

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

SET - A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST – I [2025-26]**  
**ENGLISH CORE**  
**Class – XII**

**Time: 1 ½ Hours**

**Maximum Marks: 40**

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***GENERAL INSTRUCTIONS:***

1. *The Question Paper contains questions from LITERATURE and WRITING sections.*
  2. *Attempt questions based on specific instructions for each part.*
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1. **Read the extract given below and answer the questions that follow:** 1X 3

*It would be an exotic moment  
without rush, without engines,  
we would all be together  
in a sudden strangeness.*

- (a) What do 'rush' and 'engines' characterize?
- i. Frenzied human and mechanical activities.
  - ii. Life is a race.
  - iii. Human advancements and achievements.
  - iv. Human desires and wishes.
- (b) Why do you think the poet employs words like "exotic" and

“strangeness”?

- i. To highlight the importance of everyone being together suddenly for once.
- ii. To emphasize the frantic activity and chaos that usually envelops human life.
- iii. To indicate the unfamiliarity of a sudden moment without rush or without engines.
- iv. To direct us towards keeping quiet and how we would all be together in that silence.

(c) How would the togetherness be achieved?

2. **Read the extract given below and answer the questions that follow:** 1X 3

*“I will learn to drive a car,” he answers, looking straight into my eyes. His dream looms like a mirage amidst the dust of streets that fill his town Firozabad, famous for its bangles. Every other family in Firozabad is engaged in making bangles.*

- (a) The simile ‘*dream looms like a mirage amidst the dust of streets*’ indicates that his dream was -
- i. a reality, that yet seemed distant.
  - ii. lost in the sea of dust.
  - iii. illusory and indistinct.

iv. hanging in the dusty air.

(b) The statement, “*I will learn to drive a car,*” expresses Mukesh’s \_\_\_\_\_ . **(Complete the statement)**

(c) How are bangle making and Firozabad related?

3. **Read the extract given below and answer the questions that follow:** 1X 4

*But I say there are three, because I’ve been on the third level of the Grand Central Station. Yes, I’ve taken the obvious step: I talked to a psychiatrist friend of mine, among others. I told him about the third level at Grand Central Station, and he said it was a waking dream wish fulfilment.*

(a) ‘*But I say there are three...*’ What is being contradicted?

- i. The Grand Central Station does not exist.
- ii. The station Presidents say that there are two levels but the narrator confirms that there are three levels at the station.
- iii. The narrator had been to the third level of the station.
- iv. All of the above

(b) “*...waking dream wish fulfilment...*” refers to –

- i. The haunting dreams of Charley
- ii. Charley’s dreams being realized.
- iii. The unconscious of Charley that seeks realization

iv. Charley's absurdity.

(c) 'Yes, I've taken the obvious step.' The step taken was \_\_\_\_\_ . **(Complete the statement)**

(d) Why was the Grand Central the centre of the conversation?

4. **Attempt the following questions in 40-50 words each.** 2 X 5

(a) Why has the poet brought in the image of the merry children 'spilling out of their homes'?

(b) What does the line, 'Therefore...are we wreathing/ A flowery band to bind us to the earth' suggest to you?

(c) What does Franz mean when he says: "Will they make them sing in German, even the pigeons"?

(d) Why was Douglas determined to get over his fear of water?

(e) Why did the Maharaja decide to get married? (*The Tiger King*)

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

(a) *Keeping quiet* dispels gloom and keeps life happy. Discuss the relevance of the statement with reference to the poem, 'Keeping Quiet'.

(b) *Desire, determination and diligence lead to success.* Explain the value of these qualities in the light of Douglas' experience in "Deep Water".

(c) Where did Charley find the 'third level'? Do you think that it was a medium of escape for him? Justify your answer with reasons.

6. You are the Academic Coordinator of Happy Learning School, 4 Bardhaman. Draft a **notice** in about 50 words informing students of Classes X and XII of Special Classes to be held during the summer recess between 17 and 23 May, 2025. Mention relevant details.
7. Siddharta Dey of Kolkata is worried that despite a legal ban on 6 trafficking of drugs, a large number of school-going teenage children are becoming drug addicts. Write a letter to the editor of a local daily highlighting the harmful effects of drug addiction and suggesting steps to curb these. (120 -150 words)

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

SET:B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST I : [2025-2026]**  
**ENGLISH CORE**  
**CLASS: XII**

**Time Allowed : 1 ½ Hrs**

**Maximum Marks : 40**

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**GENERAL INSTRUCTIONS:**

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

**1. Read the poem extract and answer the questions that follow. 1x3**

If we were not so single minded  
about keeping our lives moving,  
and for once could do nothing,  
perhaps a huge silence  
might interrupt this sadness  
of never understanding ourselves  
and of threatening ourselves with death.

- i. What do you think is the mood of poet in the above extract?
  - a. Gloomy, cynical
  - b. Reflective, inspired
  - c. Introspective, aware
  - d. Critical, demotivated
  
- ii. What might the 'huge silence' signify?
  - a. Melancholy
  - b. Understanding
  - c. Discomfort
  - d. Flexibility

iii. What is the 'sadness' that the poet refers to?

**2. Read the extract given below and answer the questions that follow. 1x3**

Mukesh insists on being his own master. "I will be a motor mechanic," he announces.

"Do you know anything about cars?" I ask.

"I will learn to drive a car," he answers, looking straight into my eyes. His dream looms like a mirage amidst the dust of streets that fill his town Firozabad, famous for its bangles.

