Name: _____ Sec: ____ Roll No.: ____

CODE : A

BURNPUR RIVERSIDE SCHOOL, BURNPUR

PERIODIC TEST - 3 : (2023-2024)

ENGLISH CORE

CLASS : XI

Time: 1 ½ Hrs. **Maximum Marks : 40**

==========

GENERAL INSTRUCTIONS:

1. *The question paper contains questions from LITERATURE, GRAMMAR and WRITING sections.*

2. *Attempt questions based on specific instructions for each part.*

==========

1. Read the conversation given below and complete the paragraph that follows: **1x3**

Customer: Why is the meal so sour?
Waiter : Nobody complained for five days about the meal.
Customer: What! Where is the Manager?
Waiter : He has gone to some other hotel to take dinner.

One day a customer was taking dinner in a hotel. He asked the waiter why (a) …….. The waiter told him (b) …….. At this, the customer was shocked and wanted to know where the Manager was. The waiter replied (c) …….

2. Rearrange the words and phrases to form meaningful sentences **1x3**

i. is one of the / to the / the art of writing / development / of civilization / contributions / most important

ii. to record / and deeds / his thoughts / it / enables man

iii. writing tools / before a real / a great many / pen / however, there were / was first made

3. A. Read the poem extract given below and answer the questions that follow. **1x3**

Silence surrounds us. I would have
Him prodigal, returning to
His father's house, the home he knew,
Rather than see him make and move
His world. I would forgive him too,
Shaping from sorrow a new love

i. The literary device used in the first and last line of the extract is:

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

ii. What does the father want from his son?

a. to talk to him
b. to forgive him
c. to come back home
d. to leave his ego

iii. Name the poet.

3. B. Read the prose extract given below and answer the questions that follow. **1x4**

One evening I'd told her through Daniel that I was heading towards Mount Kailash to complete the kora, and she'd said that I ought to get some warmer clothes.

i. Who is the speaker and to whom is he/she speaking?

ii. What is kora?

iii. What was the farewell gift?

a. Warm jacket
b. A windcheater
c. Leather coat
d. Long-sleeved coat

iv. Who is the author of 'Silk Road'?

a. Jayant Narlikar
b. Nick Middleton
c. Nani Palkhivala
d. Khushwant Singh

4. Answer the following questions in 40-50 words each. (<u>Attempt any 3</u>) 3x3

i. "This was a blow, not totally unexpected."

What was the blow and how was it not totally unexpected?

(*The Adventure*)

ii. The narrator was fascinated by the mastiffs. Why?

(*Silk Road*)

iii. Who pointed out that the mummy was in a bad condition? Who was held responsible for it?

(*Discovering Tut: The Saga Continues*)

iv. Why did Dr. Andrew say, "Don't fret mother, I will not run away"?

(*Birth*)

5. Answer the following questions in 120-150 words each. 5x2
(<u>Attempt any 2</u>)

i. What method did Professor Gaitonde adopt to find the information he wanted in the library of the Asiatic Society? Did he find the required information? What did he decide to do?

(*The Adventure*)

ii. Describe King Tut and his family.

(*Discovering Tut: The Saga Continues*)

iii. "I have done something; Oh, God! I've done something real at last."

Why does Andrew say this?

(*Birth*)

6. Bosco Public School is looking for a receptionist for the school. Write an advertisement on behalf of the Administrative Officer in the classified columns of a local newspaper, giving necessary details. **3**

7. 'Social Media draws us together.' Write a debate in 120-150 words, either for or against the motion. **5**

==========

Name: _____ Sec: ____ Roll No.: ____

CODE :B

BURNPUR RIVERSIDE SCHOOL, BURNPUR

PERIODIC TEST – 3 : (2023-24)

ENGLISH

CLASS – XI

Time: $1^{1/2}$ Hours **Maximum Marks : 40**

==========

GENERAL INSTRUCTIONS:

1. *The Question Paper contains questions from GRAMMAR, LITERATURE and WRITING sections.*
2. *Attempt questions based on specific instructions for each part.*

==========

1. **Read the instructions given below and complete the paragraph that follows** 1x 3

- *Do not bring motorcycles to school.* 1x 3
- *Do not park your cycles in front of the entrance.*
- *Senior students should not go to the Primary wing without permission.*

Dear Parents,

Students are hereby informed that (a) _____ as they do not have valid licenses. They are also (b) _____ in front of the entrance, but must go to the cycle stand. Senior (c) _____ without permission.

Thanks & regards

The Principal

2. **Rearrange the following words and phrases to form meaningful sentences:** 1x 3

(a) why / you / don't / bothering / instead / of / me? / play / go / and

(b) holidays / their / children / this / the / is / refrain / hear / during

(c) one / since / in / Summer / worse / are / things / play / cannot / sun / in / the

3. **Read the extracts given below and answerthe questionsthat follow:** 1x 3

(A) *Silence surrounds us. I would have*
Him prodigal, returning to
His father's house, the home he knew,
Rather than see him make and move
His world

(a) The word '*silence*' signifies -

a) Silent surroundings
b) Miscommunication
c) Lack of any communication
d) Busy in their individual lives

(b) *I would have / Him prodigal.* The figure of speech used is –

a) Simile
b) Allusion
c) Synecdoche
d) Alliteration

(c) Explain: *I would have / Him prodigal.*

(B) *We took a short cut to get off the Changtang. Tsetan* 1x 4

knew aroute that would take us south-west, almost directly towardsMount Kailash. It involved crossing several fairly high mountainpasses, he said. "But no problem, sir", he assured us,…

(a) Who are '***we***'?

a) The author and Changtang
b) The author and Tsetan
c) Lhamo and the narrator
d) The author and Sir

(b) "*"But no problem, sir", he assured us,…*" – The problem was _____.

a) The fairly high mountain passes
b) The presence of snow
c) The *drokbas* and the *Kyang*
d) All of the above

(c) What was the reason for the author to reach to *Mount Kailash*?

(d) *"…he assured us,…*" What was the assurance?

4. **Attempt <u>*ANY 03*</u> of the following questions in 40-50 words each.** 3 x 3

(a) "*I have conveyed my regrets to the organisers of the Panipat seminar*." Why do you think Prof. Gaitonde decided never to preside over meetings again?

(b) How was Norbu a godsend to the narrator?

(c) *He was just a teenager when he died.* Why was King Tut's demise a big event, even by royal standards?

(d) *Usually so perceptive, Andrew now felt dull and listless.* What left Andrew feel without energy?

5. **Attempt *ANY 02* of the following questions in 120-150 words:** 5 x 2

(a) *"... "Professor Gaitonde, I will try to rationalise your experience on the basis of two scientific theories as known today..."*How did Rajendra Deshpande attempt to explain Gangadhar Pant's experience?

(b) *Archaeology has changed substantially in the interveningdecades...*How does the story,***Discovering Tut:The Saga Continues***illustrate the change?

(c) *He hesitated, torn betweenhis desire to attempt to resuscitate the child, and his obligationtowards the mother, who was herself in a desperate state.* How did Dr. Andrew manage to finally overcome the dilemma?

6. Draft a **classified advertisement**, in not more than 50 words, to be published in The Telegraph for the sale of your Wagon R car giving all the necessary details. You can be contacted at 9978665432. 3

7. You are Gourav/Garima, Head Boy / Head Girl of your school. You have been selected to represent your school in an Inter School **Debate** competition on the motion *'Homework serves no good purpose to students and hence must be abolished'* Draft the text of the debate either in favour of or against the motion in 120 – 150 words. 5

==========

Name: _____ Sec: ____ Roll No.: ____

CODE : A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST – 3 : [2023 – 2024]
MATHEMATICS
CLASS - XI

TIME: $1\frac{1}{2}$ Hrs. **Maximum Marks: 40**

==========

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 08 **MCQ's and 03** Assertion – Reason based questions of 1 mark each.*

***3. Section B** has 02 **Short Answer (SA) – type** questions of 2 marks each.*

*4. **Section C** has 04 **Long Answer (LA-I) – type** questions of 3 marks each.*

*5. **Section D** has 01 **Long Answer (LA-II) – type** question of 5marks.*

*3. **Section E** has 02 **Case Based (CBQ) – type** questions of 4 marks each with sub parts.*

==========

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

1. The slope of a line joining the points A(x, 2) and B(6, -8) is $\frac{-5}{4}$then the value of x is: 1
   (a) -1
   (b) -2
   (c) 0
   (d) 1

2. The focus of the parabola $3x^2 = -16y$ is: 1
   (a) (0, 4/3)
   (b) (4/3, 0)
   (c) (0, - 4/3)
   (d) (- 4/3, 0)

3. The octant in which the point (2, 3, -4) lies is: 1
   (a) III
   (b) IV
   (c) V
   (d) VI

4. The 7^{th} term in the expansion of $(\frac{4x}{5} + \frac{5}{2x})^8$ is: 1

(a) $\frac{4375}{x^2}$

(b) $\frac{4375}{x^3}$

(c) $\frac{4375}{x^4}$

(d) $\frac{4375}{x^8}$

5. The coefficient of x^6 in the expansion of $(3x^2 - \frac{1}{3x})^9$ is: 1

(a) 128

(b) 258

(c) 378

(d) 489

6. Which term of the A.P 9, 14,19, 24, 29,……..is 379? 1

(a) 75^{th}

(b) 55^{th}

(c) 65^{th}

(d) 85^{th}

7. The slope of the line that passes through the points (2, 5) and (-4, -4) is: 1

(a) 1/2

(b) 3/2

(c) 5/2

(d) 7/2

8. The centre and radius of the circle $3x^2 + 3y^2 + 6x - 4y - 1 = 0$ are 1

(a) Centre (-1, 2/3), radius = 4/3

(b) Centre (1, 2/3), radius = 4/3

(c) Centre (-2, 2/3), radius = 5/3

(d) Centre (-1, - 2/3), radius = 4/3

ASSERTION – REASON BASED QUESTIONS

9. Assertion (A): The distance between the parallel lines $3x - 4y + 9 = 0$ and $6x - 8y - 15 = 0$ is 33/10 1

Reason (R): distance between parallel lines $ax + by + c_1 = 0$ and $ax + by + c_2 = 0$ is $\frac{c_2 - c_1}{\sqrt{a^2 + b^2}}$

(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.

10. Assertion (A): The radius of the circle $2x^2 + 2y^2 + 3x + 4y + \frac{9}{8} = 0$ is 1. 1

Reason (R): Radius of the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is

$$\sqrt{\left(\frac{1}{2}\text{coefficient of x}\right)^2 + \left(\frac{1}{2}\text{coefficient of y}\right)^2 + \quad - \text{constant term}}$$

(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.

11. Assertion (A): If 2/3, k, 5/8 are in A.P, then the value of k is 31/48. 1

Reason (R): If three numbers a, b and c are in A.P, then 2b = a + c.
(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.

12. Find the equation of a line which is perpendicular to the line $3x + 2y = 8$ and passes through the midpoint of the line joining the points (6, 4) and (4, -2) 2

OR

Find the image of the point P(1, 2) in the line $x – 3y + 4 = 0$.

13. The length of the major axis of an ellipse is 20 units and its foci are 2

$(\pm 5\sqrt{3}, 0)$. Find the equation of the ellipse.

SECTION - C

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

14. Find the equation of the circle concentric with the circle $x^2 + y^2 + 4x + 6y + 11 = 0$ and passing through the point P(5, 4). 3

OR

If two diameters of a circle lie along the lines $x – y = 9$ and $x – 2y = 7$, and the area of the circle is 38.5 sq. cm, find the equation of the circle.

15. Find the equation of the hyperbola whose foci are $(\pm\sqrt{5}, 0)$ and the eccentricity is $\sqrt{\frac{5}{3}}$. 3

16. If the coefficients of 2^{nd}, 3^{rd} and 4^{th} terms in the expansion of $(1 + x)^{2n}$ are in A.P, show that $2n^2 – 9n + 7 = 0$. 3

17. The 2^{nd} and 5^{th} terms of a G.P are -1/2 and 1/16 respectively. Find the sum of the G.P up to 8 terms. 3

SECTION - D

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

18. Find the equation of the circle circumscribing the triangle formed by the lines $x + y = 6$, $2x + y = 4$ and $x + 2y = 5$. 5

OR

Find the equation of the circle passing through the points (1, 2), (3, -4) and (5, -6).

SECTION - E

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

19. If A and B are two persons sitting at the positions (2, -3) and (6, -5). If C is a third person who is sitting between A and B such that it divides the line AB in 1:3 ratio.

Based on the above information, answer the following questions:

(a) What is the distance between A and B? 1
(b) What are the coordinates of the point C? 1
(c) What is the equation of AB? 2

20. There are 30 trees at equal distances of 5 meters in a line with a well, the distance of the well from the nearest tree being 10 meters. A gardener waters all the trees separately starting from the well and he returns to the well after watering each tree to get water for the next tree.

Based on the above information, answer the following questions:

(a) What is the total distance covered by the gardener in order to water all the trees? 2
(b) What is the distance covered by the gardener in order to water the 30^{th} tree? 2

==========

Name: _____ Sec: ____ Roll No.: ____

CODE : B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST – 3 : [2023 – 2024]
MATHEMATICS
CLASS - XI

TIME: $1\frac{1}{2}$ Hrs. **Maximum Marks: 40**

==========

General Instructions:

This question paper contains five sections A, B, C, D and E. Each section is compulsory.

Section–A:

It comprises of 11 MCQs of 1 mark each.

Section –B:

It comprises of 2 SA type questions of 2 marks each.

Section–C:

It comprises of 4 SA type of questions of 3 marks each.

Section –D:

It comprises of 1 LA type of questions of 5 marks each.

