c) Ethical responsibility (d) Discretionary responsibility

- 14 Read the following statements: Assertion(A) and Reason(R). Choose the correct alternative from those given below. 1  
Assertion(A): Retailers need to maintain large working capital  
Reason(R): Wholesaler sells goods to retailers on credit.  
(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 and the 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
- 15 Asit started a small business of manufacturing sanitisers few months back and within a very short span of time his business gained popularity and created a market standing for itself. As a result Asit feels a great amount of self-satisfaction, whenever he is given sole credit for the success of his business. Identify the merit of sole proprietorship being highlighted in the above lines. 1  
(a) Quick decision making (b) Sense of accomplishment  
(c) Confidentiality of information (d) Direct incentive
- 16 The Department of Posts (DoP), trading as India Post, is a government-operated postal system in India which is subsidiary of Ministry of Communications. Name the form of public sector enterprise under which Department of Posts will be classified. 1  
(a) Government Company (b) Departmental Undertaking (c) Statutory corporation (d) All of the above
- 17 Mrs. Sen has initiated a food chain specialising in different varieties of baked snacks in India with branches in Delhi, Chennai and Kolkata. She managed the initial capital for starting the business by investing her personal savings and resources. Identify the funding method used by Mrs. Sen for her start-ups 1  
(a) Bootstrapping (b) Crowd funding  
(c) Angel investment (d) Venture capital
- 18 IEC Number is issued by 1  
(a) Import Export Licensing authority (b) Foreign Minister  
(c) Minister of Commerce and Industry (d) Chamber of Commerce

- 19 X.Ltd. makes use of internet facility for managing interactions and dealings among various departments and persons within a company. The component of e-business apparent in the above line is 1  
(a) B2B Commerce (b) B2C Commerce (c) C2C Commerce (d) Intra B Commerce
- 20 The 'karta' in Joint Hindu family business has 1  
(a) limited liability (b) unlimited liability (c) no liability for debts (d) joint liability
- 21 Explain any three services provided by wholesaler to manufacturer or producer. 3
- OR
- Explain any three services provided by a retailer to his/her customer.
- 22 Distinguish between e-business and traditional business on the basis of (a) Locational requirements (b) Internal communication and (c) Nature of human resource 3
- 23 Explain why the following might be considered as a poor decision while selecting a source of finance. 3  
(a) A small business buys a new machine for ₹ 50,000 and finances it by increasing its overdraft  
(b) Company takes a mortgage for fifteen years to buy a car for the company chairman  
(c) A company running in losses for last three years, takes a five year loan to pay off some of its debts.
- 24 'Memorandum of Association is significant for a company'. Discuss three points to justify the above statement. 3
- 25 Describe the contribution of small business towards the development of Indian economy ( any four points ) 4
- OR
- What is intellectual property rights? How does it help entrepreneurs? Explain any three ways.

- 26 Explain any five features of a Public Private Partnership. 4
- 27 While comparing the e-business with traditional business you may have realised that starting e-business is not a major task. 4  
Explain any four benefits of e-business to justify the above statement.
- 28 X Pvt Ltd. is a company incorporated with ROC, Gwalior. It wishes to import Japanese low value toys and sell them in Indian markets. Write a detailed note advising its Board of Directors about the next four procedural steps of importing goods after obtaining IEC code as per the Indian Customs Regulations and EXIM Policy. This prospective importer has already procured IEC Code no. 4
- 29 Explain four social responsibilities of a business towards shareholders. 4  
OR  
Explain four social responsibilities of a business towards Government.
- 30 Explain any four features of global enterprises. 4
- 31 Bivas Stores are networks of retail shops owned and operated by Bit & Company. These shops operate in different parts of country. One can easily identify these shops in any part of the country as they have same appearance, even their interior is also identical. All the shops are supplied the goods from head office only and all the policies for all the branches are made by head office only. Even store sells some goods at uniform prices. 6  
(a) State the type of retail store mentioned in about case.  
(b) Explain any five features of that type of retail store.
- 32 Explain any three merits and three limitations of partnership business. 6  
OR  
Explain the contents of Memorandum of Association of a company in the form of different clauses (any six).
- 33 Konika wants to start her own business dealing in high end crockery items. She decides to arrange for initial finance from her savings. However, her savings are not enough to fulfil all the initial needs of the business. She seeks help of her husband, who works in government sector. He advises her that to start her business with limited finance and then use the revenues 6

earned by the business to fulfil other financial requirements.

(a) Is the view of Konika's husband justified? Justify your answer by explaining five points

(b) Konika's husband advocates the use of which source of finance?

OR

Kamal owns a small firm in which he grows flowers. He is able to earn a small amount of profit, but being of an ambitious nature, he wants to take over a neighbouring firm and increase the range of flowers he is selling. He is of the view that he will need long term finance for this purpose and plans to take a bank loan to pay for takeover. He has already borrowed money to buy a new tractor.

(a) Identify and define the form of internal finance Kamal could have used to buy the tractor

(b) What factors would the bank consider before granting loan to Kamal.

34 Mention the different types of services provided by a service sector. Also explain any five services provided by a bank. 6

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION : (2023-2024)**  
**ECONOMICS(030)**  
**CLASS : XI**

**Time: 3 Hrs.**

**Maximum Marks : 80**

**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. Read the following statements-Assertion(A) and Reason(R). Choose one of the correct alternatives given below:-

1

**Assertion(A)-Ogivescan only be made with less than cumulative frequency distribution.**

**Reason(R)- Ogive is a frequency distribution graph by plotting cumulative frequency distribution in a form of smooth curve.**