- i. Through the expression, "..... looking straight into my eyes," the narrator is trying to convey
  - a. Mukesh displayed no fear in his eyes.
  - b. Mukesh was not feeling shy while speaking to the narrator.
  - c. Mukesh was conversing in a friendly manner with the narrator.
  - d. Mukesh displayed courage and determination in expressing his opinion
- ii. Mention any two qualities of Mukesh that can be drawn from the line "Mukesh insists on being his own master"
- iii. Why are his dreams compared to a mirage?

**3. Read the extract and answer the questions that follow. 1x4**

But that's the reason, he said, and my friends all agreed. Everything points to it, they claimed. My stamp collecting, for example; that's a 'temporary refuge from reality.' Well, may be, but my grandfather didn't need any refuge from reality; things were pretty nice and peaceful in his day, from all I hear, and he started my collection. It's a nice collection too, blocks of four of practically every US issue, first day covers, and so on. President Roosevelt collected stamps too, you know.

- i What does 'temporary refuge' mean?
  - a. a shelter away from home
  - b. a temporary escape from reality
  - c. an escape from one's responsibilities
  - d. an escape from being caught by the police
  
- ii Hobby of stamp collection is known as
  - a. Philately
  - b. Philology
  - c. Petrology
  - d. Philanthropy
  
- iii Explain: 'But that's the reason'
  
- iv What is a 'first-day cover'?

**4. Answer the following questions in 40-50 words each.**

**5x2**

- i Throw light on the significance of the poet's parting words and her smile in the poem 'My Mother at Sixty-Six'.
  
- ii What, according to John Keats, are the things that have a sublimating effect on the minds of human beings?
  
- iii Who were sitting on the back benches during M. Hamel's last lesson? Why?
  
- iv How did Douglas' misadventure at the Y.M.C.A. pool affect his later life?
  
- v Which problem did the Maharaja face when he had killed seventy tigers? How did he solve it?

5. Answer ANY TWO of the three questions given below in 120-150 words each. 5x2

- i How, according to the poet Pablo Neruda, can keeping quiet change our attitude towards life?
- ii How did the swimming instructor build a swimmer out of Douglas?
- iii Describe briefly the scene at the third level of Grand Central as seen (or seemed to be seen) by Charley.

6. You are Sanjana / Sanjay, Secretary, West End Co-operative Group Housing Society, Vasundhara, Mumbai. Write a notice, in not more than 50 words, requesting the members to attend a meeting of the society to discuss the problem of irregular supply of drinking water to the residents. 4

7. You are Sujata / Sujoy of 520, Ashok Nagar, Hyderabad. You recently visited Shimla with your family. You were perturbed to see tourists throwing empty plastic water bottles and cans all over the place. Write a letter to the Editor of a national daily, in about 120-150 words, expressing your concern and offering suggestions to improve the situation. 6

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No: \_\_\_\_\_  
SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I: [2025 – 26]**  
**PHYSICS**  
**CLASS: XII**

Time: 1 ½ Hrs.

Maximum Marks: 40

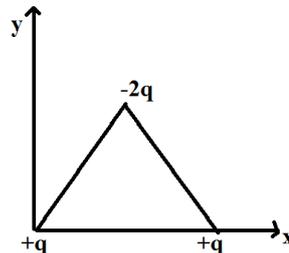
**General Instructions:**

- (1) There are 18 questions in all.
- (2) This question paper has five sections: Section A, Section B, Section C, Section D and Section E.
- (3) All the sections are compulsory.
- (4) Section A contains twelve questions, five MCQs and two Assertion Reasoning based of 1 mark each, Section B contains five questions of two marks each, Section C contains three questions of three marks each, Section D contains one case study based questions of four marks each and Section E contains two long answer question of five marks.

**SECTION : A**

1. Determine the electric dipole moment of the system of three charges placed at the vertices of an equilateral triangle of side  $l$ . 1

- (a)  $ql(\hat{i} + \hat{j})/\sqrt{2}$  (b)  $\sqrt{3}ql(\hat{i} - \hat{j})/\sqrt{2}$   
(c)  $-\sqrt{3}ql\hat{j}$  (d)  $2ql\hat{j}$



2. Four charges equal to  $-Q$  are placed at the four corners of a square of side 'a' and charge  $q$  is placed at the center. If the system is in equilibrium, the value of  $q$  is: 1

- (a)  $-Q(1+2\sqrt{2})/4$  (b)  $+Q(1+2\sqrt{2})/4$   
(c)  $-Q(1+2\sqrt{2})/2$  (d)  $+Q(1+2\sqrt{2})/2$

3. A vertical electric field of magnitude  $4.9 \times 10^5 \text{ N/C}$  just prevents a water droplet of mass  $0.1 \text{ g}$  from falling. The value of the charge on the droplet will be ( $g=9.8 \text{ m/s}^2$ ) 1  
 (a)  $1.6 \times 10^{-9} \text{ C}$  (b)  $2 \times 10^{-9} \text{ C}$   
 (c)  $3.2 \times 10^{-9} \text{ C}$  (d)  $0.5 \times 10^{-9} \text{ C}$
4. Three charges  $+2q, -q$  and  $-q$  lie at vertices of an equilateral triangle. The values of  $E$  and  $V$  at the centroid of the triangle will be: 1  
 (a)  $E \neq 0, V \neq 0$  (b)  $E=0, V=0$  (c)  $E \neq 0, V=0$  (d)  $E=0, V \neq 0$
5. Two insulated metallic spheres of  $3 \mu\text{F}$  and  $5 \mu\text{F}$  capacitances are connected to  $300 \text{ V}$  and  $500 \text{ V}$  respectively. The energy loss when they are connected by wire is 1  
 (a)  $0.012 \text{ J}$  (b)  $0.0375 \text{ J}$  (c)  $0.0218 \text{ J}$  (d)  $3.75 \text{ J}$