Section–E:

It has 2 Case-Based type question of 4 marks each.

Internal choice is provided in 1 question in Section - B, 1 question in Section – C and1 question in Section-D. You have to attempt only one of the alternatives in all such questions.

==========

SECTION –A

1. The inclination of the line $\sqrt{3}x + 3y = 5$ with x-axis is 1

   a) 180° b) 60° c) 30° d) 150°

2. The equation of parabola with focus F(4,0) and equation of directrix x = -4 is 1

   a) $y^2 = 16x$ b)$x^2 = 16y$ c)$y^2 = 4x$ d)$x^2 = 4y$

3. In which octant does the point (-4, -1, -6) lie? 1

   a) V b) VI c) VII d) VIII

4. The number of terms in the expansion of $(2x + 3y)^{17}$ is 1

a) 16 b) 17 c) 18 d) 34

5. The term independent of x in the expansion of $(x + \frac{1}{x})^{10}$ is 1

a) 210 b) 252 c) 504 d) 756

6. If the sum of n terms of an AP is given by $S_n = 2n^2 + 3n$, then its common difference is 1

a) 4 b) 6 c) 7 d) 10

7. Distance between parallel lines $3x - 4y = 8$ and $6x - 8y + 5 = 0$ is 1

a) $\frac{1}{10}$ b) $\frac{2}{10}$ c) $\frac{21}{10}$ d) $\frac{16}{10}$

8. The centre of the circle $x^2 + y^2 - 6x + 8y + 1 = 0$ is 1

a) (-3, 4) b) (3,-4) c) (4,-3) d) (-4, 3)

Each question consists of two statements, namely, Assertion (A) and Reason (R). for selecting the correct answer, use the following code:

I. Both assertion (A) and Reason(R) are true and Reason (R) is a correct explanation of Assertion (A).

II. Both assertion (A) and Reason(R) are true but Reason (R) is not a correct explanation of Assertion (A).

III. Assertion (A) is true and Reason(R) is false.

IV. Assertion (A) is false and Reason (R) is false.

9. **Assertion**: The equation of a line making intercepts a and b on x-axis and y-axis respectively is $\frac{x}{a} + \frac{y}{b} = 1$ 1

Reason: The slope of the line $ax + by + c = 0$ is $\frac{b}{a}$.

a) I b) II c) III d) IV

10. **Assertion**: Centre and radius of the circle $x^2 + y^2 - 6x + 4y - 36 = 0$ is (3,-2) and 7 respectively. 1

Reason: Centre and radius of the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is (-g,-f) and $\sqrt{g^2 + f^2 - c}$ respectively.

a) I b) II c) III d) IV

11. **Assertion** : The arithmetic mean between two numbers is 34 and their geometric mean is 16. The numbers are 4 and 64. 1

Reason: For two numbers a and b, A.M = $\frac{a+b}{2}$ and G.M = $\sqrt{ab}$.

a) I b) II c) III d) IV

SECTION- B

12. Show that the lines $27x- 18y+ 25= 0$ and $2x + 3y+ 7=0$ are perpendicular to each other. 2

OR

Find the equation of the line whose y-intercept is -3 and which is perpendicular to the line $3x- 2y+ 5=0$

13. Find the equation of an ellipse whose foci are $(\pm 4 , 0)$ and the eccentricity is $\frac{1}{3}$ 2

SECTION- C

14. Find the equation of a circle of radius 5 units, whose centre lies on the x-axis and which passes through the point (2,3). 3

OR

The sides of a rectangle are given by the equations $x = -2$, $x = 4$, $y = -2$ and $y = 5$. Find the equation of the circle drawn on the diagonal of this rectangle as its diameter.

15. Find the equation of the hyperbola whose foci are at $(0, \pm\sqrt{10})$ and which passes through the point (2,3) 3

16. Show that the ratio of the coefficient of x^{10} in the expansion of $(1-x^2)^{10}$ and the term independent of x in the expansion of $(x - \frac{2}{x})^{10}$ is 1:32 3

17. The sum of three numbers in GP is 21 and the sum of their squares is 189. Find the numbers. 3

SECTION- D

18. Find the equation of a circle concentric with the circle $2x^2 + 2y^2 – 6x + 8y + 1 = 0$ and double of its area. 5

OR

Find the equation of the circle passing through the vertices of a triangle whose sides are represented by the equations $x + y = 2$, $3x – 4y = 6$ and $x - y = 0$

SECTION-E

19. A man is standing at the junction (crossing) of two straight paths represented by the equations $x - y- 4=0$ and $2x+ y -5=0$ wants to reach the path whose equation is $12x + 5y – 18= 0$ in the least time, then

i) Find the coordinates of the point where man is standing. 1

ii) Find the distance , man has to cover to reach his destination in least time. 2

iii) Find the slope of the path, he should follow to reach his destination 1

20. On the first day of new year i.e. on 1 January Ramesh helped 3 persons, when those persons thanked him , he advised them not to thank but to help 3 more persons on second day and instruct them to do same on third day. They move the chain similarly. Assuming that the chain is not broken,

i) Find how many persons will be helped on 5^{th} day. 2

ii) 6,561 persons will be helped on which day? 2

==========

NAME_____SEC_____ROLLNO._____

CODE:A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
PHYSICS
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

- There are 17 questions in all. All questions are compulsory.
- Use of calculators is not allowed.

==========

1. 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
2. The velocity of a small ball of mass m and density d_1 when dropped in a container filled with glycerin becomes constant after sometime. If the density of the glycerin is d_2 then the viscous force acting on the ball will be 1
   (a) $mg(1- d_1/ d_2)$
   (b) $mg(1- d_2/ d_1)$
   (c) $mg(d_1/ d_2 -1)$
   (d) $mg(d_2/ d_1 -1)$
3. 540g of ice at 0^0C is mixed with 540g of water at 80^0C. The final temperature of the mixture is 1
   (a) 0^0C
   (b) 40^0C
   (c) 80^0C
   (d) Less than 0^0C
4. An electric heater supplies heat to a system at a rate of 100W. If the system performs work at a rate of 75J per second, at what rate is the internal energy increasing? 1
   (a) 75W
   (b) 50W
   (c) 25W
   (d) 100W

5. Consider a mixture of n moles of He gas and 2n moles of O_2 gas as ideal gas. What will be γ of the mixture? 1

(a) 13/19
(b) 19/13
(c) 3/7
(d) 7/3

6. A lift is tied with thick iron wire and its mass is 1000kg. if the maximum acceleration of the lift is $1.2m/s^2$ and maximum safe stress is $1.4x10^8N/m^2$ find the minimum diameter of the wire. Take $g = 9.8m/s^2$. 2

7. Water from a tap emerges vertically downwards with an initial speed of 1m/s. The cross sectional area of the tap is 10^{-4} m^2. Assume that the pressure is constant throughout the stream of water and that the flow is steady. What is the cross sectional area of the stream 0.15m below the tap. 2

8. (i) State the principle of calorimetry.
(ii) Write the effect of pressure on the melting point of a substance. 2

9. Applying first law of thermodynamics, obtain the relation between the two specific heats of gas. 2

10. Derive Charle's law on the basis of kinetic theory of gases. 2

11. A copper wire of negligible mass 1m length and cross sectional area 10^{-6} m^2 is kept on a smooth horizontal table with one end fixed. A ball of mass 1kg is attached to the other end .the wire and the ball are rotating with angular velocity 20rad/s. If the elongation in the wire is 10^{-3}m, obtain the Young's modulus. If on increasing the angular velocity to 100rad/s the wire breaks down, obtain the breaking stress. 3

12.	Water stands at a height H in a tank whose side walls are vertical. A hole is made in one of the walls at a depth h below the water surface. Find at what distance from the foot of the wall does the emerging stream of water strikes the floor?	3
13.	One end of a copper rod of uniform cross section and of length 1.5m is kept in contact with ice and other end with water at 100^0C. At what point along the length should a temperature of 200^0C 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. Assume that the whole system is insulated from the surrounding. Latent heat of fusion of ice = 80 cal/g Latent heat of vaporization of water is=540cal/g	3
14.	Derive an expression for the work done during the isothermal expansion of an ideal gas.	3
15.	A gaseous mixture enclosed in a vessel contains 1 gram mole of gas A (with $\gamma = 5/3$) and another gas B (with $\gamma = 7/5$) at a temperature T. The gasses A and B donot react with each other and assume to be ideal. Find the number of gram moles of B if γ of the mixture is 19/13.	3
16.	State and prove Bernoulli's principal for the flow of a non-viscous fluid.	5
17.	Apply first law of thermodynamics to obtain an adiabatic relation between pressure and volume.	5

==========

NAME_____SEC_____ROLLNO._____

CODE:B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
PHYSICS
CLASS-XI

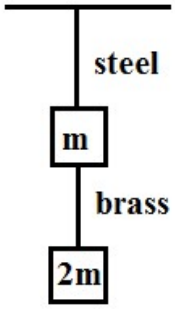
Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

Section :A

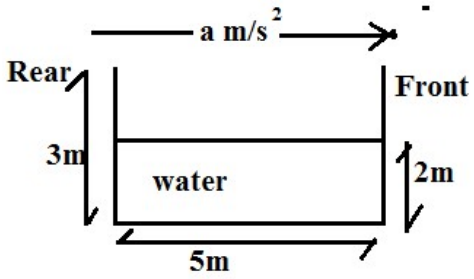
Question 1 to 5 are multiple choice type question, choose correct option.

Q1. If ratio of length, radii and young moduli of steel and brass wires in the figure are a,b and c respectively. Then corresponding ratio of their increase in length would be : 1



i.$2ac/b^2$ ii.$3a/2b^2c$ iii.$3c/2ab^2$ iv.$2a^2c/b$

Q2. An open rectangular tank with dimension 5mx3mx4m contains water up to height of 2m. it is accelerated horizontally along longer side with acceleration of a as shown in the figure. 1



Maximum acceleration a that can be given without spilling the water is:

a.$1m/s^2$ b. $2m/s^2$ c.$3m/s^2$ d.$4m/s^2$

Q3. Rate of heat loss through a glass window of area 1000cm^2 and thickness 0.4cm when inside temperature is 37°C and outside temperature is -5°C is : (given K_{glass}=2.2x10^{-3}cal sec^{-1}cm^{-1}°C^{-1}) 1

a.331cal/sec b.231cal/sec
c.431cal/sec d.531cal/sec

Q4 The final temperature of helium initially at 15°C , when suddenly expanded to 8times its volume is : 1

a.72k b.82k c.92k d.32k

Q5. One mole of mono atomic gas is mixed with three moles of diatomic gas. Then the molar specific heat of the mixture at constant volume is : 1

a.18.7 Jmole^{-1}k^{-1} b.19.7 Jmole^{-1}k^{-1}
c.20.7 Jmole^{-1}k^{-1} d.30.7 Jmole^{-1}k^{-1}

Section :B

Each question carry two marks:

Q6. A wire of cross section A is stretched horizontal between two clamps located at a distance of 2L. A weight w is suspended from the middle of the wire. Prove that the strain produced in the wire if midpoint of the wire comes down by X (X<<L) is 2

$X^2/2L^2$.

Q7. A horizontal pipe line carries water in stream line flow. At a point on the tube where cross section of pipe is 10^{-2} m^2 and pressure is 8000Pa and velocity of water is 2m/sec. Find the pressure of water at a point on the pipe where the cross section of pipe is 0.5x10^{-2}m^{-2} . 2

Q8. Water is boiled in a rectangular tank of thickness 2 cm at constant temperature furnace. Due to boiling water level falls steadily at a rate of 1cm in 9minute. Calculate temperature of furnace if K for steel is 0.2 calsec^{-1}cm^{-1}°C^{-1} 2

Q9. Derive the expression for work done in Adiabatic process. 2

Q10. Prove Avogadros's law from kinetic theory of gasses 2

Section :C

Each question carry three marks:

Q11. a.Prove elastic potential energy stored per unit volume is $\frac{1}{2}$ stress x strain. 3

b. Derive expression thermal stress in a material of Young's modulus Y , coefficient of linear expansion α , when temperature changes by $\triangle\,\theta$

Q12. Derive the expression of excess pressure in a soap bubble. 3

Q13. Three bars of equal length and equal cross section are connected in series. Their thermal conductivities are in a ratio of 2:4:3. If the open end of the first and last bar are at temperature of 200℃ and 18℃ in steady state, then temperature of junctions are what? 3

Q14. Derive the expression for work done in isothermal process. 3

Q15. 3

a. Show isochoric process on pressure vs temperature diagram.
b. Show isothermal process on pressure vs density of gas diagram.
c. Show isobaric process on density of gas vs temperature diagram.

Section :C

Each question carry five marks:

Q16. a.State and prove Bernoulli's principle for flow of non-viscous liquid. 5

b.What is work done to double the radius of a soap bubble from r to final radius 2r. Take surface tension T.

Q17. a.Write two assumptions of kinetic theory of gasses. 5

b.State law Equipartition of energy and prove that $\gamma = 1+\frac{2}{f}$, where terms have their usual meaning.

NAME_____SEC_____ROLLNO._____

CODE:A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
CHEMISTRY
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General instructions:-

- There are 19 questions in this question paper. All questions are compulsory.
- SECTION-A, Q.No-1 to 9 consists of multiple choice questions and Assertion/Reason type questions carrying 1 mark each.
- SECTION-B, Q.No-10 to 13 consists of very short answer questions carrying 2 marks each.
- SECTION-C, Q.No-14 to 16 consists of short answer questions carrying 3 marks each.
- SECTION-D, Q.No- 17 consists of case based question carrying 4 marks.
- SECTION-D, Q.No- 18 to 19 consists of long answer questions carrying 5 marks each.
- Use of calculators is not allowed.