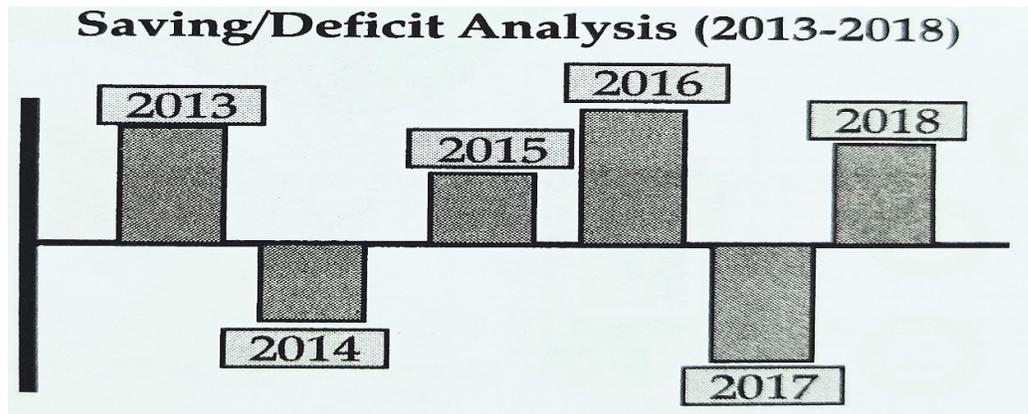
**Alternatives:**

- Both Assertion (A) and Reason(R) are true and Reason(R) is the correct explanation of Assertion (A).
- Both Assertion (A) and Reason(R)are true but Reason(R) is not the correct explanation of Assertion (A).
- Assertion (A) is true but Reason (R) is false.
- Assertion (A) is false but Reason(R) is true.

2. The investigator appoints local persons or correspondents at different places. They collect information in their own way and furnish the same to the investigator. 1  
Identify the above source of data.  
a. Primary data source  
b. Secondary data source  
c. Both (a) and (b)  
d. Neither (a) nor (b)
3. Index numbers are very helpful in comparing the economic conditions of a particular group of people for \_\_\_\_\_ different periods. 1  
( fill up the blank with correct alternative)  
a. Three  
b. Two  
c. Four  
d. None of these
4. Read the following statements carefully. 1  
**Statement 1: No adjustment is required for calculation of mean in case of mid value series.**  
**Statement 2: In order to combine mean of two different series, we simply need to add the average values of two series.**  
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. The statistical study begins with collection of data and ends with 1  
(choose the correct alternative)  
a. Organisation of data  
b. Analysis of data  
c. Interpretation of data  
d. None of the above

6.

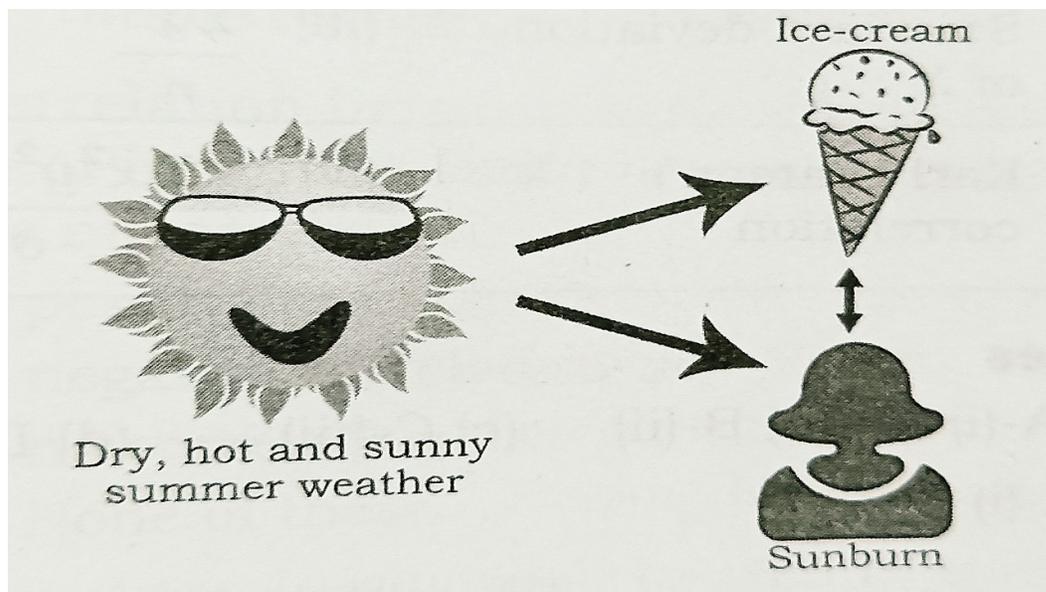
1



Identify the following diagram:

- Pie Diagram
- Deviation Bar Diagram
- Percentage Bar Diagram.
- Sub divided Bar Diagram

7. The arrow between the ice cream cone and sunburn indicates which of the following? 1



- Causation
- Correlation
- Both (a) and (b)
- Neither (a) nor (b)

8. If the median of 5,9,11,3,4,X and 8 is 6, then find the value of X. 1

- 4
- 6
- 8
- 5

9. Read the following statements carefully. 1  
**Statement 1: Raw data is incapable of statistical analysis unless organised.**  
**Statement 2: An ideal method of classification should be mutually exclusive.**  
 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

10. Movement of points from left to right, in an upward direction indicates 1  
 a. Negative correlation  
 b. Positive correlation  
 c. No correlation  
 d. None of the above

11. In how many groups, different commodities have been divided while constructing wholesale price index in India? 3

12. 3

|                        |       |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| <b>Marks</b>           | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
| <b>No. of students</b> | 5     | 3     | 4     | ?     | 2     | 6     | 13    |

In the following frequency distribution, the frequency of the class interval 40 – 50 is missing. Find out the missing frequency, if mean is 52.