**For Questions 6 and 7, two statements are given – one labelled Assertion (A) and other labelled Reason (R). Select the correct answer to these questions from the options as given below.**

- a) If both Assertion and Reason are true and Reason is correct explanation of Assertion.**  
**b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.**  
**c) If Assertion is true but Reason is false.**  
**d) If both Assertion and Reason are false.**

6. **Assertion (A):** In a non-uniform electric field, a dipole will have translatory as well as rotatory motion 1  
**Reason (R):** In non-uniform electric field, a dipole experience a force as well as a torque.
7. **Assertion (A):** Work done in moving a charge between any two points in an uniform electric field is independent of the path followed by the charge between these points. 1  
**Reason (R):** Electrostatic forces are not conservative.

**SECTION : B**

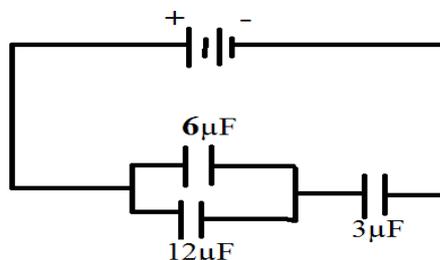
8. Three charges of equal magnitudes  $q$  are placed at the 2

vertices of an equilateral triangle of side  $l$ . How can this system of charges be in equilibrium?

9. Apply Gauss's theorem to calculate the electric field of a thin infinitely long straight line of charge with a uniform charge density  $\lambda$  C/m. 2
10. Deduce the expression for the capacitance of a parallel plate capacitor when a dielectric slab is inserted between its plates. Assume the slab thickness is less than the plate separation. 2
11. Find  $V_{ab}$  in an electric field  $\vec{E} = (2\hat{i} + 3\hat{j} + 4\hat{k})$  N/C where  $\mathbf{r}_a = (\hat{i} - 2\hat{j} + \hat{k})$  m and  $\mathbf{r}_b = (2\hat{i} + \hat{j} - 2\hat{k})$  m 2
12. When two charged capacitors having different capacities and potentials are joined together, show that there is always a loss of energy. 2

**SECTION : C**

13. A bob of simple pendulum has a mass  $m$  and carries a charge  $q$  on it. Length of the pendulum is  $l$ . There is uniform electric field  $E$  in the region. Calculate the time period of small oscillations for the pendulum about its equilibrium positions for the following cases: 3
- (a)  $E = mg/q$  acting vertically downwards
- (b)  $E = mg/q$  acting horizontally
14. In the following arrangement of capacitors the energy stored in  $6\mu\text{F}$  capacitor is  $E$ . Find: 3
- (i) energy stored in  $12\mu\text{F}$  capacitor.
- (ii) energy stored in  $3\mu\text{F}$  capacitor.
- (iii) total energy drawn from the battery.



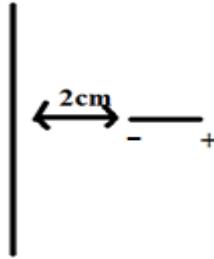
15. Derive an expression for the electric potential at any general point at a distance  $r$  from the center of a dipole. 3

## SECTION-D

### Case Study Based Questions

Read the following paragraph and answer the questions that follow.

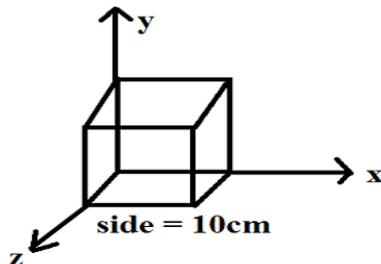
16. An electric field (sometimes called  $\vec{E}$ -field) is a physical field that surrounds electrically charged particles such as electrons. In classical electromagnetism, the electric field of a single charge (or group of charges) describes their capacity to exert attractive or repulsive forces on another charged object. 4
- An electric dipole is a system of two electric charges of equal magnitude but opposite sign, separated by a small distance. The dipole moment, a vector quantity, represents the strength and direction of the dipole and is the product of the charge magnitude and the separation distance. The electric field due to an electric dipole at a point is the net electric field resulting from the combined effects of the positive and negative charges that make up the dipole.
- (i) Two parallel infinite line charges  $+\lambda$  and  $-\lambda$  are placed with a separation of  $R$  in free space. The net electric field exactly midway between the two line charges is  
(a) zero (b)  $2\lambda/\pi\epsilon_0 R$  (c)  $\lambda/\pi\epsilon_0 R$  (d)  $\lambda/2\pi\epsilon_0 R$
- (ii) An electric dipole consists of charges  $\pm 2 \times 10^{-8}$  C separated by a distance of  $2 \times 10^{-3}$  m. If it is placed near a long line charge of linear charge density  $4 \times 10^{-4}$  C/m such that the negative charge is at a distance of 2 cm from the line charge. The force acting on the dipole will be:  
(a) 7.2N towards line charge  
(b) 6.6N away from line charge  
(c) 0.6N away from line charge  
(d) 0.6N towards line charge