==========

SECTION-A

1 For the reaction $H_2(g) + I_2(g)$ ------> 2HI(g), the standard free energy is $\Delta G° > 0$. The equilibrium constant (K) would be 1
a) K=0 b) K > 1 c) K = 1 d) K < 1

2 The pH of neutral water at 25°C is 7.0. As the temperature increases, ionisation of water increases, however, the concentration of H^+ and OH^- ions are equal. What will be the pH of pure water at 60°C? 1
a) Equal to 7.0
b) Greater than 7.0
c) Less than 7.0
d) Equal to 0

3 Which of the following elements doesnot show disproportionation tendency? 1
a) Cl b) Br c) F d) I

4 The oxidation state of phosphorus in $Ba(H_2PO_2)_2$ is 1
a) +3 b) +2 c) +1 d) -1

5 Arrange the following in decreasing order of their boiling points. 1
A) n - butane B) 2-methylbutane C) n-pentane D) 2,2-dimethylpropane
a) A>B>C>D
b) B>C>D>A
c) D>C>B>A
d) C>B>D>A

6 The chlorination of methane is an example of 1
a) elimination reaction
b) substitution reaction
c) addition reaction
d) oxidation reaction

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

7 Assertion:- An aqueous solution of ammonium acetate can act as buffer. 1
Reason:- Acetic acid is a weak acid and ammonium hydroxide is a weak base.

8 Assertion:- In the reaction between potassium permanganate and potassium iodide, permanganate ions act as oxidising agent. 1
Reason:- Oxidation state of manganese changes from +2 to +7 during the reaction.

9 Assertion:- It is not possible to isolate either pure iclipsed or pure staggered form of ethane at room temperature. 1
Reason:- The energy difference between staggered and eclipsed form of ethane is very small and can be easily overcome by the collision of molecules at room temperature.

SECTION-B

10 pH of a solution of a strong acid is 5.0. What will be the pH of the solution obtained after diluting the given solution a 100 times?(log2 = 0.301) 2

11 How will you differentiate between oxidation number and valency? Give two points. 2

12 Why is Wurtz reaction not preferred for preparation of alkanes containing odd number of carbon atoms? Explain your answer by taking one example. 2

OR

Sodium salt of which acid will be needed for the preparation of propane? Write chemical equation for the reaction.

13 BF_3 does not have proton but still acts as an acid and reacts with NH_3 , Why is it so? What type of bond is formed between the two? 2

SECTION-C

14 List the conditions (no reasons) for the maximum yield of NH_3 in terms of pressure, temperature and concentration. 3

OR

Define the following :
i) Equilibrium constant
ii) Le-Chatelier principle
iii) Law of mass action

15 How do you account for the formation of ethane during chlorination of methane? 3

16 Write balanced chemical equations for the following reaction : 3
Permanganate ion reacts with sulphur dioxide gas in acidic medium to produce Mn^{2+} and hydrogen sulphate ion.(Balance by ion electron method)

SECTION-D

17 Read the passage given below and answer the following questions that follow : 4

Redox reactions play vital role in chemistry and biology. The values of standard redox potential (E°) of two half-cell reactions decide which way the reaction is expected to proceed. A simple example is Daniell cell in which zinc goes into solution and copper gets deposited.

a) What do you mean by a redox couple? Explain with an example.

b) Can Fe^{3+} oxidise Br^- to Br_2 at 1 M concentration?

$E°(Fe^{3+}/Fe^{2+}) = 0.77$ V and $E°(Br/Br^-) = 1.09$ V

c) Depict the galvanic cell in which the reaction takes place :

$Zn(s) + 2Ag^+(aq) \text{ ------> } Zn^{2+}(aq) + 2Ag(s)$.

Further show individual reaction at each electrode.

OR

c) Nitric acid is an oxidising agent and reacts with PbO but it does not react with PbO_2 . Explain why?

SECTION-E

18 i) What is the conjugate base of $H_2PO_4^-$? 5

ii) How is equilibrium constant related to rate constant of forward and backward reactions?

iii) The solubility of SrF_2 in water is 1.2×10^{-2} g L^{-1} . Calculate the solubility product of the salt at room temperature (molecular mass of SrF_2 = 125.6 g/mol)

OR

i) What do you understand by common ion effect?

ii) Why does the hydrolysis of copper sulphate solution gives acidic solution?

iii)The equilibrium constant for the reaction

$H_2(g) + Br_2(g) \text{ -----> } 2HBr(g)$

at 1024 K is 1.6×10^5 . Find the equilibrium pressure of all gases if 10 bar of HBr is introduced into a sealed container at 1024 K.

19 i) Name two conformations of ethane. 5

ii) Draw the structures of the following showing all C and H atoms:

a) 2-Methyl-3-isopropyl heptane

b) Dicyclopropyl methane

iii) Assign IUPAC names of the following compounds :

a) $(CH_3)_4C$

b) $(CH_3)_3CCH_2C(CH_3)_3$

OR

i) Give one method of preparation of alkanes from unsaturated hydrocarbons.

ii) Write short notes on:

a) Kolbe's reaction

b) Wurtz reaction

iii) Write hydrocarbon radicals that can be formed as intermediates during monochlorination of 2-methylpropane. Which of them is more stable? Give reasons.

==========

NAME_____SEC_____ROLLNO._____

CODE:B

BURNPUR RIVERSIDE SCHOOL, BURNPUR

PERIODIC TEST -III : [2023-2024]

CHEMISTRY

CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

1. There are19 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 consists of nine questions, six MCQ's and three A/R type of 1 mark each, Section - B consists of 4 questions carrying 02 marks each, Section - C consists of 3 questions carrying 03 marks each Section – D consists of 1 source-based/ case-based units of assessment of 04 marks and Section - E consist of 2 questions carring 5 maeks each.

==========

SECTION-A

1. Which of the following options would be correct for the stage of half completion of the reaction A $\rightleftharpoons$ B. 1

(a) $\Delta G^{\Theta}=0$
(b) $\Delta G^{\Theta}>0$
(c) $\Delta G^{\Theta}=-RT\ln 2$
(d) $\Delta G^{\Theta}<0$

2. Acidic character of BF_3 can be explained on the basis of which of the following concepts? 1

(a) Arrhenius concept
(b) Bronsted concept
(c) Lewis concept
(d) Bronsted as well as lewis concept

3. When $KMnO_4$ acts as an oxidising agent and ultimately forms MnO_4^{2-}, MnO_2, Mn_2O_3 and Mn^{2+} then the no. of electrons transferred in each case respectively is 1

(a) 4, 3, 1, 5
(b) 1, 5, 3, 7
(c) 1, 3, 4, 5
(d) 3, 5, 7, 1

4. Which is a redox reaction? 1

(a) $H_2SO_4 + 2NaOH \rightarrow Na_2SO_4 + 2H_2O$
(b) $BaCl_2 + H_2SO_4 \rightarrow BaSO_4 + 2HCl$
(c) $CH_3COOH + C_2H_5OH \rightarrow CH_3COOC_2H_5 + H_2O$
(d) $2FeCl_3 + SnCl_2 \rightarrow 2FeCl_2 + SnCl_4$

5. How many carbons are there in the product of a decarboxylation reaction when compared with the reactant? 1

a) two carbons more
b) one carbon more
c) one carbon less
d) an equal number of carbons

6. Which of the following is true regarding the boiling point? 1

a) None of these
b) n-Octane is greater than isooctane
c) n-Octane is less than isooctane
d) n-Octane is equal to isooctane

Question No. 7 to 9 consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

(a) Both A and R are true, and R is the correct explanation of A

(b) Both A and R are true, and R is not the correct explanation of A

(c) A is true but R is false

(d) A is False but R is true

7. **Assertion (A):** The reaction for which $\Delta n = 0$, there is no effect of pressure on equilibrium. 1

Reason (R): A change in pressure results in no change in the value of the equilibrium constant.

8. **Assertion(A):** The reaction: 1

$CaCO_3(s) \rightarrow CaO(s) + CO_2(g)$ is an example of decomposition reaction.

Reason(R): Above reaction is also a redox reaction.

9. **Assertion(A):** Sodium acetate on Kolbe's electrolysis gives methane. 1

Reason(R): Methyl free radical is formed at anode.

SECTION -B

10. Equilibrium constant, K_C, for the reaction, 2

$$N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g);$$

at 500 K is 0.061 litre^2 mole^{-2}. At a particular time, the analysis shows that the composition of the reaction mixture is 3 mol/ litre of N_2, 2.00 mol litre^{-1} of H_2, and 0.500 mol litre^{-1} of NH_3. Show whether the reaction is at equilibrium? If not, in which direction does the reaction tend to proceed to reach equilibrium?

11. Depict the galvanic cell in which the reaction $Zn(s) + 2Ag^+(aq) \rightarrow Zn^{2+}(aq) + 2Ag(s)$ takes place. 2

Further show:

(i) Which of the electrode is negatively charged

(ii) Individual reaction at each electrode.

12. Draw the structure of the following organic compounds:- 2

i. 5-(2,2-Dimethyl propyl)nonane

ii. Tetra-tert-butylmethane

OR

Answer the following questions:-
i. What is combustion?
ii. Write the chemical equation of the combustion reactions of Butane and Pentane.

13. At 700 K, the equilibrium constant K_p, for the reaction 2

$2SO_3(g) \rightleftharpoons 2SO_2(g)+O_2(g)$

is 1.8×10^{-3}kPa. What is the numerical value of K_c for this reaction at the same temperature?

R=0.0821 L atm mol^{-1} K^{-1}

SECTION -C

14. **A.** Consider the following equilibrium, 3

$SO_2(g)+1/2O_2(g) \rightleftharpoons SO_3(g)$ -------- 1

$2SO_3(g) \rightleftharpoons 2SO_2(g)+O_2(g)$ ----------2

What is the relation between K_1 and $K_2$where K_1 and K_2 are equilibrium constants for equation 1 and 2 respectively.

OR

A. Give reason for your answer:

a) There is a fizz when a soda water bottle is opened.
b) Acetic acid is readily soluble in water but still a weak electrolyte.
c) The solubility of CO_2 in water decreases with increse in temperature.

15. Following reactions are the examples of controlled combustion of alkanes. Write the chemical equations for the following reactions and write the IUPAC name of the products. 3

a) When a mixture of methane and oxygen is passed through copper tubes at 523K temperature and 100 atm pressure.
b) When a mixture of ethane and oxygen is passed through heated molybdenum oxide.
c) When 2-Methyl propane get oxidised in the presence of $KMnO_4$.

16. Balance the following redox reaction in basic medium by ion - electron method: 3

$P_4 + OH^- \rightarrow PH_3 + H_2PO_2^-$

SECTION - D

Question 17 is a case-based question with 3 sub-parts. Internal choice is provided in sub-part c.

17. Redox reactions are reactions in which oxidation and reduction takes place simultaneously. Oxidation number are assigned in accordance with the set of rules. Redox reactions are important class of reactions which are taking place in our daily life. Metals are good reducing agents because they can lose electrons easily whereas non-metals are good oxidising agents which can gain electrons easily. In electrolytic cells, electricity is passed to bring about redox reaction. All rechargeable batteries act as electrolytic cells while recharging. Electrochemical cells produce electricity as a result of redox reaction. Salt bridge is used in electrochemical cell to complete internal circuit and prevents accumulation of charges. 3

a) What is standard electrode potential?

b) If a redox couple has negative E^o, is it stronger or weaker reducing agent than H^+/H_2 couple?

c) What is salt bridge? Why it is necessary?

OR

c) Using the given standard electrode potential identify whether the reaction is feasible or not between $Fe^{3+}(aq)$ and $I^-(aq)$. If feasible why? [$Fe^{3+}+e^- \rightarrow Fe^{2+}$ is 0.77V and $I_2 + 2e^- \rightarrow 2I^-$ is 0.54V]

SECTION - E

18. **A.** For the following reactions write the unit of equilibrium constant: 5

i) $COCl_2(g) \rightleftharpoons CO(g) + Cl_2(g)$

ii) $2N_2(g) + O_2(g) \rightleftharpoons 2N_2O(g)$

iii) $C(s)+1/2O_2(g) \rightleftharpoons CO_2(g)$

B. A liquid is in equilibrium with its vapour in a sealed container at a fixed temperature. The volume of the container is suddenly increased,

(i) What is the initial effect of the change on the vapour pressure?
(ii) How do the rates of evaporation and condensation change initially?

OR

A. The ionization constant of dimethylamine is 5.4×10^{-4}. Calculate its degree of ionization in its 0.02 M solution. What percentage of dimethylamine is ionized if the solution is also 0.1M in NaOH?

B. Describe the effect of following components on the equilibrium of the given reaction, $2H_2(g)+CO(g) \rightleftharpoons CH_3OH(g)$
(a) addition of H_2
(b) addition of CH_3OH
(c) removal of CO
(d) removal of CH_3OH

19. **A.** Draw the Sawhorse and Newman projection for the eclipsed and staggered conformation of ethane.Which of these conformation is more stable and why? 5
B. Rotation around carbon - carbon single bond is not completely free. Justify your answer

OR

A. Define the following terms:-
a) Substitution reaction
b) Pyrolysis
c) Isomerisation
B. Write the major products obtained in the following reactions:-
a) n-Hexane on heating in the presence of anhydrous $AlCl_3$/HCl
b) n-Octane is treated with V_2O_5 at 773K temperature and at 10-20 atm pressure.

==========

NAME_____SEC_____ROLLNO._____

CODE:A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
BIOLOGY[044]
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General instructions:

(i) All questions are compulsory.

(ii) The question paper has four sections and 17 questions.