**OR**

Construct the index number by simple average of price relative method and by simple aggregative method.

|                           |          |          |          |          |          |
|---------------------------|----------|----------|----------|----------|----------|
| <b>Commodity</b>          | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |
| <b>Price in 2014(Rs.)</b> | 16       | 40       | 35       | 5.25     | 2        |
| <b>Price in 2015(Rs.)</b> | 20       | 60       | 50       | 6.25     | 1.5      |

13. Construct a pie diagram to represent the cost of construction of a house in Delhi. 4

| Items           | Labour | Bricks | Cement | Steel | Timber | Supervision |
|-----------------|--------|--------|--------|-------|--------|-------------|
| Expenditure (%) | 25     | 15     | 20     | 15    | 10     | 15          |

- 14 Calculate median from the following data: 4

| Wages(inRs.)  | More than 100 | More than 150 | More than 200 | More than 250 | More than 300 |
|---------------|---------------|---------------|---------------|---------------|---------------|
| No.of workers | 200           | 180           | 150           | 70            | 10            |

- 15 “An index number is a statistical device for measuring changes in the magnitude of a group of related variables. It represents the general trend of diverging ratios, from which it is calculated.” 4

Elaborate how index number measures the changes in the magnitude of variable

**OR**

What is the importance of statistics in economic planning?

16. A. Construct ‘Less than’ Ogive , on the basis of data given below:- 3

| Marks          | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|----------------|-----|------|-------|-------|-------|-------|-------|-------|
| No.of students | 3   | 10   | 20    | 30    | 20    | 9     | 5     | 3     |

- B. “An activity can be economic activity in one situation and non economic in another situation”. 3

Do you agree? Give an example to justify your answer.

**OR**

- A. Prepare a frequency curve of the following data:- 3

| C.I.  | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-------|------|-------|-------|-------|-------|-------|
| Freq. | 6    | 10    | 16    | 12    | 8     | 4     |

- B. Discuss briefly the nature of statistics. 3

- 17A. Calculate coefficient of correlation between the price and quantity demanded by step deviation method:- 3

|            |    |    |    |    |    |
|------------|----|----|----|----|----|
| Price Rs.  | 5  | 10 | 15 | 20 | 25 |
| Demand Kg. | 40 | 35 | 30 | 25 | 20 |

- B. Calculate coefficient of rank correlation from the following data: 3

|           |    |    |    |   |    |    |    |    |    |    |
|-----------|----|----|----|---|----|----|----|----|----|----|
| <b>X:</b> | 48 | 33 | 40 | 9 | 16 | 16 | 65 | 24 | 16 | 27 |
| <b>Y:</b> | 13 | 13 | 24 | 6 | 15 | 4  | 20 | 9  | 6  | 19 |

**SECTION B- MICRO ECONOMICS**

18. From the set of the events given in the column I and corresponding facts given in the column II , choose the correct pair of statements:- 1

| Column I                 | Column II                                    |
|--------------------------|----------------------------------------------|
| A.Utility                | 1. Bread and butter                          |
| B. Normal Goods          | 2. Rise in price                             |
| C. Contraction in Demand | 3. Capacity of a good to satisfy human wants |
| D. Complementary Goods   | 4. Positively related                        |

**Codes**

- a. A-1
  - b. B-2
  - c. C-3
  - d. D-4
19. Comment on the nature of goods, if the demand of one good increases due to decrease in the price of another good. 1
- a. Substitute good
  - b. Complementary good
  - c. Inferior good
  - d. Giffen good
20. A form of market in which “**sellers become price taker instead of price maker**” firm. 1  
Identify the above form of market.
- a. Perfectly competitive market
  - b. Monopoly market
  - c. Monopolistic form of market
  - d. Oligopoly market
21. Utility approach is \_\_\_\_\_ 1  
(Fill in the blank with appropriate option)
- a. Cardinal
  - b. Ordinal
  - c. Both cardinal and ordinal
  - d. None of the above

22. Identify the stage of production from given circumstances according to the law of variable proportion. 1  
“Average production continues to decrease, total production starts decreasing and marginal product become negative”.  
**Alternatives:**  
a. First stage  
b. Second stage  
c. Third stage  
d. None of the above
23. 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.
24. Read the following statements carefully. 1  
**Statement 1: The society faces a number of difficulties in the production of commodities.**  
**Statement 2: The whole societies sacrifices for the production process.**  
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

25. Look at the image given below and identify the correct statement based upon the same.

1

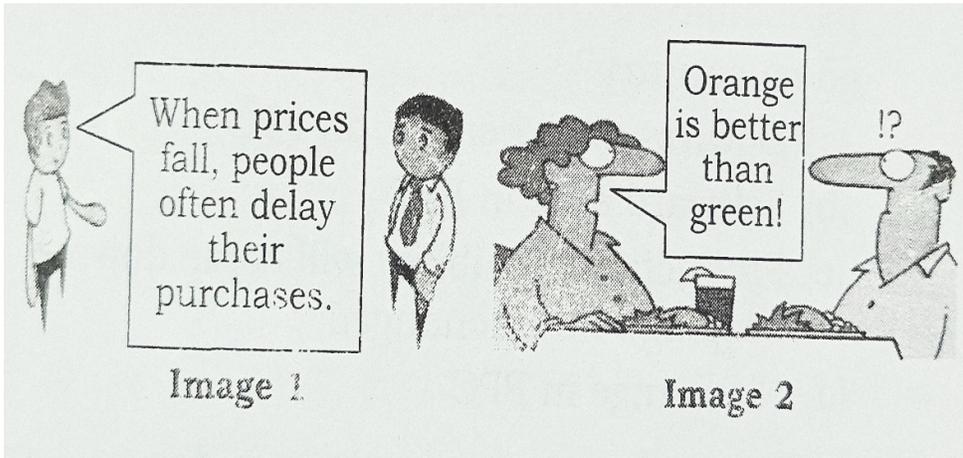


25 utils of satisfaction from eating a bowl of ice cream while someone else would only get 5 utils of satisfaction.

- a. Utility is subjective in nature
- b. Utility is depending on urgency of wants
- c. Utility is cardinally measured.
- d. Both (a) and (b)

26.

1



Identify the positive economics out of the two images given above:

Alternatives

- a. Image 1
- b. Image 2
- c. Both image 1 and 2
- d. Neither image 1 nor image 2

27. Read the following statements carefully. 1  
**Statement 1: Greater slope of supply curve leads to higher elasticity of supply.**  
**Statement 2: Law of supply does not give any information regarding the magnitude of change in supply.**  
 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

28. Draw a single diagram of the average revenue and marginal revenue curves of a firm which can sell any quantity of the good at a given price. Explain. 3

29. What are the characteristics of a perfectly competitive market? 3

**OR**

Explain the implications of ‘**perfect knowledge**’ about market under perfect competition.