- (iii) Consider a thin spherical shell of radius  $R$  consisting of uniform charge density  $\sigma$ . The electric field at a point outside the shell at a distance  $x$  from the center is proportional to  
 (a)  $1/\sigma$  (b)  $x^2$  (c)  $R$  (d)  $1/x^2$
- (iv) Two point charges of  $-4\mu\text{C}$  and  $+4\mu\text{C}$  are placed at A (1,0,4) and B(2,-1,5). The entire system is located in an electric field of  $E=0.2\hat{i}$  volt/cm. Torque on dipole is:  
 (a)  $4 \times 10^{-5} (\hat{j} + \hat{k})$  N-m (b)  $4 \times 10^{-5} (\hat{j} - \hat{k})$  N-m  
 (c)  $8 \times 10^{-5} (\hat{j} + \hat{k})$  N-m (d)  $8 \times 10^{-5} (\hat{j} - \hat{k})$  N-m

### SECTION-E

17. (a) Electric field is directed along +X axis and is given by  $E_x = (5Ax + 2B)\text{N/C}$  where A and B are constants. Taking  $A = 10\text{NC}^{-1}\text{m}^{-1}$  and  $B = 5\text{N/C}$ , calculate the electric flux and net charge enclosed within the cube. 5



- (b) Five point charges each of magnitude  $+q$  coulomb are placed on five vertices of a regular hexagon of side  $L$  meters. Find the magnitude of force on charge  $-q$  coulomb placed at the center of the hexagon.
18. (a) A small sphere of radius 'a' carrying charge  $+q$  is placed concentrically inside a large hollow conducting shell of radius  $b$  ( $b > a$ ). This outer shell has a charge  $Q$  on it. Show that if these spheres are connected by a 5

conducting wire, charges will always flow from inner to outer sphere irrespective of magnitude of two charges.

- (b) Show that the direction of electric field is normal to the equipotential surface at every point

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

SET-B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025-26]**  
**CLASS XII**  
**SUBJECT: PHYSICS**

TIME:  $1\frac{1}{2}$  Hr

Maximum Marks: 40

All questions are compulsory.

Section A contains five questions of 1 mark each.

Section B contains two questions of 1 mark each.

Section C contains five questions of 2 marks each.

Section D contains three questions of 3 marks each.

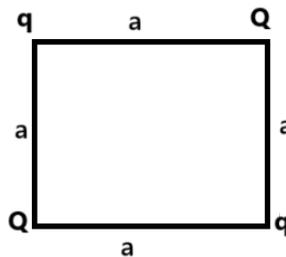
Section E contain one case based question of 4 marks.

Section F contains two question of 5 marks each.

**Section :A**

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

- Q1. A charged particle of mass  $m$  and charge  $q$  initially at rest is released in an electric field of magnitude  $E$ . Then its kinetic energy after  $t$  sec will be: 1  
(a)  $2E^2t^2/mq$  (b)  $E^2q^2t^2/2m$  (c)  $Eq^2m/2t^2$  (d)  $Eqm/2t$
- Q2. Four charges are shown in the figure are placed at corners of a square of side length  $a$ . What is the ratio of  $\frac{Q}{q}$  if net force on  $Q$  is zero. 1



- (a)  $1/2\sqrt{2}$  (b)  $-2\sqrt{2}$  (c)  $1/2$  (d)  $-1/\sqrt{2}$
- Q3. Two charges of  $2 \times 10^{-7}$  and  $3 \times 10^{-7}$  are placed 30 cm apart in air. Then force of repulsion between them is : 1  
(a)  $3 \times 10^{-3}$  N (b)  $6 \times 10^{-3}$  N (c)  $9 \times 10^{-3}$  N (d)  $12 \times 10^{-9}$  N

- Q4. The electrical field intensity at a point at a distance of 2m from a point charge of  $q$  is 4 N/C. Then the amount of work done by external agent in slowly bringing 2C charge from infinity to this point is: 1  
 (a)4J (b)8J (C) 16J (d)32J
- Q5. Two conductors A and B of capacitance  $3\mu\text{F}$  and  $6\mu\text{F}$  having charges  $6\mu\text{C}$  and  $3\mu\text{C}$ . They are kept at large distance and are connected by wire, then common potential is: 1  
 (a)1volt (b)2Volt (c)3Volt (d)1.5Volt

**SECTION: B**

**Reasoning Assertion type:**

**Instruction for question no 6 to 7.**

**Question contains two statements, Assertion and Reason. Question also has four alternative choices, only one of which is the correct answer. You have to select one of the codes (a), (b), (c) and (d) from given below.**

**(a) Assertion is correct, reason is correct; reason is a correct explanation for assertion.**

**(b) Assertion is correct, reason is correct; reason is not a correct explanation for assertion**

**(c) Assertion is correct; reason is false.**

**(d) If both Assertion and reason is false.**

- Q6. **Assertion:** In a non-uniform electric field, a dipole will have translatory as well as rotatory motion 1

**Reason:** In a non-uniform electric field, a dipole experiences a force as well as torque.

- Q7. **Assertion:** If there exists Coulomb's force of attraction between bodies, both of them may not be charged. 1

**Reason:** In Coulomb's attraction of two bodies, they are oppositely charged.

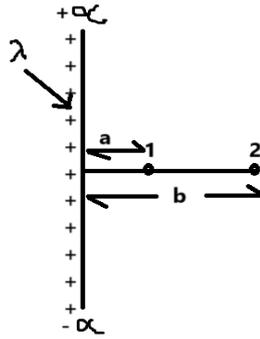
**SECTION: C**

**Each carry two marks:**

- Q8. Derive the expression of field due to dipole at any equatorial point. 2
- Q9. Derive the expression of field due to dipole at any axial point. 2

Q10. Derive the expression of capacitance of a parallel plate air capacitor. 2

Q11.