(iii) Section–A has 5 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 5 questions of 3 marks each; Section– D has 2 questions of 5 marks each.

(iv)Wherever necessary, neat and properly labeled diagrams should be drawn.

==========

SECTION – A

1. Which of the following is a non-membrane bound organelle ? 1

   (a) Centriole

   (b) Mitochondria

   (c) Chloroplast

   (d) Lysosomes

2. How many Carbon atoms are present in arachidonic acid, including the Carboxyl Carbon ? 1

   (a) 16

   (b) 19

   (c) 18

   (d) 20

3. The longest phase in cell cycle is 1

(a) Anaphase

(b) Interphase

(c) Prophase

(d) Telophase

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

4. A: Chlorophyll b is the most abundant plant pigment in the world. 1

R: Maximum absorption of light energy takes place in the blue and red wavelengths of the visible Spectrum.

5. A: Respiratory pathway is an amphibolic pathway. 1

R: Eight molecules of ATP are produced in anaerobic respiration.

SECTION – B

6. Differentiate between a prokaryotic and eukaryotic cell. 2

7. What is the significance of mitosis ? 2

8. Name the primary CO_2 acceptor in C_3 and C_4 plants respectively. 2

9. Mention the two crucial events in aerobic respiration after glycolysis. 2

10. Write a note on the plant growth regulator that acts as an antagonist of gibberellic acids. 2

SECTION – C

11. With the help of proper graphs, show the effect of change in the following on enzyme activity – 3

(a) pH

(b) Temperature

(c) Concentration of substrate

12. Name the sub-stages of prophase – I where the following events occur – 3
(a) Formation of synaptonemal complex.
(b) Recombination nodules, where crossing over takes place, can be seen.
(c) Synaptonemal complex dissolves, but chiasmata persists.

13. Point out three processes that cause a proton gradient across a thylakoid membrane, which in turn helps in ATP synthesis. 3

14. In a tabular form, chalk out the respiratory balance sheet for aerobic respiration. 3

15. Which phytohormone is responsible for phototropism ? Identify two other functions of this PGR. 3

SECTION –D

16. Diagrammatically represent the Hatch and Slack pathway. 5

17. Represent glocolysis in the form of a flowchart. 5

Name: _____ Sec: ____ Roll No.: ____

CODE : B

BURNPUR RIVERSIDE SCHOOL, BURNPUR

PERIODIC TEST – 3 : [2023 – 2024]

BIOLOGY (044)

CLASS : XI

TIME: $1\frac{1}{2}$ Hrs. Maximum Marks: 40

==========

General Instructions:

i *All questions are compulsory.*

ii *The question paper contains four sections and 17 questions.*

iii *Section A has 5 questions of 1 mark each,containing 3 MCQ and 2 R/A type. Section B has 05 questions of 2 marks each. Section C has 5 questions of 3 marks each and section D has 2 questions of 5 marks each.*

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

==========

SECTION-A

1. Who proposed the fluid mosaic membrane of the plasma membrane? 1
   a) Camilleo Golgi
   b) Schleiden and Schwann
   c) Singer and Nicolson
   d) Robert Brown

2. Which pair of nitrogenous bases is incorrectly matched? 1
   a) G,A- Purine
   b) T,U – Pyramidine
   c) A,T- Purine
   d) U,C-Pyrimidine

3. Complex formrd by a pair of synapsed homologous chromosome is called:- 1
   a) Axoneme
   b) Equitorial plate
   c) Kinetochore
   d) Bivalent

Question No. 3 and 4 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.

4. Assertion:- PS II and PS I are interlinked in Z scheme of photosynthesis 1
Reason|:-Presence of electron transport system exists between the two photosystems.

5. Assertion :- In Lactic acid fermentation $NADH_2$ is produced. 1
Reason: The fermentation takes place in aerobic condition.

SECTION-B

6. Mention the components of primary cell wall and middle lamella. 2

7. Diagrammatically represent the steps of cell cycle in a pie graph. 2

8. What is photorespiration? Explain briefly 2

9. Why is TCA considered amphibolic in nature? 2

10. Name a gaseous plant growth regulator. Mention its functions. 2

SECTION-C

11. Discuss briefly the factors which affect enzyme activity. 3

12. Briefly mention the steps of Prophase I of Meiosis I along with the cytological features. 3

13. Mention the factors affecting photosynthesis. 3

14. Schematically represent the steps of glycolysis. 3

15. Name any two synthetic auxins. Enlist some functions of this plant growth regulator. 3

SECTION-D

16.	Explain the Z -Scheme/Lightreaction of photosynthesis.	5
17	Schematically represent the steps of TCA/Kreb cycle.	5

==========

NAME_____SEC_____ROLLNO._____

CODE:A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
COMPUTER SCIENCE
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

- The question paper is divided into 4 sections – A, B, C, D
- Section-A, consists of 12 questions (1-12). Each question carries 1 mark.
- Section-B, consists of 9 questions (13-21). Each question carries 2 marks.
- Section-C, consists of 2 questions (22-23). Each question carries 3 marks.
- Section-D, consists of 1 question (24) of 4 marks.

==========

Section-A
Each question carries 1 marks

Q.NO.	QUESTIONS	Marks
1.	State True or False: The extend () adds a single element to a list.	1
2.	Which of the following will always return a list? a) max() b)min() c)sort() d)sorted()	1
3.	What will be the result of the following code ? d1={"abc":5,"def":6,"ghi":7} print(d1[0]) a)abc b)5 c){“abc”:5} d) Error	1
4.	Which of the below given functions cannot be used with nested tuples ? a)index() b)count() c)max() d)sum()	1
5.	What will be the output of the following python code? tp=() tp1=tp * 2 print(len(tp1)) a) 0 b)2 c)1 d)Error	1

6. Which of the following are tools to design algorithms? 1
a) Using variable and data b) Using inputs and outputs
c) Using pseudo-code and flowcharts
d)Using functions and procedures

7. What shape represents a decision in a flowchart? 1

a) A diamond b)A rectangle c)An oval
d) None of these

8. Which of the following can be used to delete item(s) from a dictionary? 1

a) del statement b)pop() c)popitem()
d) all of these

9. Dictionaries are _____ data types of python. 1

a)mutable b)immutable c)simple
d)all of these

10. A software that can be freely accessed and modified is called _____ 1
a) Synchronous Software b) Package Software
c)Open Source Software d)none of these

Q11 and 12 are ASSERTION AND REASONING based questions. Mark the correct choice as
(a) Both A and R are true and R is the correct explanation for A
(b) Both A and R are true and R is not the correct explanation for A
(c) A is True but R is False
(d) A is false but R is True

11. **Assertion**: A list slice is an extracted part of a list. 1
Reason : A list slice is a list in itself.

12. **Assertion:** Any comma- separated group of values creates a tuple. 1
Reason : A set of comma-separated values, surrounded with or without round brackets, creates a tuple.

SECTION–B
Each question carries 2 marks

13.	How are tuples different from lists when both are sequence?	2
14.	When are dictionaries more useful than list ?	2
15.	Write a program to calculate the mean of a given list of numbers.	2
16.	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
17.	Write a program to check if a dictionary is empty.	2
18	Write a program to input a list and an element, and remove all occurrences of the given element from the list.	2
19	What do you understand by plagiarism ?	2
20	What is List? Give example.	2
21	What will be the **output** of the following code segment: lst1=[0,1,[2]] lst1[2][0]=3 print(lst1) lst1[2].append(4) print(lst1) lst1[2]=2 print(lst1)	2

Section-C
Each question carries 3 marks

22.	Write a program to search for an element in a given list of numbers.	3
23.	Write a program to check if the element in the first half of a tuple are sorted in ascending order or not.	3

Section-D
Each question carries 4 marks

24. a) What will be the **output** of the following code segment:

```
mylist=[1,2,3,4,5,6,7,8,9,10]
for i in range(0,len(mylist)):
        if i % 2==0:
                print(mylist[i])
```

2+2

b) Write a program to find the number of times an element occurs in the list .

==========

NAME_____**CLASS**_____ **SEC**_____

CODE: **B**

BURNPUR RIVERSIDE SCHOOL,BURNPUR
PERIODIC TEST-III[2023-2024]
COMPUTER SCIENCE
CLASS-XI

Time: 1½ Hrs. **Maximum Marks:40**

==========

SECTION – A

Each question carries 1 marks:

1. **State true or false:**
   The **insert()** can add an element in the middle of a list.

2. Given a list L=[10,20,30,40,50,60,70] what would L[1:4] return?
   a.[10,20,30,40]
   b.[20,30,40,50]
   c.[20,30,40]
   d.[30,40,50]

3. Which of the following will add a key to the dictionary only if it does not already exist in the dictionary?
   a.fromkeys()
   b.update()
   c.setdefault()
   d.all of the above

4. What will be the output:
   tp1=(2,4,3)
   tp3=tp1*2
   print(tp3)
   a.(4,8,6)
   b.(2,4,3,2,4,3)
   c.(2,2,4,4,3)
   d.error

5. What will be the output:

```
t=(5,)
tp=t*2
print(len(tp))
```

a.0
b.2
c.1
d.error

6. What is an algorithm?
   a. A set of steps to solve a problem
   b. software that analyses data
   c. a hardware device that stores data
   d. all of these

7. What shape represents a decision box in a flowchart?
   a. Diamond
   b. Rectangle
   c. Oval
   d. Square

8. Dictionaries are also called _____
   a. mapping
   b. hashes
   c. associative arrays
   d. all of the above

9. _____removes the key:value pairs in LIFO order and is useful to iterate over a dictionary.
   a.popitem()
   b.key
   c.del
   d.none of these

10. A software that can be freely accessed and modified is called_____
    a. Synchronous Software
    b. Package software
    c. Open source software
    d. Middleware

11. In the following question a statement of assertion(A) is followed by a statement of reason(R).Mark the correct choice as:
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.(or partly true)
d. A is false but R is true.(or partly true)
e. Both A and R are false or not fully true.
Assertion: In python unlike other data types you can change elements of a list in place.
Reason: Lists are mutable sequences.

12. Assertion: Tuples are similar to lists.
Reason:Tuples are similar to lists in indexing,slices and accessing elements but not in mutability.

SECTION-B

Each question carries 2 marks:

13. How are tuples different from lists when both are sequences?(any 2 reasons) 2

14. **Predict the output:** 2

```
d={“Ram”:1 , “Richa”:2 , “Faizan”:10, “Sayan”: 20}
temp=0
for value in d.values():
temp=temp+value
print(temp)
```

15. **What will be the output:** 2

i)
```
p=[1,2,3,4,5,6,7,8,9,10]
    del p[3:]
    print(p)
```

ii)
```
list1=[1,2,3,4,5,6,7,8,9,10]
list1[::-2]
print(list1)
```

16. **Find the output:** 2

```
t1=(23,1,4,67,45,9,55)
t2=(100,200)
i)print(t1.index(45))
ii)print(sum(t2))
```

17. What will be the output: 2

```
D={'x':10, 'y':15, 'z':20, 'w':5}
lst=['x' , 'w']
s=0
fork,v in d.items():
if k in lst:
   s=s+d[k]
print(s)
```

18. Differentiate between append() and extend () functions of list. 2

19. What do you mean by intellectual Property rights? 2

20. Draw a flowchart to add two numbers. 2

21. Find the output of the following: 2

```
k=[10,12,14,20,22,24,30,32,34]
```

   i. k[3:30]

   ii. k[-15:7]

SECTION-C

Each question carries 3 marks:

22. Write a program in Python to count the frequency of a given element in a list of numbers. 3

23. Write a python function secondLargest(T) which takes as input a tuple T and returns the second largest element in the tuple. 3

SECTION-D

Each question carries 4 marks:

24. Write the most appropriate list method to perform the following tasks: 4

a. Delete 4^{th} element from the list.

b. Add an element in the end of the list.

c.Add an element in the beginning of the list.

d.Add elements of a list in the end of a list.

==========

NAME_____SEC_____ROLLNO._____

CODE:A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
ACCOUNTANCY
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions :

1. This question paper contains 18 questions. All questions are compulsory.
2. Question Nos. 1 to 11 carries 1 mark each.
3. Question no. 12 and 14 carries 3 marks each.
3. Question no. 15 to 16 carries 4 marks each.
4. Question no. 17 and 18 carries 6 marks each.
5. There is no overall choice. However, an internal choice has been provided in 3 questions of one mark and 1 question of three marks, and 1 question of four marks, and 1 questions of six marks
6. Attempt all parts of the questions together.

==========

1 "Wages and Salaries " appearing in Trial Balance is shown: 1
(a) On the Debit side of Trading A/c (b) On the Debit side of Profit and Loss A/c (c) On the Assets side of Balance Sheet (d) On the Liabilities side of Balance Sheet.

2 Which of the following is the example of Capital Reserve? 1
(a) General Reserve (b) Workmen's Compensation Reserve
(c) Premium received on issue of shares (d) none of these

OR

Dividend Equalisation Reserve is
(a) General Reserve (b) Specific Reserve (c) Secret Reserve (d) none of these.