30. The quantity demanded of a good at a price of rupees 8 per unit is 600 units. Its price falls by 25% and the quantity demanded rises by 120 units. Calculate the price elasticity of demand. Is its demand elastic? Give reasons for your answer. 4

31. Complete the following table: 4

| Price(in Rs.) | Output(units) | TR(in Rs.) | MR(Rs.) |
|---------------|---------------|------------|---------|
| ----          | 1             | 6          | ----    |
| 4             | ----          | ----       | 2       |
| ----          | 3             | 6          | ----    |
| 1             | ----          | ----       | (-)2    |

**OR**

Giving reasons, state whether the following statements are true or false.

- i. Average product will increase only when marginal product increases
- ii. With increase in level of output, average fixed cost goes on falling till it reaches 0.

- iii. Under diminishing returns to a factor, total product continues to increase still marginal product reaches zero.
- iv. When there are diminishing returns to a factor, total product always increases.

**32.** Using a diagram explain what happens to the production possibility curve of Kashmir if the widespread of floods have led to the destruction of human lives. **4**

**33.A.** Central problems arise because resources are scarce and have alternate uses and wants are unlimited. Explain. **3**

**B.** Describe the problem of “**What to Produce**”. **3**

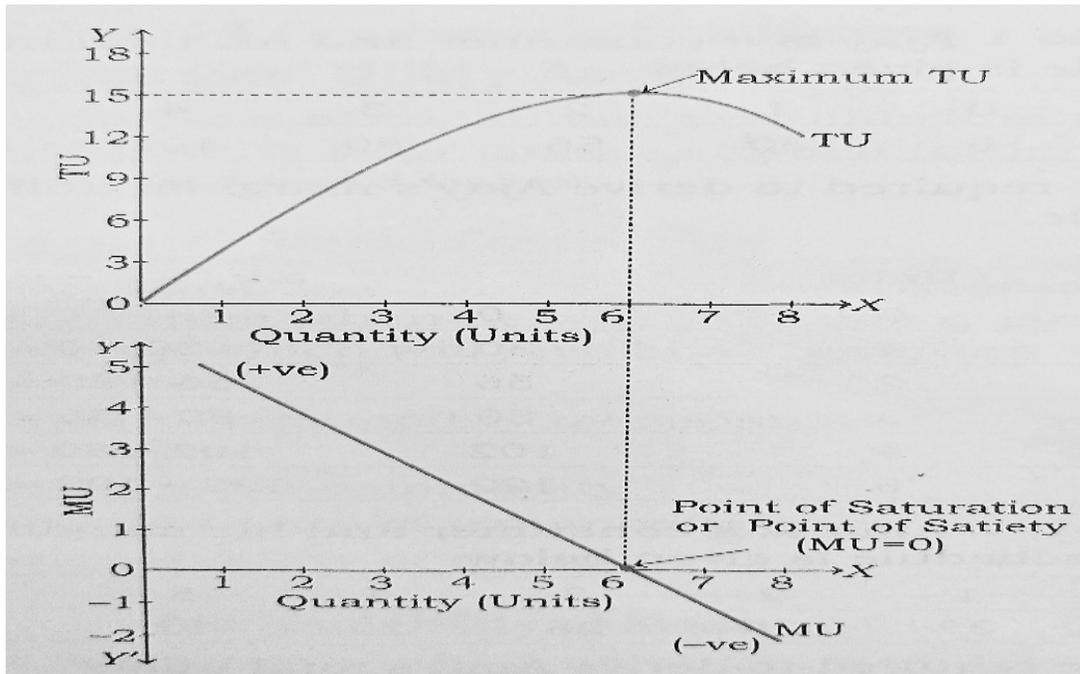
**OR**

**A.** Define price floor. What is the common purpose of fixation of floor price by the government? Explain anyone likely consequence of this nature of intervention by the government. **3**

**B.** Define price ceiling. What is the common purpose for the price ceiling imposed by the government? Explain anyone likely consequence of this nature of intervention by the government in the price determination process. **3**

Read the following hypothetical text and answer the given questions:

| <b>Quantity (Q)</b> | <b>Total Utility (TU)</b> | <b>Marginal Utility(MU)</b> |
|---------------------|---------------------------|-----------------------------|
| 0                   | 0                         | --                          |
| 1                   | 5                         | 5                           |
| 2                   | 9                         | 4                           |
| 3                   | 12                        | 3                           |
| 4                   | 14                        | 2                           |
| 5                   | 15                        | 1                           |
| 6                   | 15                        | 0                           |
| 7                   | 14                        | -1                          |
| 8                   | 12                        | -2                          |



From the given schedule and curve, we observe that by consuming successive units of a particular commodity, the TU initially increases at a decreasing rate, reaches its maximum and eventually falls. Relationship between total utility and marginal utility can be understood from the following points.

- When MU is diminishing but remains positive (+ve), i.e., till 5<sup>th</sup> unit, TU tends to increase at a diminishing rate.
- When MU becomes zero, i.e., at 6<sup>th</sup> unit, TU reaches at its maximum point. This point is known as point of saturation or point of satiety.
- When MU becomes negative (-ve), i.e., from 7<sup>th</sup> unit onwards, TU starts to fall.
- The above relationship between TU and MU is due to the operation of Law of diminishing marginal utility.