Above diagram shows a line charge having uniform charge density of  $+\lambda$ . Find the expression of Potential difference between points 1 and 2 as shown in the figure. Points 1 and 2 are at perpendicular distance of  $a$  and  $b$  from the line charge.

Q12. Two-point charges  $+Q_1$  and  $-Q_2$  are placed  $r$  distance apart. Obtain expression for amount of work done to place a third charge  $+Q_3$  at midpoint of line joining charges. 2

### SECTION: D

**Each carry three marks:**

Q13. A charged particle  $q_1$  is placed at position  $(2,-1,3)$ . Then find electrical force on another charge  $q_2$  placed at  $(0,0,0)$  3

Q14. a. Electric field is increasing along  $Z$  axis, then draw equipotential surfaces. 1

b. An isolated positive charge is placed at origin, then draw electric field lines and equipotential surfaces for the charge. 2

Q15.  $N$  small droplets of mercury of equal radii  $r$  possessing equal charge  $q$  combine to form a bigger drop of radius  $R$ . Compare charge, capacitance and potential of bigger drop with corresponding quantities of small droplets. 3

### SECTION: E

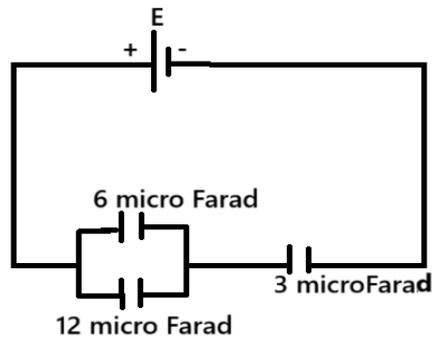
**Case Based question.**

Q16. An electrical dipole is a system consisting of two equal and opposite point charges separated by small and finite distance. The dipole moment is  $\vec{p}$  and uniform electric field is  $\vec{E}$ . 4



Q18.

5



- (a) Total capacitance of the system
  - (b) Charge on each capacitor.
  - (c) Energy stored in each capacitor.
- Take  $E=10$  volt .

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

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**PERIODIC TEST 1: [2025– 2026]**

**CHEMISTRY**

**CLASS XII**

**Time Allowed:  $1\frac{1}{2}$  Hrs.**

**Maximum Marks: 40**

***General Instructions:***

- i. There are 18 questions in all. All questions are compulsory.**
- ii. This question paper has five sections: Section - A, Section - B, Section - C, Section - D and Section - E**
- iii. Section - A contains 07 questions, 05 MCQ, s and 02 A/R of 1 mark each.**
- iv. Section - B contains 05 SA-I type questions of 2 marks each.**
- v. Section - C contains 03 SA-II type questions of 3 marks each.**
- vi. Section - D consist of 01 case-based question of 4 mark.**
- vii. Section - E consist of 02 LA - type question of 5 mark.**

**SECTION – A**

**Select and write the most appropriate option out of the four options given for each of the questions 1 -5. There is no negative mark for incorrect response.**

1. Value of Henry's constant  $K_H$  - 1
  - (a) Greater for gases with lower solubility
  - (b) Greater for gases with higher solubility
  - (c) Constant for all gases
  - (d) Not related to the solubility of gases
  
2. Which of the following does not show positive deviation from Raoult's Law? 1
  - (a) Benzene- chloroform
  - (b) Benzene- acetone
  - (c) Benzene- ethanol
  - (d) Benzene- carbon tetrachloride

3. Standard electrode potential for  $\text{Sn}^{4+}/\text{Sn}^{2+}$  couple is +0.15V and that for  $\text{Cr}^{3+}/\text{Cr}$  couple is -0.74V. These two couples in their standard state are connected to make the cell. The cell potential will be- 1
- (a) +1.19V  
(b) +0.89V  
(c) +0.18V  
(d) +1.83V
4. The role of catalyst in a chemical reaction is to change- 1
- (a) Enthalpy of reaction  
(b) Nature of products  
(c) Active energy  
(d) Equilibrium constant
5. The slope in the plot of  $\ln[R]$  vs time gives: 1
- (a) +K  
(b)  $2K/2.303$   
(c) -K  
(d)  $-K/2.303$

**Question No. 6 and 7 consists of two statements – Assertion (A) and Reason (R). Answer the questions selecting the appropriate options given below:**

- (a) Both A and R are true, and R is the correct explanation of A.  
(b) Both A and R are true, and R is not the correct explanation of A.  
(c) A is true but R is false.  
(d) A is false but R is true.
6. **Assertion(A):** When NaCl is added to water, a depression in freezing point is observed. 1  
**Reason(R):** The lowering of vapour pressure of a solution causes depression in the freezing point.
7. **Assertion(A):** Order of the reaction can be zero or fractional. 1  
**Reason(R):** We cannot determine order from balanced chemical equation.