3 Calculate gross profit from the following information. 1
Cost of goods sold ₹ 200,000 and gross profit 20% on sales
(a) ₹ 250,000 (b) ₹ 100,000 (c) ₹ 75,000 (d) ₹ 50,000

4 At the end of the year, Depreciation A/c is transferred to 1
(a) Manufacturing A/c (b) Profit and Loss Appropriation A/c (c) Profit and Loss A/c (d) Trading A/c

OR

Depreciation is a process of
(a) Allocation (b) Valuation (c) Depletion (d) None of these

5 Secret Reserve is created by 1
(a) Writing off excessive depreciation (b) Charging capital expenditure to Profit & Loss Account (c) Suppressing the sales (d) All of the above

OR

Profit on sale of assets is used to create
(a) General Reserve (b) Specific Reserve (c) Revenue Reserve (d) None of these

6 Ascertain the value of closing stock from the following. 1
Opening Stock ₹ 2,40,000; Purchases during the year ₹ 18,60,000; Sales during the year ₹ 31,20,000; Rate of gross profit 40% on sales.
(a) ₹ 2,20,000 (b) ₹ 2,28,000 (c) ₹ 2,50,000 (d) ₹ 2,40,000

OR

Closing stock appearing in the Trial Balance is shown:
(a) On the Dr. side of Trading A/c
(b) On the Cr. side of Trading A/c
(c) On the Assets side of Balance Sheet
(d) On the Cr. side of Trading A/c and on the Assets side of Balance Sheet.

Read the following hypotheticals text and answer the question no. 7 and 8.
Mr.Suman has established a new business of supplying cricket, football and tennis kits to the schools and colleges. At the end of the particular period, he wants to calculate gross profit of his business .
He made total purchases of sports kit for ₹4,00,000.
Some items were broken and some have scratched on them. Therefore, he returned the items to the respective companies, these items were purchased for ₹ 10,000. Wages paid during the period ₹ 20,000 and carriage paid on the purchases was ₹ 10,000.
During the period, 2/3 of the goods were sold for ₹ 3,05,000.

7 What is the cost of goods sold for Suman? 1
(a) ₹ 400,000 (b) ₹ 420,000 (c) ₹ 30,000 (d) ₹ 25000

8 What is the gross profit of Suman at the end of the period? 1
(a) ₹ 400,000 (b) ₹ 420,000 (c) ₹ 30,000 (d) ₹ 25,000

9 The balance of machinery on 31st March,2022 is ₹ 194,400. The machine was purchased on 1st April,2020. Depreciation is charged @ 10%p.a.by diminishing balance method. The cost price of the machine as on 1st April 2020 would be 1
(a) ₹300,000 (b) ₹250,000 (c) ₹ 240,000 (d) none of these

10 The original cost of the asset is ₹ 2,50,000. The freight and installation charges amounted to ₹ 25,000. The useful life of the asset is 10 years end net residual value is estimated to be ₹ 50,000. Calculate the amount of depreciation to be charged under the straight line method for the year ended 31st December 2022 when the asset has been purchased on 1st April,2022. 1
(a) ₹ 22,500 (b) ₹ 22,875 (c) ₹ 16,875 (d) ₹ 16,500

11 Under diminishing balance method, depreciation to be charged on 1
(a) Scrap value (b) Original value (c) Real value (d) None of these

12 Calculate the amount of gross profit and operating profit on the basis of following balances extracted from the books of Mr.Sahoo for the year ended 31.03.2023. 3
Opening Stock ₹ 50,000; Net Sales ₹11,00,000; Net Purchases ₹ 6,00,000; Direct Expenses ₹ 60,000; Administrative Expenses ₹ 45,000; Selling and Distribution Expenses ₹ 65,000; Loss due to fire ₹ 20,000; Closing stock ₹ 70,000.

13 From the following extract of the Trial Balance as at 31st March,2023, pass necessary journal entries. 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.

OR

From the following extract of the Trial Balance as at 31st March,2023, show the treatment of bad debts and provision for doubtful debts in the relevant accounts and in financial statements.

Particulars	Dr.(₹)	Cr.(₹)
Sundry Debtors	5,30,000	
Provision for Doubtful Debts		40,000
Bad Debts	10,000	

Additional Information:
(a) Further Bad Debts were for ₹ 30,000
(b) Provision for Doubtful Debts is to be maintained at 10% on Sundry Debtors.

14 On 1st July, 2021, X Ltd. purchased a machine for ₹ 1,08,000 and spent ₹ 12,000 for its installation. At the time of purchase it was estimated that effective commercial life of the machine will be 12 years and after 12 years its salvage value will be ₹ 12,000. Pass necessary journal entries in the books of X.Ltd. for two years if depreciation is written off according to straight line method assuming accounts are closed on 31st December every year. 3

15 Distinguish between Capital expenditure and Revenue expenditure on the basis of (a) Purposes of expenses (b) Effect on final accounts (c) Period and (d) Increase in the value of assets. 4

16 A company whose accounting year is the calendar year, purchased on 1st April, 2020, machinery costing ₹ 30,000. On 1st June 2022, one third of the machinery which was installed on 1st April,2020 became obsolete and was sold for ₹ 3,000. Show how the Machinery A/c would appear in the books of the company for the relevant periods assuming that machinery was depreciated by fixed instalment method @ 10% per annum. 4

OR

AZ Ltd. purchased on 1st April, 2020 a plant for ₹ 80,000. On 1st July,2021 it purchased additional plant costing ₹ 48,000 in cash . On 1st December 2022 the plant purchased on 1st April 2020 was sold off for ₹ 42,000 and on the same date new machinery was purchased for ₹ 75,000. Depreciation is provided @ 10% per annum under diminishing balance method. Show Plant account for three years assuming that accounts are closed on 31st March every year.

17 On the basis of following balances prepare Trading A/c and Profit & Loss A/c for the year ended 3st March,2023 6

Particulars	₹	Particulars	₹
Salaries and Wages	4,500	Purchases	53,400
Sales	94,500	Carriage outwards	1,200
Wages	2,500	Carriage inwards	800
Discount Allowed	540	Interest on investment	1,500
Advertisement	800	Legal expenses	750
Charity	250	Audit fees	450
Coal and Power	650	Office lighting	950
Postage and Telephone	750	Miscellaneous expenses	1,250
Factory Rent	1,450	Factory insurance	745
Office Expenses	2,500	Depreciation on furniture	1,500
Closing Stock	15,560		

OR

From the following Trial Balance of M/s P.Construction prepare Trading A/c and Profit & Loss A/c for the year ended31st March,2023.

Trial Balance as at 31st March,2023

Particulars	₹	Particulars	₹
Opening Stock	96,000	Sales	5,50,000
Purchases	1,78,000	Creditors	23,500
Discount allowed	1,500	Capital	1,50,000
Wages	87,000		
Salaries	93,000		
Travelling Expenses	2,000		
Commission	12,000		
Carriage Inwards	500		
Administrative expenses	700		
Electricity and lighting	1,300		
expenses	1,500		
Charity	1,50,000		
Building	35,000		
Motor Van	56,500		
Debtors			
Cash in hand	8,500		7,23,500
	7,23,500		

Stock as on 31st March,2023 was ₹ 50,000.

18	On 1st April 2020, Y Ltd. purchased a machinery for ₹ 1,00,000 . On 1st July,2023 the machinery became obsolete and was sold for ₹ 40,000 . The company charges depreciation on its machinery @ 10% p.a. on written down value method. The books are closed on 31st March every year. Prepare machinery A/c, Provision for Depreciation A/c and Machinery Disposal A/c for the relevant periods.	6

==========

NAME_____SEC_____ROLLNO._____

CODE:B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
ACCOUNTANCY
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions :

1. This question paper contains 18 questions. All questions are compulsory.
2. Question Nos. 1 to 11 carries 1 mark each.
3. Question no. 12 and14carries 3 marks each.
3. Question no. 15 to 16 carries 4 marks each.
4. Question no. 17 and 18 carries 6 marks each.
5. There is no overall choice. However, an internal choice has been provided in 3 questions of one mark and 1 question of three marks, and 1 question of four marks, and 1 questions of six marks
5. Attempt all parts of the questions together.

==========

1 Calculate gross profit from the following information. 1
Cost of goods sold ₹ 200,000 and gross profit 20% on sales
(a) ₹ 250,000 (b) ₹100,000 (c) ₹75,000 (d) ₹50,000

2 Which of the following is the example of Capital Reserve? 1
(a) General Reserve (b) Workmen's Compensation Reserve (c) Premium received on issue of shares (d) none of these

OR

Dividend Equalisation Reserve is
(a) General Reserve (b) Specific Reserve (c) Secret Reserve (d) none of these.

3 Under diminishing balance method, depreciation to be charged on 1
(a) Scrap value (b) Original value (c) Real value (d) None of these

4 Ascertain the value of closing stock from the following. 1
Opening Stock ₹ 2,40,000; Purchases during the year ₹ 18,60,000; Sales during the year ₹ 31,20,000; Rate of gross profit 40% on sales.
(a) ₹ 2,20,000 (b) ₹2,28,000 (c) ₹2,50,000 (d) ₹ 2,40,000

OR

Closing stock appearing in the Trial Balance is shown:
(a) On the Dr. side of Trading A/c(b) On the Cr. side of Trading A/c
(c) On the Assets side of Balance Sheet
(d) On the Cr. side of Trading A/c and on the Assets side of Balance Sheet.

5 Secret Reserve is created by 1
(a) Writing off excessive depreciation (b) Charging capital expenditure to Profit & Loss Account (c) Suppressing the sales (d) All of the above

OR

Profit on sale of assets is used to create
(a) General Reserve(b) Specific Reserve (c) Revenue Reserve(d) None of these

6 At the end of the year, Depreciation A/c is transferred to 1
(a) Manufacturing A/c (b) Profit and Loss Appropriation A/c (c) Profit and Loss A/c (d) Trading A/c

OR

Depreciation is a process of
(a) Allocation (b) Valuation (c) Depletion (d) None of these

7 "Salaries and Wages" appearing in Trial Balance is shown: 1
(a) On the Debit side of Trading A/c
(b) On the Debit side of Profit and Loss A/c
(c) On the Assets side of Balance Sheet
(d) On the Liabilities side of Balance Sheet.

8 The balance of machinery on 31st March,2022 is ₹ 194,400. The machine was purchased on 1st April,2020. Depreciation is charged @ 10%p.a.by diminishing balance method. The cost price of the machine as on 1st April 2020 would be 1
(a)₹ 300,000 (b) ₹250,000 (c) ₹240,000 (d) none of these

Read the following hypotheticals text and answer the question no. 9 and 10.
Mr. Suman has established a new business of supplying cricket, football and tennis kits to the schools and colleges. At the end of the particular period, he wants to calculate gross profit of his business .
He made total purchases of sports kit for ₹4,00,000.

Some items were broken and some have scratched on them. Therefore, he returned the items to the respective companies, these items were purchased for ₹ 10,000. Wages paid during the period ₹ 20,000 and carriage paid on the purchases was ₹ 10,000.
During the period, 2/3 of the goods were sold for ₹ 3,05,000.

9 What is the cost of goods sold for Suman? 1
(a) ₹400,000 (b) ₹ 420,000 (c) ₹30,000 (d) ₹ 25000

10 What is the gross profit of Suman at the end of the period? 1
(a) ₹ 400,000 (b) ₹ 420,000 (c) ₹ 30,000 (d) ₹ 25,000

11 The original cost of the asset is ₹ 2,50,000. The freight and installation charges amounted to ₹ 25,000. The useful life of the asset is 10 years end net residual value is estimated to be ₹ 50,000. Calculate the amount of depreciation to be charged under the straight line method for the year ended 31st December 2022 when the asset has been purchased on 1st April,2022. 1
(a) ₹22,500 (b) ₹ 22,875 (c) ₹ 16,875 (d) ₹ 16,500

12 Calculate the amount of gross profit and operating profit on the basis of following balances extracted from the books of Mr. Sahoo for the year ended 31.03.2023. 3
Opening Stock ₹ 50,000; Net Sales ₹11,00,000; Net Purchases ₹ 6,00,000; Direct Expenses ₹ 60,000; Administrative Expenses ₹ 45,000; Selling and Distribution Expenses ₹ 65,000; Loss due to fire ₹ 20,000; Closing stock ₹ 70,000.

13 On 1st July, 2021, X Ltd. purchased a machine for ₹ 1,08,000 and spent ₹ 12,000 for its installation. At the time of purchase it was estimated that effective commercial life of the machine will be 12 years and after 12 years its salvage value will be ₹ 12,000. Pass necessary journal entries in the books of X.Ltd. for two years if depreciation is written off according to straight line method assuming accounts are closed on 31st December every year. 3

14 From the following extract of the Trial Balance as at 31st March,2023, pass necessary journal entries. 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.

OR

From the following extract of the Trial Balance as at 31st March,2023, show the treatment of bad debts and provision for doubtful debts in the relevant accounts and in financial statements.

Particulars	Dr.(₹)	Cr.(₹)
Sundry Debtors	5,30,000	
Provision for Doubtful Debts		40,000
Bad Debts	10,000	

Additional Information:
(a) Further Bad Debts were for ₹ 30,000
(b) Provision for Doubtful Debts is to be maintained at 10% on Sundry Debtors.

15 A company whose accounting year is the calendar year,purchased on 1st April, 2020, machinery costing ₹ 30,000. On 1st June 2022, one third of the machinery which was installed on 1st April,2020 became obsolete and was sold for ₹ 3,000. Show how the Machinery A/c would appear in the books of the company for the relevant periods assuming that machinery was depreciated by fixed instalment method @ 10% per annum. 4

OR

AZ Ltd. purchased on 1st April, 2020 a plant for ₹ 80,000. On 1st July,2021 it purchased additional plant costing ₹ 48,000 in cash . On 1st December 2022 the plant purchased on 1st April 2020 was sold off for ₹ 42,000 and on the same date new machinery was purchased for ₹ 75,000. Depreciation is provided @ 10% per annum under diminishing balance method. Show Plant account for three years assuming that accounts are closed on 31st March every year.