A) Based on the above paragraph state the assumptions of law of DMU. 2

B) Explain the conditions of consumer's equilibrium under utility analysis. 4

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE :A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION : [2023-2024]**  
**GEOGRAPHY**  
**CLASS: XI**

**Time : 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 to 21 are Short answer type questions carrying 3 marks each.
  5. Section C- Question number 22 and 23 are Source based type questions carrying 3 marks each.
  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 **Choose the correct option by matching column I and column II.** 1

**COLUMN I** **COLUMN II**

- |                          |                        |
|--------------------------|------------------------|
| I. Climatology           | i. Regional Analysis   |
| II. Historical Geography | ii. Biogeography       |
| III. Plant Geography     | iii. Human Geography   |
| IV. Geographical Thought | iv. Physical Geography |

**OPTION**

- a. I- iv, II- ii, III- i, IV- iii
- b. IV- ii, III- i, II- iii, I- iv
- c. II- iii, I- iv, IV- i, III- ii
- d. III- iv, II- i, I- ii, IV- iii

- 2 Which type of volcanic eruption have caused Deccan Trap formation? 1
- Shield
  - Flood
  - Composite
  - Caldera
- 3 Which one of the following is not a soil forming factor? 1
- Parent material
  - Topography
  - Time
  - Volcanic eruption
- 4 **Consider the following statements and choose the correct answer with the help of given options.** 1
- Statement I:** Landforms once formed may change in their shape and size.
- Statement II:** It is due to continued action of geomorphic processes and agents.
- OPTIONS:**
- Only statement I is correct.
  - Only statement II is correct.
  - Both the statements are correct and statement II correctly explains statement I.
  - Both the statements are true but not related with each other
- 5 The atmospheric pressure is expressed in units of 1
- Nautical Miles
  - Millibar
  - Miles
  - Kilometre
- 6 If the water vapour condenses directly into solid form it is known as 1
- Sublimation
  - Condensation
  - Vaporisation
  - Precipitation
- 7 Choose the correct option from the following: 1
- When the moon's orbit is closest to the earth is known as apogee.
  - When the moon's orbit is farthest from the earth is known as perigee.
  - The earth is farthest from the sun around 4<sup>th</sup> July.
  - The earth is closest to the sun around 1<sup>st</sup> January

- 8 Tropical grasslands are also known as 1
- a. The Prairies
  - b. The Savannas
  - c. The Steppes
  - d. The Pampas

- 9 **There are two statements marked as Assertion(A) and Reason(R). Mark your answer as per the codes provided below.** 1

**ASSERTION(A):**82° 30' E has been selected as the 'standard meridian' of India.

**REASON(R):**Our southern boundary extends upto 6° 45' N

**OPTIONS**

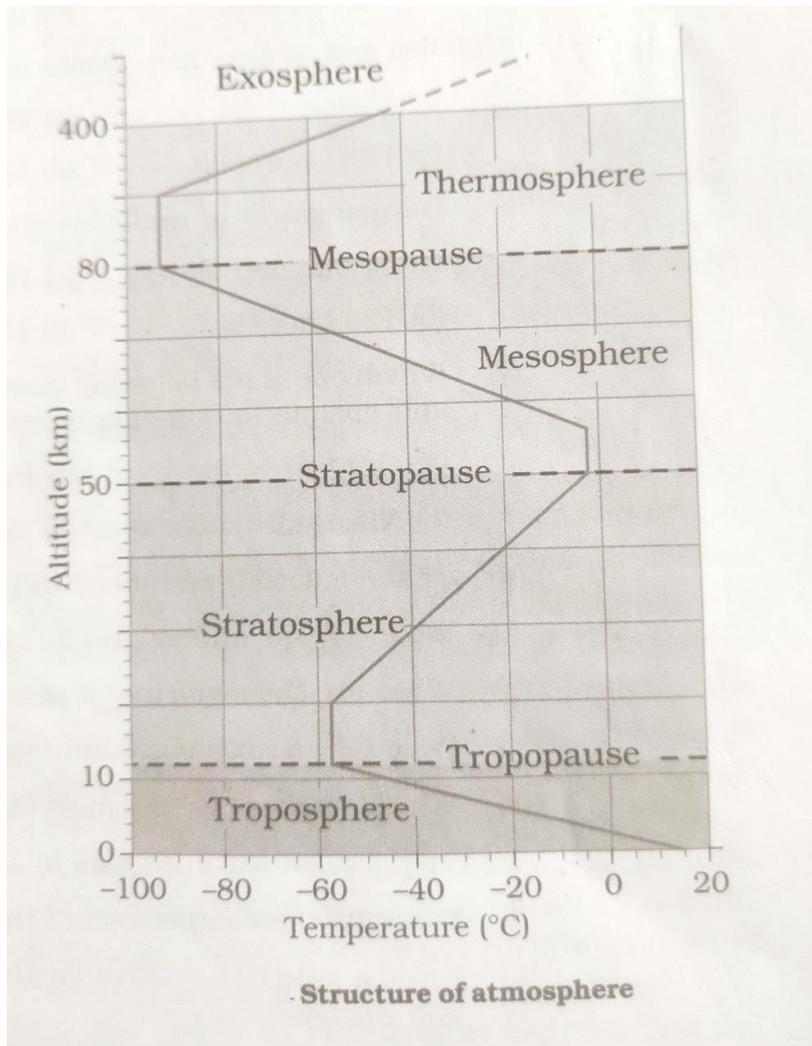
- a) Both (A) and (R) are true but (R) is not the correct explanation of (A)
  - b) Both (A) and (R) are true and (R) is the correct explanation of (A)
  - c) (A) is incorrect but (R) is correct
  - d) (A) is correct but (R) is incorrect
- 10 Which one of the following countries is larger in area than India? 1
- a. China
  - b. Egypt
  - c. France
  - d. Iran
- 11 Thick deposits of glacial clay and other materials embedded with moraines are known as 1
- a. Molassis basin
  - b. Khadar
  - c. Bhangra
  - d. Karewas
- 12 Which of the following option is incorrect? 1
- a. River Kosi is known as sorrow of Bengal.
  - b. Ravi is an important tributary of the Indus.
  - c. Luni is the largest river system of Rajasthan.
  - d. Yamuna is the longest tributary of the Ganga
- 13 Which one of the following rivers is not included in 'Panchnad'? 1
- a. The Ravi
  - b. The Chenab
  - c. The Brahmaputra
  - d. The Jhelum

14 In which state is the Nanda Devi reserve situated?

1

- a. Bihar
- b. Uttar Pradesh
- c. Uttarakhand
- d. Odisha

**Read the following graph and answer question no 15 to 17.**



15 Which of the following contains the ozone layer?

1

- a. Stratosphere
- b. Troposphere
- c. Exosphere
- d. Thermosphere

- 16 The mesosphere extends up to a height of 1  
a. 50 km  
b. 100 km  
c. 80 km  
d. 13 km
- 17 The rate at which temperature decreases in troposphere is 1  
a. 2° C for every 165m of height.  
b. 1° C for every 165m of height.  
c. 1° C for every 100m of height.  
d. 1° C for every 150m of height.