## SECTION – B

8. (a) Blood cells are isotonic with 0.9% sodium chloride solution. What happens if we place blood cells in a solution containing 1.2% sodium chloride? 2
- (b) What happens when the external pressure applied becomes more than osmotic pressure of the solution?
9. (a) What type of battery is lead storage cell? 2
- (b) For a weak electrolyte, molar conductance in dilute solution increases sharply as its concentration in solution is decreased. Give reason.
10. A cell reaction is given as: 2
- $$A(s) + B^{2+}(aq) \rightleftharpoons A^{2+}(aq) + B(s)$$
- Equilibrium constant ( $K_c$ ) for the cell is 10. Calculate  $E^0_{\text{cell}}$ .  
( $R=8.314\text{Jmol}^{-1}\text{k}^{-1}$ ,  $T=298\text{k}$ ,  $F=96500\text{c mol}^{-1}$ )
11. (a) Identify the reaction order from the rate constant,  $K= 3.5 \times 10^{-5}\text{Lmol}^{-1}\text{s}^{-1}$ . 2
- (b) What is the effect of temperature on reaction rate?
12. The three fourth of a first order reaction is completed in 32 minutes. What is the half life period of the reaction? ( Given  $\log 4=0.6021$ ) 2

## SECTION – C

13. 3
- (a) What advantage to the fuel cells have over primary and secondary batteries?
- (b) Write the cell reaction of a lead storage battery when it is discharged. How does the density of the electrolyte change when the battery is discharged?
14. The slope of a line in the graph of  $\log k$  vs  $1/T$  for a reaction is - 3
- $5841\text{K}$ . Calculate energy of activation for the reaction. (Given  $R=8.314\text{Jmol}^{-1}\text{K}^{-1}$ )
15. A reaction is first order in A and second order in B. 3
- (a) Write differential rate equation.
- (b) How is rate affected when the concentration of B is tripled?
- (c) How is rate affected when the concentration of both A and B is doubled?

### SECTION – D

**Question no. 16 is case based / source-based questions with 3 sub parts. Internal choice is provided in one of these sub parts.**

16. The binary solutions of the volatile liquids may behave as ideal or non-ideal depending upon the forces of interaction in the molecules of liquids involved. For, an ideal solution, the participating liquids must be of the same nature so that there is no change in the magnitude of forces of interaction when these are mixed. 4

Give reason as to why upon mixing 30ml of ethyl alcohol and 30ml of water the resulting volume of the solution becomes more than 60ml.

(a) What is the difference between  $\Delta H_{\text{mixing}}$  for ideal and non-ideal solution?

(b) Calculate the mass of ascorbic acid (Vitamin C,  $C_6H_8O_6$ ) to be dissolved in 75g of acetic acid to lower its melting point by  $1.5^\circ\text{C}$ . (Given,  $K_f$  for  $\text{CH}_3\text{COOH} = 3.9 \text{ kkgmol}^{-1}$ , atomic mass of C= 12g, H=1g, O= 16g)

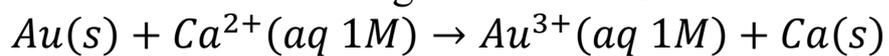
**OR**

(c) How does sprinkling of salt help in clearing the snow-covered roads in hilly areas? Explain the phenomenon involved in the process.

### SECTION – E

17. (a) Calculate the amount of sodium chloride which must be added to one kilogram of water so that the freezing point of the solution is depressed by 3K. (Given,  $K_f = 1.86 \text{ kkgmol}^{-1}$  Atomic mass of Na= 23g and Cl= 35.5g) 5
- (b) Which of the following solutions has higher freezing point? Justify your answer.
- (i) 0.05 (M)  $\text{Al}_2(\text{SO}_4)_3$
  - (ii) 0.1 (M)  $\text{K}_3[\text{Fe}(\text{CN})_6]$

18. (a) Calculate  $\Delta G^0$  for the following reaction at 25<sup>0</sup>C.



5

Given,  $E^0_{Au^{3+}/Au} = +1.50V$ ;  $E^0_{Ca^{3+}/Ca} = -2.87V$ ,  $F = 96500Cmol^{-1}$

(b) Predict whether the reaction will be spontaneous or not.

(c) How much electricity in terms of Faraday is required to produce 40.0g of Al from molten  $Al_2O_3$ . (Given atomic mass of Al= 27g)





Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No: \_\_\_\_\_  
SET-B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025-2026]**  
**CHEMISTRY**

**Class: XII**

**Time: 1 ½ Hrs.**

**Maximum Marks: 40**

**General Instructions: -**

- All questions are compulsory.
- Section-A consists of 5 MCQs and 2 Assertion-Reasoning type questions carrying 1 mark each.
- Section-B consists of 5 Short Answer type-I questions carrying 2 marks each.
- Section-C consists of 3 Short Answer type-II questions carrying 3 marks each.
- Section-D consists of 1 Case/source based question carrying 4 marks .
- Section -E consists of 2 Long answer type questions carrying 5 marks each.