16 Distinguish between Reserve and Provision on the basis of (a) Meaning (b) Necessity (c) Utilisation for dividend and (d) Investment outside the business 4

17 On 1st April 2020, Y Ltd. purchased a machinery for ₹ 1,00,000 . On 1st July,2023 the machinery became obsolete and was sold for ₹ 40,000 . The company charges depreciation on its machinery @ 10% p.a. on written down value method. The books are closed on 31st March every year. Prepare machinery A/c,Provision for Depreciation A/c and Machinery Disposal A/c for the relevant periods. 6

18 On the basis of following balances prepare Trading A/c and Profit & Loss A/c for the year ended 3st March,2023 6

Particulars	₹	Particulars	₹
Salaries and Wages	4,500	Purchases	53,400
Sales	94,500	Carriage outwards	1,200
Wages	2,500	Carriage inwards	800
Discount Allowed	540	Interest on investment	1,500
Advertisement	800	Legal expenses	750
Charity	250	Audit fees	450
Coal and Power	650	Office lighting	950
Postage and Telephone	750	Miscellaneous expenses	1,250
Factory Rent	1,450	Factory insurance	745
Office Expenses	2,500	Depreciation on furniture	1,500
Closing Stock	15,560		

OR

From the following Trial Balance of M/s P.Construction prepare Trading A/c and Profit & Loss A/c for the year ended31st March,2023.

Trial Balance as at 31st March,2023

Particulars	₹	Particulars	₹
Opening Stock	96,000	Sales	5,50,000
Purchases	1,78,000	Creditors	23,500
Discount allowed	1,500	Capital	1,50,000
Wages	87,000		
Salaries	93,000		
Travelling Expenses	2,000		
Commission	12,000		
Carriage Inwards	500		
Administrative expenses	700		
Electricity and lighting expenses	1,300		
Charity	1,500		
Building	1,50,000		
Motor Van	35,000		
Debtors	56,500		
Cash in hand	8,500		
	7,23,500		7,23,500

Stock as on 31st March,2023 was ₹ 50,000.

==========

Name: _____ Sec: ____ Roll No.: ____

CODE: A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
BUSINESS STUDIES
CLASS : XI

Time: 1 ½ Hours **Maximum Marks: 40**

General Instructions :

1. This question paper contains 17 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.

==========

1 Mail order house business is not suitable for goods which are 1
(a) Graded (b)Non-standardised
(c) Easily transported at low cost (d) All of the above

2 In view of growing demand for its product, M enterprises is planning to increase its stock level. Which of the following sources can be used to meet its additional working capital requirements. 1
(a) Trade credit (b) Loan from financial institution
(c) Preference shares (d) Equity shares

3 The concept of entrepreneurship is applicable to 1
(a) an individual (b) a team (c) both (a) and (b) (d) none of these

4 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 ofAssertion(A)
(b) BothAssertion(A) and Reason(R) are true and the Reason(R) is not the correct explanation ofAssertion(A)
(c) Assertion(A) is true but Reason(R) is false
(d) Assertion(A)is false but Reason(R) is true

5 Mr.X wants to invest in securities but at the same time he wants safety of investment and regular returns. Which among the following sources will be more suitable for him ? 1

(a) Equity share (b) Preference Shares (c) Debentures (d) none of these.

6 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

7 Match the following by choosing the correct option. 1

(i) Deals in wide variety of products of daily use	(a) Second hand goods shop
(ii) Deals in a specific line of products	(b) Street stall holders
(iii) Small vendors normally seen at street crossing	(c) Speciality shops
(iv) Deals in used goods	(d) General stores

(a) (i)-(d); (ii)- (a), (iii)-(c); (iv)-(b) (b) (i)-(d); (ii)-(c), (iii)-(b); (iv)-(a)
(c) (i)-(d); (ii)- (b), (iii)-(c); (iv)-(a) (d) none of these

8 P Ltd. is planning to raise long term capital in order to finance its fixed assets. Which among the following sources cannot be used to raise the required capital 1

(a) Equity shares (b) Preference shares (c) Loan from financial institution
(d) None of these

9 For the following two statements choose the correct option 1

Statement I : Pedlars move from street to street in search of customers
Statement II: Pedlars hire small shops or display goods intense in tents in residential colonies.

(a)Statement I is correct and statement II is wrong
(b) Statement II is correct and statement I is wrong
(c) Both the statements are correct
(d) Both the statements are incorrect

10 MSMED stands for 1

(a) Medium, Small and Micro Enterprise Development Act
(b) Medium, Service and Micro Enterprise Development Act
(c) Micro, Small and Medium Enterprise Development Act
(d) none of these

11 Differentiate between departmental stores and chain stores on the basis of 3
(a) Location (b) Range of products and (c) Services offered.

12 Describe the contribution of small business towards the development of Indian economy (any three points) 3

OR

What is intellectual property rights? How does it help entrepreneurships? Explain any three ways.

13 Define 'ploughing back of profit'. Explain its limitations (any three). 4

OR

Define 'Inter Corporate deposits'. How will you classify it? Explain each classification.

14	Bitin 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. (a) State the type of retail store mentioned in about case. (b) State any three features of that type of retail store.	4
15	Explain the importance of entrepreneurship development (any four)	4
16	Explain any three merits and three limitations of public deposits.	6
17	Explain any three services of wholesalers to manufacturer and three services to retailers. OR Explain any three advantages and three disadvantages of mail order houses.	6

==========

NAME_____SEC_____ROLLNO._____

CODE:B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST -III : [2023-2024]
BUSINESS STUDIES
CLASS-XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions :

1. This question paper contains 17 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.

1 Mr.X wants to invest in securities but at the same time he wants safety of investment and regular returns. Which among the following sources will be more suitable for him ? 1
(a) Equity share (b) Preference Shares (c) Debentures (d) none of these.

2 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

3 P Ltd. is planning to raise long term capital in order to finance its fixed assets. Which among the following sources cannot be used to raise the required capital 1
(a) Equity shares (b) Preference shares (c) Loan from financial institution
(d) None of these

4 For the following two statements choose the correct option 1

Statement I : Pedlars move from street to street in search of customers
Statement II: Pedlars hire small shops or display goods intense in tents in residential colonies.

(a) Statement I is correct and statement II is wrong
(b) Statement II is correct and statement I is wrong
(c) Both the statements are correct
(d) Both the statements are incorrect

5 MSMED stands for 1

(a) Medium, Small and Micro Enterprise Development Act
(b) Medium, Service and Micro Enterprise Development Act
(c) Micro, Small and Medium Enterprise Development Act
(d) none of these

6 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

7 In view of growing demand for its product, M enterprises is planning to increase its stock level. Which of the following sources can be used to meet its additional working capital requirements. 1

(a) Trade credit (b) Loan from financial institution
(c) Preference shares (d) Equity shares

8 Match the following by choosing the correct option. 1

(i) Deals in wide variety of products of daily use	(a) Second hand goods shop
(ii) Deals in a specific line of products	(b) Street stall holders
(iii) Small vendors normally seen at street crossing	(c) Speciality shops
(iv) Deals in used goods	(d) General stores

(a) (i)-(d); (ii)- (a), (iii)-(c); (iv)-(b) (b) (i)-(d); (ii)-(c), (iii)-(b); (iv)-(a)
(c) (i)-(d); (ii)- (b), (iii)-(c); (iv)-(a) (d) none of these

9 The concept of entrepreneurship is applicable to 1
(a) an individual (b) a team (c) both (a) and (b) (d) none of these

10 Mail order house business is not suitable for goods which are 1
(a) Graded (b) Non-standardised
(c) Easily transported at low cost (d) All of the above

11 Describe the contribution of small business towards the development of Indian economy (any three points) 3

OR

What is intellectual property rights? How does it help entrepreneurships? Explain any three ways.

12 Differentiate between departmental stores and chain stores on the basis of 3
(a) Location (b) Range of products and (c) Services offered.

13 Bitin 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. 4
(a) State the type of retail store mentioned in about case.
(b) State any three features of that type of retail store.

14 Define ‘ploughing back of profit’. Explain its limitations (any three). 4

OR

Define ‘Inter Corporate deposits’. How will you classify it? Explain each classification.

15 Explain the importance of entrepreneurship development (any four) 4

16 Explain any three services of retailers to wholesaler/manufacturer and three services to customers. 6

OR

Explain any three advantages and three disadvantages of departmental stores.

17 Explain any three merits and three limitations of debenture as a source of business finance. 6

==========

Name: _____ Sec: ____ Roll No.: ____

CODE: A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
ECONOMICS(030)
CLASS : XI

Time: 1 ½ Hours **Maximum Marks: 40**

==========

General Instructions :

(i)This question paper contains two sections:
Section A- Statistics for Economics
Section B- Micro Economics
(ii) This paper contains 8 multiple choice questions type questions of one mark each.
(iii) This paper contains 4 short answer questions type questions of 3 marks each to be answered in 60 to 80 words.
(iv)This paper contains one case based and 1question of 4 marks.
(v) This paper contains 2 long answer question type questions of 6 marks each to be answer in 100 to 150 words.

==========

SECTION -A: STATISTICS FOR ECONOMICS

1. Which of the following is not a method to measure correlation: **1**

(a) Karl Pearson's Coefficient of correlation
(b) Spearman's rank difference method
(c) Scatter diagram method
(d) Step deviation method

2. Which of the following statements is true: **1**

(a) Mean value should be negative
(b) The degree of correlation lies between 0 to 1
(c) Scattered diagram is used for measuring median value
(d) Mode is item that occurs the highest number of times

3. Choose the incorrect pair: **1**

Column I	Column II
A. Karl Pearson's method	1. Coefficient of correlation
B. Spearman's method	2. Rank coefficient
C. Scatter diagram method	3. Non mathematical method
D. Curvillinear correlation	4. Linear relationship between variables

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

4. Read the following statements-Assertion(A) and Reason(R). **1**
Choose one of the correct alternatives given below:
Assertion(A): Correlation Coefficient is unitary when variables are independent.
Reason(R): Degree of correlation represents direction of change in variables.

(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion

(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion

(c) Assertion is false but Reason is true

(d) Assertion is true but Reason is false

5. Calculate the correlation Coefficient between X and Y and comment on their **3**
Relationship:

X	1	3	4	5	7	8
Y	2	6	8	10	14	16

6. ***"The degree of closeness of scatter points and their overall direction gives us an idea of the nature of the relationship between variables".*** Do you agree with the given statement? Give valid reason in support of your answer. **3**

OR

Why does rank correlation Coefficient differ from Pearsonian correlation coefficient?

7. Compute Karl Pearson's coefficient of correlation from the following data by direct method: **4**

X	10	12	11	13	12	14	9	12	14	13
Y	7	9	12	9	13	8	10	12	7	13

OR

In a dance competition, two judges accorded following ranks to the 10 participants.

Judge X	9	3	4	2	8	7	6	5	10	1
Judge Y	1	10	2	8	3	9	4	6	5	7

8. Calculate coefficient of rank correlation from the following data: **6**

X	48	33	40	9	16	16	65	24	16	27
Y	13	13	24	6	15	4	20	9	6	19

OR

If the points in a scatter diagram tend to cluster in a straight line which makes an angle of 30° with the x-axis, what would you say about the strength of association between X and Y?

SECTION B- MICRO ECONOMICS

9. 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 these

10. There are two statements given below, marked as statement I and statement II. Read the statements and choose the correct option. **1**

Statement I : Supply function refers to the functional relationship between supply of a commodity and its determining factors.

Statement II: The supply function is used to measure price elasticity demand for goods and services.

Alternatives:

(a) St. I is true and St. II is false
(b) St. I is false and St. II is true
(c) Both the statements are true
(d) Both the statements are false

11. Which of the following is not an essential condition of pure competition? **1**

(a) Large number of buyers and sellers
(b) Homogeneous product
(c) Freedom of entry and exit
(d) Absence of transport cost

12. Read the following statements-Assertion(A) and Reason(R). **1**
Choose one of the correct alternatives given below:
Assertion(A): Charging lower price for additional units ensures higher revenue.

(a) Reason(R): As price falls, demand for goods by consumers increases.
Both Assertion and Reason are true and Reason is the correct explanation
(b) of Assertion
Both Assertion and Reason are true but Reason is not the correct
(c) explanation of Assertion
(d) Assertion is false but Reason is true
Assertion is true but Reason is false

13. Explain the conditions of a producer equilibrium in terms of marginal cost and marginal revenue. Use diagram. **3**

14. Complete the following table **3**

Output	**Total Variable Cost**	**Average Variable Cost**	**Marginal Cost**
1	10	____	____
2	____	8	6
3	27	____	____
4	____	10	13

OR

Calculate total cost and average variable cost of a firm at each given level of output from its cost schedule given below:

Output	1	2	3	4	5	6
Average Fixed Cost	60	30	20	15	12	10
Marginal Cost	32	30	28	30	35	43

15. A firm earns a revenue of rupees 50 when the market price of a good is rupees 10. The market price increases to rupees 15 and the firm now on a revenue of rupees 150. What is the price elasticity of the firms supply curve? **4**

OR

The market price of a good changes from rupees 5 to rupees 20. As a result, the quantity supplied by a firm increases by 15 units. The price elasticity of firm's supply curve is 0.5. Find the initial and final output levels of the firm.

16. **Read the passage given below and answer the questions that are followed:**

A price floor is the lowest legal price that can be paid in a market for goods and services, labour, or financial capital. Perhaps, the best known example of a price floor is the minimum wage, which is based on the normative view that someone working full night ought to be able to afford a basic standard of living.