### **SECTION-B**

**Question numbers 18 to 21 are Short Answer type questions.**

- 18 What are the different types of plate boundaries? Explain 3  
**OR**  
Explain the different soil forming factors.
- 19 What are the different ways of heating and cooling of the atmosphere? 3
- 20 How is the latitudinal spread of India advantageous to her? 3
- 21 How monsoon affects the economic life in India? 3

**OR**

Mention the different reasons for the excessive cold in north India during the cold weather season.

### **SECTION-C**

**Question 22&23 are Source based questions.**

- 22 **Read the given Passage carefully and answer the questions that follow:**  
The process of continuous condensation in free air helps the condensed particles to grow in size. When the resistance of the air fails to hold them against the force of gravity, they fall on to the earth's surface. So after the condensation of water vapour, the release of moisture is known as precipitation. This may take place in liquid or solid form. The precipitation in the form of water is called rainfall, when the temperature is lower than the 0° C, precipitation takes place in the form of fine flakes of snow and is called snowfall. Moisture is released in the form of hexagonal crystals. These crystals form flakes of snow. Besides rain and snow, other forms of precipitation are sleet and hail, though the latter are limited in occurrence and are sporadic in both time and space.

- i. **What do you mean by precipitation?** 1
- ii. **Mention different forms of precipitation.** 1
- iii. **In which type of rainfall the saturated air mass comes across a mountain, it is forced to ascend and as it rises it expands, the temperature falls and moisture is condensed?** 1

23 **Read the given Passage carefully and answer the questions that follow:**

Forests have an intricate interrelationship with life and environment. These provide numerous direct and indirect advantages to our economy and society. Hence, conservation of forest is of vital importance to the survival and prosperity of humankind. Accordingly, the Government of India proposed to have a nation-wide forest conservation policy, and adopted a forest policy in 1952, which was further modified in 1988. According to the new forest policy, the Government will emphasise sustainable forest management in order to conserve and expand forest reserve on the one hand, and to meet the needs of local people on the other.

- i. **Why conservation of forest is essential?** 1
- ii. **In which year forest policy was adopted?** 1
- iii. **Mention any one aim of the forest policy.** 1

### SECTION-D

**Question numbers 24 to 28 are Long Answer Type questions.**

- 24 Write an explanatory note on the 'Big Bang Theory'. 5
- 25 What is an ecological balance? Discuss the important measures needed to prevent ecological imbalances. 5
- 26 Explain the island groups of the Arabian Sea and the Bay of Bengal. 5
- 27 Mention the different characteristic features of the Indus system. 5
- 28 What are the factors that determine the climate of India? Explain. 5

## 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. Cold current
- B. Warm current
- C. Warm current
- D. Cold current
- E. Warm current
- F. Warm current
- G. Cold current

30 **Locate and label any five of the following geographical features on the political outline map of India with appropriate symbols.** 5

- i. Anaimudi
- ii. Garo-Khasi-Jaintia hills
- iii. Narmada river
- iv. Palk Strait
- v. An area with lowest rainfall
- vi. Corbett National Park
- vii. Rajaji Wild life Sanctuary

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
CODE:A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**ANNUAL EXAMINATION: [2023-2024]**  
**INFORMATION TECHNOLOGY**  
**CLASS – XI**

**Time: 3 Hrs.**

**Maximum Marks: 60**

**General Instructions:**

1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (6+15=) 21 questions, a candidate has to answer (6+11=) 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 15 questions.
  - ii.* A candidate has to do 11 questions.
  - iii.* Do as per the instructions given.
  - iv.* Marks allotted are mentioned against each question/part.

**SECTION-A**  
**OBJECTIVE TYPE QUESTIONS**

**Answer any 4 out of the given 5 questions on**

**Employability Skills (1 x 4 = 4 marks)**

- i. Expand NAPCC. 1
- ii. Business is a (an) \_\_\_\_ activity. 1
  - a. social
  - b. economic
  - c. hazardous
  - d. none
- iii. Click \_\_\_\_ option to accept all the changes in OpenOffice Writer. 1
- iv. \_\_\_\_ is a trust or faith that a person holds to be true. 1
- v. State TRUE or FALSE: 1  
“The assertive communication is thought to be the most effective among all the communication styles.”

**Answer any 5 out of the given 6 questions**  
**(1 x 5 = 5 marks)**

- i. What are Parent or Container controls? 1
- ii. The vertical subset of a table in a database is known as a \_\_\_\_\_. 1
  - a. attribute
  - b. tuple
  - c. Domain
  - d. none
- iii. The manufacturer assigns a unique physical address to each NIC card. This physical address is known as the \_\_\_\_ address. 1
- iv. \_\_\_\_ is a register in a computer or calculator used for holding the results of a computation or data transfer. 1
- v. \_\_\_\_ function is used to calculate the square root of a number n. 1
- vi. State TRUE or FALSE: 1  
“Bandwidth can be described as the difference between highest and lowest frequency.”