**SECTION -A**

- 1 Which one of the following pairs will not form an ideal solution? 1
- a) Benzene and toluene
  - b) n-Hexane and n-Heptane
  - c) Ethanol and acetone
  - d) Bromoethane and chloroethane
- 2 Considering 100% ionization of the given ionic solutes, aqueous solution of which of the following substances have least freezing point ? 1
- a) Glucose
  - b) NaCl
  - c)  $Al_2(SO_4)_3$
  - d)  $CaCl_2$

- 3 An electrochemical cell behaves like an electrolytic cell when 1
- a)  $E_{\text{cell}} = E_{\text{external}}$
  - b)  $E_{\text{cell}} = 0$
  - c)  $E_{\text{cell}} < E_{\text{external}}$
  - d)  $E_{\text{cell}} > E_{\text{external}}$

- 4 A reaction involving two different reactants can never be a : 1
- a) Bimolecular reaction
  - b) Unimolecular reaction
  - c) First order reaction
  - d) Second order reaction

- 5 The rate law of a reaction is  $\text{rate} = k [A]^2 [B]$ . On doubling the concentration of both A and B, the rate 'x' will become : 1
- a)  $x^3$    b)  $8x$    c)  $4x^2$    d)  $9x$

**In the following questions, two statements are given - one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:**

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

- 6 **Assertion :** Osmotic pressure is a colligative property. 1
- Reason :** Osmotic pressure of a solution depends on the molar concentration of solute at any temperature T.

7 **Assertion :** The representation of rate of reaction in terms of concentration of the reactants is known as rate law. 1

**Reason :** Rate law for any reaction cannot be predicted theoretically but must be determined experimentally.

### SECTION-B

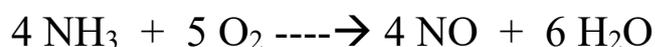
8 What is the advantage of using osmotic pressure as compared to other colligative properties to determine the molecular mass of macromolecules ? 2

9 How much charge is required for the following reductions : 2

- i) 1 mol of  $\text{Al}^{3+}$  to Al
- ii) 1 mol of  $\text{MnO}_4^-$  to  $\text{Mn}^{2+}$  ?

10 Why is it necessary to use a salt bridge in a galvanic cell ? 2

11 For the reaction, 2



The rate of formation of NO is  $3.6 \times 10^{-3} \text{ mol L}^{-1} \text{ s}^{-1}$ . Calculate the rate of disappearance of  $\text{NH}_3$  and rate of formation of  $\text{H}_2\text{O}$ .

12 Identify the reaction order from each of the following rate constant: 2

- i)  $k = 3.1 \times 10^{-4} \text{ s}^{-1}$
- ii)  $k = 9.3 \times 10^{-4} \text{ mol L}^{-1} \text{ s}^{-1}$

### SECTION-C

13 What are fuel cells ? Write the reactions of  $\text{H}_2\text{-O}_2$  fuel cell. 3

14 What is rate constant ? Define half-life period and show that half-life period is independent of initial concentration of reactant for first order reaction. 3

- 15 Show that the time required for completion of  $\frac{3}{4}$  th of the reaction of first order is twice that of half life of the reaction. 3

### SECTION-D

- 16 **Read the following case/ paragraph and answer the following questions:** 4

In order to account for the extent of association or dissociation, van't Hoff introduced a factor  $i$ . It is defined as the ratio of theoretical and experimental molar mass.

In case of association, the magnitude of experimental molar mass is greater than theoretical molar mass. In case of dissociation, the magnitude of experimental molar mass is less than the theoretical molar mass.

- What will be the van't Hoff factor for a compound which undergoes dimerization in an organic solvent ?
- What would be the value of van't Hoff factor for a solute which neither undergoes dissociation nor association in any solvent ?
- In the determination of molar mass of  $A^+B^-$  using a colligative property, what may be the value of van't Hoff factor, if the salt is 50% dissociated ?

**OR**

c) KI and sucrose solution with 0.1 M concentration have osmotic pressure of 0.465 atm and 0.245 atm respectively. Find van't Hoff factor of KI .

### SECTION-E

- 17 Define the following terms : 5
- ppm
  - mole fraction
  - molarity
  - molality
  - mass percent

- 18 a) How for weak and strong electrolytes , molar conductivity changes with concentration of solute. How is such change explained ? 5
- b) A voltaic cell is set up at 25°C :



What would be the voltage of this cell?

(  $E^{\circ}_{\text{Cell}} = 0.46 \text{ V}$  )

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**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025-26]**  
**MATHEMATICS**  
**CLASS- XII**

Time:  $1\frac{1}{2}$  Hrs.

Maximum Marks:40

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**General Instructions:**

- (i) This question paper has 5 sections A,B,C,D and E
  - (ii) Section A contains 9 MCQs and 2 assertion reason based question carrying 1 mark each
  - (iii) Section B contains 3 questions carrying 2 marks each.
  - (iv) Section C contains 3 questions carrying 3 marks each.
  - (v) Section D contains 2 question carrying 5 marks.
  - (vi) Section E contains 1 case based questions carrying 4 marks.
  - (vii) All questions are compulsory. However an internal choice in 1 question of 2 marks and 1 question of 3 marks and 1 question in 5 marks are provided.
  - (viii) Draw neat figures wherever required.
- 
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**SECTION A**

1. If  $A = \begin{bmatrix} 1 & k & 3 \\ 3 & k & -2 \\ 2 & 3 & -4 \end{bmatrix}$  is singular then  $k =$  1  
(a)  $\frac{16}{3}$  (b)  $\frac{34}{5}$  (c)  $\frac{33}{2}$  (d) 0
2. If A is a square matrix of order 3 and  $|3A| = k|A|$ . Then the value of k is 1  
(a) 27 (b) 9 (c) 3 (d) 2
3. If A is a square matrix then  $(A + A')$  is a 1  
(a) null matrix (b) identity matrix  
(c) symmetric matrix (d) skew symmetric matrix
4. If  $\begin{vmatrix} 5 & 3 & -1 \\ -7 & x & 2 \\ 9 & 6 & -2 \end{vmatrix} = 0$  then  $x = ?$  1  
(a) 0 (b) 6 (c) -6 (d) 9
5. If a matrix has 6 elements then number of possible orders of the matrix 1  
can be (a) 2 (b) 4 (c) 3 (d) 6