(a) Define price floor? What is the common purpose of fixation of floor price by the government? Explain any one likely consequence of this nature of intervention by the government. **3**

(b) Discuss ***" surplus amount of production as a direct consequence of price flooring"*** **3**

==========

Name: _____ Sec: ____ Roll No.: ____

CODE: B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
ECONOMICS(030)
CLASS : XI

Time: 1 ½ Hours **Maximum Marks: 40**

==========

General Instructions :

(i)This question paper contains two sections:
Section A- Statistics for Economics
Section B- Micro Economics
(ii) This paper contains 8 multiple choice questions type questions of one mark each.
(iii) This paper contains 4 short answer questions type questions of 3 marks each to be answered in 60 to 80 words.
(iv)This paper contains one case based and 1question of 4 marks.
(v) This paper contains 2 long answer question type questions of 6 marks each to be answer in 100 to 150 words.

==========

SECTION -A: STATISTICS FOR ECONOMICS

1. Karl Pearson's coefficient of correlation indicates the_____ and also the degree of relationship between the two variables. **1**

(a) Direction
(b) Relation
(c) Interpretation
(d) None of these

2. Based upon the given data, identify the degree of correlation. **1**

X	1	2	5	7	9
Y	44	34	24	14	4

(a) Perfect positive correlation
(b) Perfect negative correlation
(c) Positive correlation
(d) Negative correlation

3. Read the following statement I and II and choose the correct alternatives: **1**

Statement I: Negative correlation ranges from minus infinity to zero.

Statement II: In case of multiple correlation, there are more than one independent variables.

(a) Statement I is true and Statement II is false.
(b) Statement II is true and Statement I is false.
(c) Both statements are true
(d) Both statements are false.

4. Read the following statements-Assertion(A) and Reason(R). **1**

Choose one of the correct alternatives given below:

Assertion(A): Correlation analysis facilitates understanding of economic behaviour.

Reason(R): Correlation facilitates the decision making in the business

(a) world.
Both Assertion and Reason are true and Reason is the correct explanation
(b) of Assertion
Both Assertion and Reason are true but Reason is not the correct
(c) explanation of Assertion
(d) Assertion is false but Reason is true
Assertion is true but Reason is false

5. Calculate Karl Pearson's coefficient of correlation from the following data: **3**

Marks in Economics	4	6	8	10	12
Marks in English	6	8	10	12	14

6. The value of coefficient of correlation isaffected by the change of origin and change of scale. Explain. **3**

OR

An economist finds negative relation between price of petrol and its demand. When value from such study is brought to front, which will guide the economy to find solution?

7. Using the data given below, find coefficient of correlation by Karl Pearson's method (Use Short-Cut method) **4**

X	50	54	56	58	59	60	61	62	65	75
Y	20	22	24	30	32	36	38	40	44	54

OR

Calculate the rank coefficient of correlation from the following data

X	25	45	35	40	15	19	35	42
Y	55	60	30	35	40	42	36	48

8. Marks obtained in Maths and Economics obtained by 6 students are given below. Calculate rank coefficient of correlation **6**

Students	A	B	C	D	E	F
Marks in Maths	85	60	55	65	75	90
Marks in Eco.	60	48	49	50	55	62

OR

"Scatter diagram studies correlation between two variables but it does not measure the precise extent of correlation." In the context of above statement, explain the advantages and disadvantages of scatter diagram.

SECTION B- MICRO ECONOMICS

9. If the total product of 5 labours is 50 units of output and total product of 6 labours is 66 units of output, find average product of 6^{th} unit of labour. **1**

Alternatives

(a) 10 units of output
(b) 11 units of output
(c) 50 units of output
(d) 16 units of output

10. There are two statements given below, marked as statement I and statement II. Read the statements and choose the correct option. **1**

Statement I : Greater slope of supply curve leads to higher elasticity of supply.

Statement II: Law of supply does not gives any information regarding the magnitude of change in supply.

(a) **Alternatives:**
(b) St. I is true and St. II is false
(c) St. I is false and St. II is true
(d) Both the statements are true
Both the statements are false

11. In perfect competition, as the firm is a price taker, the___ curve is a horizontal straight line. **1**

(a) Marginal cost
(b) Total cost
(c) Total revenue
(d) Marginal revenue

12. Read the following statements-Assertion(A) and Reason(R). **1**
Choose one of the correct alternatives given below:
Assertion(A): A producer always prefers producing above the midpoint of average revenue curve.
Reason(R): Above the midpoint of downward sloping demand curve, elasticity of demand is greater than 1

(a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion
(b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion
(c) Assertion is false but Reason is true
(d) Assertion is true but Reason is false

13. Complete the following table: **3**

Price	Output	Total Revenue	Marginal Revenue
7	__	7	__
__	2	10	__
__	3	__	-1
1	__	__	-5

14. Calculate average variable cost at each level of output: **3**

Output	Marginal Cost
1	24
2	20
3	16
4	12
5	18
6	30

OR

An individual is both the owner and the manager of shop taken on rent. Identify implicit cost and explicit cost from this information.

15. At the market price of rupees 10, a firm supplies 4 units of output. The market price increases to rupees 30. The price elasticity of the firm's supply is 1.25. what quantity will the firm supply at the new price? **4**

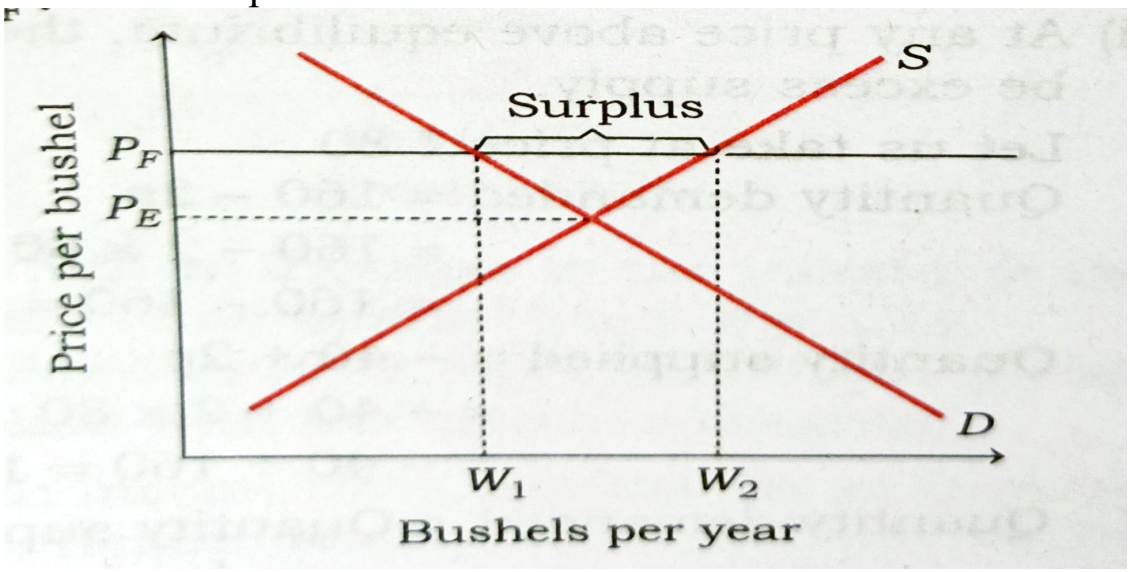
OR

Commodities X and Y have equal price elasticity of supply. The supply of X rises from 400 units to 500 units due to a 20% rise in its price. Calculate the percentage fall in supply of Y if it's price falls by 8%.

16. Read the passage given below and answer the questions that are followed:

Government seek to assist farmers by setting price floors in agricultural markets. A minimum allowable price set above the equilibrium price is a price floor. With a price floor, the government forbids a price below the minimum. A price floor that is set above the equilibrium price create a surplus.

Figure given below "price floors in wheat markets" shows the market for wheat. Suppose the government sets the price of wheat at (PF). Notice that PF is above the equilibrium price of PF. At PF, we read over to the demand curve to find that the quantity of wheat that buyers will be willing and able to purchase is W1 bushels. Reading over to the supply curve, we find that sellers will offer W2 bushels of wheat at the price floor of PF. Because PF is above the equilibrium price, there is a surplus of wheat equal to (W2-W1) bushels. The surplus persist because the government does not allow the price to fall.



(a) Based upon the above case, explain the consequences of the action taken by the government. **3**

(b) In the case shown above, there is a surplus. A surplus lead to fall in market price due to invisible hands of market forces.
What actions government should take to ensure that the market price doesn't fall below to the original level? **3**

==========

Name: _____ Sec: ____ Roll No.: ____

CODE: A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
GEOGRAPHY
CLASS : XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

i. Question number 1 to 8 are MCQ type questions.
ii. Question 9 is Source based question.
iii. Question number 10 to 12 are SA type questions (80-100 words).
iv. Question number 13 and 16 are Long Answer based questions (120-150 words).

==========

1 The transfer of heat through horizontal movement of air is called 1

a. Conduction
b. Convection
c. Advection
d. Terrestrial Radiation

2 **Match column I with column II and choose the correct option.** 1

COLUMN-I	**COLUMN-II**
A. Cold Front	i. Front remain stationary
B. Warm Front	ii. Airmass lifted above the land surface
C. Stationary Front	iii. Warm air mass moves towards the cold air mass
D. Occluded Front	iv. Cold air mass moves towards the warm air mass

OPTIONS

a. A-iv, B-iii, C-ii, D-i
b. A-i, B-iii, C-ii, D-iv
c. A-iii, B-iv, C-i, D-ii
d. A-iv, B-iii, C-i, D-ii

3 Which type of cloud have the following features? 1

i. Look like cotton wool
ii. They have a flat base
iii. They are generally formed at a height 4000-7000m
iv. They are scattered

OPTIONS

a. Cirrus
b. Cumulus
c. Stratus
d. Nimbus

4 When the water vapour directly condenses into solid form it is known as 1

a. Condensation
b. Sublimation
c. Vapourisation
d. Evaporation

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

ASSERTION (A): The temperature of surface water decreases from the equator towards the poles
REASON(R): The amount of insolation decreases polewards.

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

6 Which of the following statement is incorrect 1

a. In neap tide the sun, the moon, and the earth are in a straight line.
b. The earth is closest to the sun around 3rd January
c. The earth is farthest from the sun around 4th July
d. The time between the high tide and low tide when the water level is falling is called the ebb.

7 **Consider the following statements and choose the correct answer with the help of given options**. 1

Statement I: The Himalayan ranges show a succession of vegetation from the tropical to the tundra.
Statement II: Tussocky grass are mainly found in littoral and swamp forest.

OPTIONS:

a. Only statement I is correct.
b. Only statement II is correct.
c. Both the statements are correct and statement II correctly explains statement I.
d. Both the statements are true but not related with each other

8. A nation-wide forest conservation policy was adopted by the Government of India in the year 1

a. 1852
b. 1862
c. 1962
d. 1952

9 **Read the given passage carefully and answer the questions that follow:**

Waves are actually the energy, not the water as such, which moves across the ocean surface. Water particles only travel in a small circle as a wave passes. Wind provides energy to the waves. Wind causes waves to travel in the ocean and the energy is released on shorelines. The motion of the surface water seldom affects the stagnant deep bottom water of the oceans. As a wave approaches the beach, it slows down. This is due to the friction occurring between the dynamic water and the sea floor. And, when the depth of water is less than half the wavelength of the wave, the wave breaks. The largest waves are found in the open oceans. Waves continue to grow larger as they move and absorb energy from the wind.

i **What is the condition in which wave breaks?** 1
ii **What is wavelength?** 1
iii **From where waves acquire energy?** 1

10 Explain the land and sea breezes. 3
11 Describe the vertical temperature structure of oceans over middle and low latitudes. 3
12 How can people's participation be effective in conserving forests and wildlife? 3
13 What are the factors that control the temperature of air? Explain. 5
14 What are the different forms of condensation? Explain. 5
15 What is salinity of sea water? What are the factors affecting ocean salinity? 5
16 Mention the important reasons of the declining of wildlife. 5

==========

Name: _____ Sec: ____ Roll No.: ____

CODE : B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST– 3 : (2023-24)
GEOGRAPHY
CLASS – XI

Time:$1^{1/2}$ Hours **Maximum Marks : 40**

==========

Q1) Make correct pairs from the following two columns? 1

(i)Insolation	(A)The difference between the mean temperature of the warmest and the coldest month.
(ii)Albedo	(B)The lines joining the places of equal temperature.
(iii)Isotherm	(C)The incoming solar radiation.
(iv)Annual range	(D)The percentage of visible light reflected by an object.

(a)	(i-A)	(ii-C)	(iii-D)	(iv-B)
(b)	(i-D)	(ii-B)	(iii-C)	(iv-A)
(c)	(i-C)	(ii-D)	(iii-B)	(iv-A)
(d)	(i-B)	(ii-D)	(iii-A)	(iv-C)

Q2) Reason-During the day the land heats up faster and becomes warmer than the sea. 1
Assertion-Thus,pressure gradient from sea to land is created and wind blows from the sea to the land as the sea breeze
OPTIONS-
a)both Assertion (A) and Reasoning (R) are true and Reason (R) is the correct explanation of Assertion (A)
b)Both Assertion (A) and Reason (R) are true and 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

Q3) Which one of the following process is responsible for transforming liquid into vapour? 1

(a)Condensation (b)Evaporation (c)Transpiration (d)Precipitation

Q4) The chief characteristic of this sort of rain is that the windward slopes receive greater rainfall,Name the type of rainfall? 1

(a)cyclonic (b)frontal (c)convectional (d)orographic

Q5) Which one of the following is the smallest ocean: 1

(a)Indian Ocean (b)Arctic Ocean (c)Atlantic Ocean (d)Pacific Ocean

Q6) Upward and downward movement of ocean water is known as the: 1

(a)tide (b)current (c)wave (d)none of the above

Q7) Which biosphere reserve is located in the swampy delta of the river Ganga in West Bengal? 1

(a)Nilgiri (b) Sunderbans (c)Nanda Devi (d)Manas

Q8) Identify the incorrect pair :- 1

A)Rosewood	1)Tropical Evergreen forest
B)Teak	2) Moist deciduous forest
C)Khair	3)Tropical thorn forest
D)Pines	4)Swamp forest

Q9) Read the passage and answer the questions that follow. 3

The ocean currents may be classified based on their depth as surface currents and deep water currents: (i)surface currents constitute about 10 per cent of all the water in the oceans,these waters are the upper 400m of the ocean,(ii)deep water currents make up the other 90 per cent of the ocean water.These waters move around the ocean basins due to variations in the density and gravity.