**Answer any 6 out of the given 7 questions**  
**(1 x 6 = 6 marks)**

- i. What is an IDE? 1
- ii. Define Foreign Key. 1
- iii. DNS stands for \_\_\_\_\_. 1
  - a. Directory Name System
  - b. Domain Name System
  - c. Domain Name Server
  - d. none
- iv. The latest version of Mac OS is \_\_\_\_\_. 1
- v. In OpenOfficeCalc, a worksheet contains \_\_\_\_ columns. 1
- vi. Data sent via connectionless methods are called \_\_\_\_\_. 1
- vii. State TRUE or FALSE: 1  
“Heuristics means learning and improving from previous or past experience”

4.

**Answer any 5 out of the given 6 questions**  
**(1 x 5 = 5 marks)**

- i. What is the function of an Assignment operator? 1  
Give an example to support your answer?
- ii. Which of the following are not popular DBMS? 1  
a. DRider      b. Syllabus      c. Both (a) & (b)      d. none
- iii. Each device in the network has a numeric address that is known as \_\_\_\_\_. 1
- iv. The full form of BOSS is \_\_\_\_\_. 1
- v. In OpenOfficeCalc, the SORT command is available in the \_\_\_\_\_ menu. 1
- vi. State TRUE or FALSE: 1  
“Worms infect the entire network of devices by replicating itself.”

5.

**Answer any 5 out of the given 6 questions**  
**(1 x 5 = 5 marks)**

- i. What do you understand by ‘Inheritance’? 1
- ii. To create a table in MySQL \_\_\_\_\_ statement is used. 1  
a. CR TB      b. CR TABLE  
c. CREATE TABLE      d. none
- iii. \_\_\_\_\_ viruses are memory-resident viruses. 1
- iv. PMT stands for \_\_\_\_\_. 1
- v. \_\_\_\_\_ displays information about the current open document. It displays the current page number, total pages in the document, etc. 1
- vi. State TRUE or FALSE: 1  
“Firewall inspects all incoming and outgoing traffic using a set of rules to identify and blocks threats.”

6.

**Answer any 5 out of the given 6 questions**  
**(1 x 5 = 5 marks)**

- i. What is the use of System.exit( ) method? 1
- ii. A candidate key of a table which is not selected as the primary key is called its \_\_\_\_\_ Key. 1  
a. foreign      b. alternate      c. Both (a) & (b)      d. none
- iii. A bi-directional ring topology can transfer and receive data at the same time and it is 1

- called as \_\_\_\_ network.
- iv. A \_\_\_\_ is a large printer-like device that is used to print large maps and architectural designs. 1
- v. In OpenOffice Impress, \_\_\_\_ view presents slides in a miniature form. 1
- vi. State TRUE or FALSE: 1  
“Your browser stores each message in a small file, called **cookie.txt**”

### **SECTION-B:SUBJECTIVETYPEQUESTIONS**

**Answer any 3 out of the given 4 questions on**

**Employability Skills (2 x 3 = 6 marks)**

7. In context to Green Economy, why forests are important? 2  
What are the effects of deforestation or loss of forests?  
(Give any two effects)
8. What do you understand by Trading business? Give an example. 2
9. What do you understand by: 2  
i. Uppercase  
ii. Capitalize Every Word
10. What do you understand by Self Motivation? Mention its types. 2

**Answerany3outofthegiven 4questions(2x3=6marks)**

11. How many types of containers can a Java GUI application contain? 2
12. Identify the DML commands from the following list: 2
- CREATE DATABASE
  - SELECT
  - CREATE TABLE
  - UPDATE
  - ALTER TABLE
  - DROP TABLE
  - DELETE
  - INSERT INTO

13. Name the various components of communication. 2
14. What is the function of the 'Save As' option in OpenOffice Writer? 2

**Answer any 2 out of the given 3 questions (3x2=6 marks)**

15. Give three differences between RAM and ROM. 3
16. What are the three kinds of control structures in Java programming? Also, give examples for each kind. 3
17. Write down the functions of the following: 3
- LIKE keyword
  - IN operator
  - UPDATE command

**Answer any 3 out of the given 4 questions (4x3=12 marks)**

18. Design a form in Java NetBeans to check whether a number is divisible by 5. Also, write the program code for the 'Check' button. 4
19. Write the MySQL command to create a table "SPORTS" with the following specifications: 4

| Fieldname     | Datatype    | Constraint  |
|---------------|-------------|-------------|
| Sport_id      | Int         | Primary key |
| Sport_name    | Varchar(25) |             |
| No_of_players | Int         | Not NULL    |
| Sports_fees   | Float(9,2)  |             |
| Date_of_Event | Date        |             |

20. Write the SQL statements for the table "Players" given below: 4

| No   | Name     | Training_fee | Gender | Game_name   | Date_of_join |
|------|----------|--------------|--------|-------------|--------------|
| 1012 | Amandeep | 30000        | M      | Cricket     | 2012-01-02   |
| 1102 | Anisha   | 25000        | F      | Badminton   | 2009-03-24   |
| 1103 | Isha     | 31000        | F      | Golf        | 2011-11-04   |
| 1049 | Arun     | 40000        | M      | Basket ball | 2009-05-06   |
| 1025 | Amber    | 30000        | M      | Volley ball | NULL         |
| 1106 | Inkita   | 40000        | F      | Golf        | 2010-11-12   |
| 1017 | Nikita   | 35000        | F      | Badminton   | 2012-12-04   |
| 1108 | Arleena  | 30000        | F      | Cricket     | 2009-02-10   |
| 1101 | Sameer   | 25000        | M      | Golf        | 2011-03-23   |

- (i) Display the unique game name in the descending order of game name.

- (ii) Change the monthly fees of Sameer to 50000 (permanently).
- (iii) Delete player details who will pay monthly fee of Rs. 35000.
- (iv) Delete those records where game name starts with “G” and gender is “M”.

21.

What do you understand by **Guided** and **Unguided** Media.  
Give atleast two examples for each to support your answer.