(i)What are surface currents?
(ii)What are deep water currents?
(iii)On what basis are ocean currents classified?

Q10)	Enlist the forces affecting the velocity and direction of the wind?	3
Q11)	What are ocean deeps or ocean trenches?	3
Q12)	Give a brief account on social forestry.	3
Q13)	Explain how the rotation of the earth on its axis and the angle of inclination of the earth affects the insolation received on the surface of the earth?	5
Q14)	What is condensation?Enlist the conditions for condensation to take place?	5
Q15)	Describe the factors which affect the distribution of temperature of ocean water.	5
Q16)	Enlist the characteristic features of Tropical Evergreen forests or Tropical Deciduous forests?	5

==========

Name: _____ Sec: ____ Roll No.: ____

CODE: A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
INFORMATION TECHNOLOGY
CLASS – XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

All questions are compulsory.

==========

SECTION-A: OBJECTIVE TYPE QUESTIONS

1. **Answer The Following Questions on Employability Skills (1 x 6 = 06 marks)**

i. What is the shortcut key to create a new word document? 1

ii. What is problem-solving? 1

iii. Undo, Cut, Copy and Paste are ____ commands. 1

a. View b. Edit c. File d. none

iv. ____ means using new methods or original ideas. 1

a. Innovativeness b. Talent

c. Needs d. none

v. ____ is an exercise that entrepreneurs do to understand whether there is a market for their product or not. 1

vi. Click ____ option to reject all the changes in OpenOffice Writer. 1

2. **Answer the following 4 questions (1 x 4 = 04 marks)**

i. What is '**fall through**' while using Switch statement? 1

ii. A ____ is a user defined data type from which objects are created with attributes and methods. 1

a. Class b. Variable c. Both (a) & (b) d. none

iii. What is the function of **TELNET**? 1

iv. **IRTF** stands for: 1

a. Internal Research Task Force
b. Internet Routing Task Force
c. Internet Research Task Force
d. Internet Research Terminal Force

SECTION-B: SUBJECTIVE TYPE QUESTIONS

Answer the following 6 questions on Employability Skills (2 x 6 = 12 marks)

3.	What do you understand by Merging of Cells of a table? Write down the steps involved in Merging of Cells of a table.	2
4.	What do you understand by: i. Served Needs ii. Partially- served Needs	2
5.	What do you understand by Unordered list? Give an example to support your answer.	2
6.	Differentiate between Creativity and Innovation.	2
7.	Mention any two types of Business Activities.	2
8.	What do you understand by: i. Sentence case ii. Lowercase	2

Answer the following 2 questions (2 x 2 = 04 marks)

9.	How are Getters different from Setters?	2
10.	Name and describe the two kinds of digital footprints.	2

Answer the following 2 questions (3 x 2 = 06 marks)

11.	These days we have three types of VoIP services. Name them.	3
12.	Name and describe the three types of Logical operators in Java. Also, Give their symbols to support your answer.	3

Answer the following 2 questions (4 x 2 = 08 marks)

13.	Design a form in Java NetBeans to check whether a person is eligible to vote or not. Also, write the program code for the 'Check Eligibility To Vote' button.	4
14.	Name the various layers of TCP/IP protocol.	4

==========

Name: _____ Sec: ____ Roll No.: ____

CODE : B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST-3 : [2023-2024]
INFORMATION TECHNOLOGY
CLASS – XI

Time: 1 ½ Hrs. **Maximum Marks: 40**

==========

General Instructions:

All questions are compulsory.

==========

SECTION-A: OBJECTIVE TYPE QUESTIONS

1. **Answer The Following Questions on Employability Skills (1 x 6 = 06 marks)**

i. Write any two examples of word processors. 1

ii. What do you understand by Attitude? 1

iii. Which menu option has the commands Save, Print and close? 1

a. Insert b. Tools c. File d. none

iv. Business is a (an) ____ activity. 1

a. social b. economic c. hazardous d. none

v. A ____ is a detailed plan of what an entrepreneur wants to achieve through the business and how it will be achieved. 1

vi. Click ____ option to accept all the changes in OpenOffice Writer. 1

2. **Answer the following 4 questions (1 x 4 = 04 marks)**

i. What do you understand by 'Inheritance'? 1

ii. In Java, the primitive data types include: 1

a. char b. int c. Both (a) & (b) d. none

iii. What is **MAC address?** 1

iv. IETF stands for: 1

a. Internal Engineering Task Force
b. Internet Engineering Task Force
c. Internet Engineering Think Force
d. Internet Engine Think Force

SECTION-B: SUBJECTIVE TYPE QUESTIONS

Answer the following 6 questions on Employability Skills (2 x 6 = 12 marks)

3.	What do you understand by Splitting the Cells of a table? Write down the steps involved in Splitting the Cells of a table.	2
4.	What do you understand by: i. Unserved and Known Needs ii. Unknown Needs	2
5.	What do you understand by Ordered list? Give an example to support your answer.	2
6.	Mention any two types of Business Activities.	2
7.	Differentiate between Creativity and Innovation.	2
8.	What do you understand by: i. Uppercase ii. Capitalize Every Word	2

Answer the following 2 questions (2 x 2 = 04 marks)

9.	What is the purpose of JOptionPane Class?	2
10.	Explain: (a) Bridge, & (b) Hub	2

Answer the following 2 questions (3 x 2 = 06 marks)

11.	Mention any six different types of viruses.	3
12.	Differentiate between Public, Private and Protected access specifiers.	3

Answer the following 2 questions (4 x 2 = 08 marks)

13.	Design a form in Java NetBeans to check whether a number is even or odd. Also, write the program code for the 'Check' button.	4
14.	i. Name and expand the two protocols used in the Transport layer. ii. Expand the protocols: (a) SMTP and (b) DHCP	4

==========

Name: _____ Sec: ____ Roll No.: ____

CODE :A

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST – 3 : [2023 – 2024]
PHYSICAL EDUCATION
CLASS – XI

Time: $1\frac{1}{2}$ Hrs. **Maximum Marks: 40**

==========

General Instructions:

1. There are 17 questions in the question papers. All questions are compulsory.
2. Question no 1 to 6 which has 6 MCQS. Each question carries 1 mark.
3. Question no 7 to 10 are very short answer type questions. Each question carries 2 marks. (30 to 50 words)
4. Question No 11 to 14 are short answer type questions. Each question carries 3 marks. (80 to 100 words)
5. Question No 15 is a value based question, carry 4 mark
6. Question No 16 to 17 are long answer type questions. Each question carries 5 marks. (100 to 150 words)

==========

SECTION - A

Q.1 Test is a _____ 1
a) Tool b) Instrument c) Question paper d) All of these

Q.2 Which one of the following body type person is good for weight lifting? 1
a) Endomorph b) Ectomorph
c) Mesomorph d) None of the above

Q.3 Synovial Joint is also known as _____ 1
a) Slightly movable joint b) Freely movable joint
c) Both (a) and (b) d) None of these

Q.4 Who is known as "Father of Kinesiology"? 1
a) J. Rasch b) Nicolas Dally
c) Aristotle d) R. K Burke

Q.5	Match of the following: A. Plate Tapping of boy's — 1. Upper body strength endurance B. Push Up — 2. Speed and coordination of limb movement C. Partial Curl Up — 3. Upper body strength D. Modified Push Up — 4. Abdominal strength Codes: a) A 2, B 1, C 4, D 3 c) A 2, B 3, C 1, D 4 b) A 1, B 3, C 2, D 4 d) A 2, B 3, C 4, D 1	1
Q.6	Give below are the statement labeled as Assertion (A) and Reason (R) Assertion (A): In adolescence rapid increase in height, other changes in body proportions occur. Reason (R): Adolescence is the transitional period between childhood and adulthood. In context of above 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, 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	1

SECTION -B

Q.7	What is test measurement and evaluation?	2
Q.8	What are the functions of larynx (voice box)?	2
Q.9	Write down two importances of Biomechanics in sports?	2
Q.10	What is Sports Psychology? OR Define Psychology.	2

SECTION - C

Q.11	Discuss any three problems at adolescence stage.	3
Q.12	Define Kinesiology and Biomechanics.	3
Q.13	What is cardiac cycle?	3
Q.14.	What is Anthropometric test? OR Write down classification by William Herbert Sheldon body type.	3

SECTION -D

Q.15. On the basis of the picture below, answer the following questions. 4*1

a) Newton's which law is applicable in this sport?
b) List any two other sports which apply the above law.
c) Write down the another name of first law.
d) What is the definition of Newton's third law.

SECTION- E

Q.16. Elucidate the Harvard Step test to measure the cardio-vascular fitness. 5

Q.17. Explain the circulatory system and its functions. 5

OR

Discuss about the various organs of the respiratory system and their functions.

==========

Name: _____ Sec: ____ Roll No.: ____

CODE : B

BURNPUR RIVERSIDE SCHOOL, BURNPUR
PERIODIC TEST – 3 : [2023 – 2024]
PHYSICAL EDUCATION
CLASS – XI

Time: $1\frac{1}{2}$ Hrs. Maximum Marks: 40

==========

GENERAL INSTRUCTIONS:-

1) *The question paper consists of 5 sections and 17 questions.*
2) *Section-A consists of questions 1-6 carrying 1mark each and is multiple choice questions. All are compulsory.*
3) *Section-B consists of questions 7-10 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. There is internal choice available.*
4) *Section-C consists of questions 11-14 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 1 carrying 4 marks each and are case studies. There is internal choice available.*
6) *Section-E consists of questions 16& 17 carrying 5 marks each and long answer types and should not exceed 200-300 words. There is internal choice available.*

==========

SECTION-A

Q.1. What is the range of healthy body mass index according to WHO? 1

a) 18.5-24.9
b) 25-29.9
c) 30-34.9
d) 35-39.9

Q.2. **Given below are the two statements labelled Assertion (A) and Reason (R).** 1

Assertion (A):- The body mass index is also known as Quetelet Index because it was invented by AdolpheQuetelet.

Reason (R):- With the help of BMI, it is to know whether one is Underweight, normal weight, overweight or in the category of obesity.

In the context of the above two statements which one of the following is correct?

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.

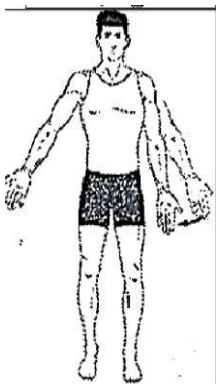
Q.3. Out of the following, which is the property of muscles? 1

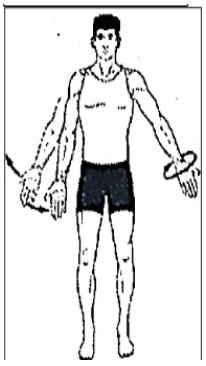
a) Excitability
b) Contractility
c) Elasticity
d) All of the above

Q.4. Identify the picture:- 1

Which of the following depicts the Adduction movement?

a) b) c)





d) All of these.

Q.5. The stage of infancy is for the age group…. 1

a) 0-2 years
b) 3-5 years
c) 6-8 years
d) 9-12 years

Q.6 Which one of the following is not a psychological attribute? 1

a) Attention
b) Motivation
c) Resilience
d) Mental toughness

SECTION-B

Q.7. Discuss the procedure of Partial curl-up test. 2

Q.8. Discuss the functions of muscles. 2

Q.9. What do you mean by kinetics and kinematics? 2

Q.10. Discuss any two factors that help in building resilience. 2

OR

What do you mean by Flexion and Extension?

SECTION-C

Q.11 What do you mean by Test, Measurement and Evaluation? 3

Q.12. Elaborate the properties of muscles. 3

Q.13. What is Biomechanics? What are the importance of biomechanics in sports and physical education? 3

Q.14. Elaborate the developmental characteristics during infancy. 3

OR

Explain in detail about the management of problems faced by adolescents.

Q.15. **SECTION-D** 4×1=4

Read the given case study carefully and answer the questions that follow:-

In sports, Biomechanics and Kinesiology has a crucial role both in injury prevention and enhancement of performance and Plane shows the human body in its erect form, the hands spread to the sides, palm facing forward, legs together with the knees straight and feet resting on the ground with the toes pointed straight.

Based on this case answer the following questions:-

i) Biomechanics helps in which of the following?
a) In improving technique
b) In improving designs of sports equipment
c) In improving performance
d) All of these

ii) Which is called the study of human body?
a) Anatomy
b) Kinesiology
c) Biomechanics
d) Physiology

iii) A decrease in the angle between the femur and the tibia because of the movement of the knee is an example of what type of movement?
a) Flexion
b) Extension
c) Abduction
d) Adduction

iv) An imaginary, flat surface passing through the body organ is called……..

a) Axis
b) Plane
c) Abduction
d) Adduction

SECTION-E

Q.16. Test, Measurements and Evaluation are not only important in physical education, but are also important in the field of education, health, science, psychology. Etc. Explain in detail. 5

Q.17. What are the classification of bones in the human body? Enlist them and explain in brief. 5

OR

Write about the types of joints and explain them in brief.

==========