4

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**BURNPUR RIVERSIDE SCHOOL**  
**ANNUAL EXAMINATION-2023-24**  
**GENERAL STUDIES**  
**Class – XI**

**Time: 1 hour**

**Maximum Marks: 50**

**Answer the following questions by choosing the correct options from the alternatives given below. Questions 1-30 carry 1 mark each and questions 31-40 carry 2 marks each.**

1. Who is known as the "Father of Computer Science"? 1
  1. Albert Einstein
  2. Marie Curie
  3. Isaac Newton
  4. Alan Turing
  
2. What is the capital city of Japan?
  1. Paris
  2. Tokyo
  3. Cairo
  4. Brasilia
  
3. Who wrote the play "Romeo and Juliet"? 1
  1. Anton Chekhov
  2. Henrik Ibsen
  3. Tennessee Williams
  4. William Shakespeare

4. In which year did World War I begin? 1
1. 1914–1918
  2. 1936–1939
  3. 1939–1945
  4. 1950–1953
5. What is the largest planet in our solar system? 1
1. Mercury
  2. Venus
  3. Earth
  4. Jupiter
6. Who is the author of the novel "To Kill a Mockingbird"? 1
1. J,K Rowling
  2. George Orwell
  3. Harper Lee
  4. Jane Austen
7. Which gas is most abundant in Earth's atmosphere?
1. Oxygen
  2. Hydrogen
  3. Carbon Dioxide
  4. Nitrogen
8. What is the chemical symbol for gold?
1. Au
  2. Ag
  3. Cu
  4. Mg

9. Who painted the Mona Lisa?
1. Leonardo Da Vinci
  2. Vincent Van Gogh
  3. Pablo Picasso
  4. Claude Monet
10. What is the capital city of Australia? 1
1. Brasília
  2. Canberra
  3. Moscow
  4. Pretoria
11. Which element has the chemical symbol "O"? 1
1. Helium
  2. Carbon
  3. Oxygen
  4. Gold
12. Who is the current President of the United States? 1
1. Joe Biden
  2. Frank-Walter Steinmeier
  3. Emmanuel Macron
  4. Ram Nath Kovind
13. What is the currency of China? 1
1. Dollar (USD)
  2. Yen (JPY)
  3. Pound Sterling (GBP)
  4. Renminbi (Yuan)

14. What is the main ingredient in guacamole? 1
1. Avocado
  2. Tomatoes
  3. Onions
  4. Lime Juice
15. Who wrote "The Great Gatsby"?
1. Jane Austen
  2. Gabriel Garcia Marquez
  3. Agatha Christie
  4. F. Scott Fitzgerald
16. What is the capital of Brazil? 1
1. Paris
  2. Tokyo
  3. Brasilia
  4. Pretoria
17. Which planet is known as the "Red Planet"? 1
1. Mercury
  2. Venus
  3. Earth
  4. Mars
18. Who developed the theory of relativity? 1
1. Albert Einstein
  2. Marie Curie
  3. Charles Darwin
  4. Jane Goodall

19. What is the longest river in the world? 1
1. Nile River
  2. Amazon River
  3. Ganges River
  4. Mississippi River
20. In which year did India gain independence from British rule? 1
1. 1956
  2. 1948
  3. 1947
  4. 1957
21. Which is the largest mammal in the world? 1
1. Elephant
  2. Dolphin.
  3. Kangaroo.
  4. Blue Whale
22. Who wrote "Pride and Prejudice"? 1
1. Jane Austen
  2. Virginia Woolf
  3. Toni Morrison
  4. Chimamanda Ngozi Adichie
23. What is the currency of Japan? 1
1. Dollar (USD)
  2. Pound Sterling (GBP)
  3. Yen (JPY)
  4. Dollar (AUD)

24. In which year Titanic sank?
1. 1923
  2. 1945
  3. 1917
  4. 1912
25. What is the capital of South Africa? 1
1. Tokyo
  2. Brasília
  3. Ottawa
  4. Pretoria (Administrative), Bloemfontein (Judicial), Cape Town (Legislative)
26. Who discovered penicillin? 1
1. Alexander Fleming
  2. Paul Farmer
  3. Gerhard Domagk
  4. Jonas Salk
27. What is the currency of Russia? 1
1. Pound Sterling
  2. Yen
  3. Dollar
  4. Ruble
28. Who is the author of "1984"? 1
1. J.K. Rowling
  2. George Orwell
  3. Jane Austen

4. Haruki Murakami

29. What is the speed of light in a vacuum? 1
1. 299,792 km/s
  2. 399,792 km/s
  3. 186,282 km/s
  4. 198,342 km/s
30. Who composed the "Moonlight Sonata"? 1
1. Wolfgang Amadeus Mozart
  2. Ludwig van Beethoven
  3. Johann Sebastian Bach
  4. Pyotr Ilyich Tchaikovsky
31. Which year BRS came into being? 2
1. 1975
  2. 1976
  3. 1977
  4. 1978
32. How many rooms were there in BRS initially? 2
1. 7 rooms
  2. 8 rooms
  3. 9 rooms
  4. 5 rooms
33. What is the total student strength of BRS? 2
1. 2860
  2. 2000
  3. 1900

4. 1500

34. What is the minimum percentage of attendance compulsory? 2
1. 80%
  2. 85%
  3. 92%
  4. 75%
35. When is a student warned with a WHITE CARD? 2
1. First warning
  2. Second warning
  3. Third warning
  4. None of the above
36. Why does a student get the RED CARD? 2
1. For being late
  2. Not coming in proper school dress
  3. Carelessness
  4. For serious offences
37. What are the consequences if a student gets three Red Cards? 2
1. Heavy fine will be imposed on the student.
  2. Negative points will be given to the student.
  3. May lead to expulsion of the offender
  4. All the above
38. Students of which classes get the Scholar Badge? 2
1. IX and X
  2. X and XI
  3. VI to IX and X

4. VI to IX and XI

39. Who gets the Green Blazer and Tie? 2

1. The best student

2. The best athlete

3. Student who gets a Scholar Badge

4. Student who gets a Scholar Badge for three consecutive years

40. The four houses are named after \_\_\_\_\_ 2

1. 4 major rivers

2. 4 movies

3. 4 villages

4. d. None of the above