6. If  $f: \mathbb{R} \rightarrow \mathbb{R}$ ,  $f(x) = 3x$ . Then  $f$  is 1  
 (a) one one onto (b) many one and onto (c) one one but not onto (d) neither one-one nor onto
7. The value of  $k$  for which the function  $f(x) = \begin{cases} kx^2, & \text{if } x \geq 1 \\ 4, & \text{if } x < 1 \end{cases}$  is continuous 1  
 at  $x=1$  is (a) 4 (b) 3 (c) 2 (d) 1
8. If  $y = Ae^{5x} + Be^{-5x}$ , then  $\frac{d^2y}{dx^2} = ?$  1  
 (a)  $25y$  (b)  $5y$  (c)  $-25y$  (d)  $15y$
9. If  $y = \log x$ , then  $\frac{d^2y}{dx^2} =$  1  
 (a)  $-\frac{1}{x^2}$  (b)  $\frac{1}{x}$  (c) 1 (d)  $x$
10. **Assertion (A)** : A relation  $R = \{(1,1), (1,2), (2,2), (2,3), (3,3)\}$  is 1  
 defined on the set  $A = \{1,2,3\}$  is reflexive .  
**Reason (R)**: a relation  $R$  on the set  $A$  is said to be reflexive if  $(a,a) \in R$  for all  $a \in A$   
 (a)  $A$  and  $R$  both are true and  $R$  is the correct explanation of  $A$   
 (b)  $A$  and  $R$  both are true but  $R$  is not the correct explanation of  $A$  (c)  
 $A$  is true  $R$  is false  
 (d)  $R$  is true  $A$  is false
11. **Assertion (A)**: a function  $f: A \rightarrow B$ , can not be an onto function if 1  
 $n(A) < n(B)$   
**Reason (R)**: A function is onto if every element of codomain has at least one pre image in the domain  
 (a)  $A$  and  $R$  both are true and  $R$  is the correct explanation of  $A$   
 (b)  $A$  and  $R$  both are true but  $R$  is not the correct explanation of  $A$  (c)  
 $A$  is true  $R$  is false  
 (d)  $R$  is true  $A$  is false

### SECTION B

12. If  $A = \begin{bmatrix} 1 \\ -4 \\ 3 \end{bmatrix}$  and  $B = [-1 \ 2 \ 1]$  verify that  $(AB)^T = B^T A^T$  2
13. Let  $f(x) = \begin{cases} 2 + x, & \text{if } x \geq 0 \\ 2 - x, & \text{if } x < 0 \end{cases}$  show that  $f(x)$  is not differentiable at  $x=0$  2

**OR**

Discuss the continuity of  $f(x) = \begin{cases} 2x - 1, & \text{if } x < 0 \\ 2x + 1, & \text{if } x \geq 0 \end{cases}$  at  $x=0$

14. If  $y = \log \left\{ \tan \left( \frac{\pi}{4} + \frac{x}{2} \right) \right\}$  then find  $\frac{dy}{dx}$  2

**SECTION C**

15. If  $A = \begin{bmatrix} 4 & 3 \\ 2 & 5 \end{bmatrix}$ , find the values of  $x$  and  $y$  such that 3

$A^2 - xA + yI = O$  where  $I$  is  $2 \times 2$  unit matrix and  $O$  is a  $2 \times 2$  zero matrix

16. Prove that the function  $f: N \rightarrow N$ , defined by  $f(x) = x^2 + x + 1$  is one one but not onto

**OR**

Let  $A = \mathbb{R} - \{3\}$  and  $B = \mathbb{R} - \{1\}$ . Let  $f: A \rightarrow B$ ,  $f(x) = \frac{x-2}{x-3}$  for all values of  $x \in A$ . Show that  $f$  is one-one and onto. 3

17. Find the value of  $k$  so that the function  $f$  defined by 3

$$f(x) = \begin{cases} \frac{k \cos x}{\pi - 2x}, & \text{if } x \neq \frac{\pi}{2} \\ 3, & \text{if } x = \frac{\pi}{2} \end{cases}$$

is continuous at  $x = \frac{\pi}{2}$ .

**SECTION D**

18. On the set  $Z$  of all integers the relation  $R = \{(a,b): (a-b) \text{ is divisible by } 3\}$ . 5  
show that  $R$  is equivalence relation on  $Z$

19. If  $y = [\log(x + \sqrt{x^2 + 1})]^2$  show that 5  
 $(1 + x^2) \frac{d^2y}{dx^2} + x \frac{dy}{dx} - 2 = 0$

**SECTION-E**

20. **Casestudy1:** Amit, Biraj and Chirag were given the task of creating a square matrix of order 2.  
Below are the matrices created by them.  $A, B, C$  are the matrices created by Amit, Biraj and Chirag respectively.

$$A = \begin{bmatrix} 1 & 2 \\ -1 & 3 \end{bmatrix}, B = \begin{bmatrix} 4 & 0 \\ 1 & 5 \end{bmatrix}, C = \begin{bmatrix} 2 & 0 \\ 1 & -2 \end{bmatrix}$$

$a = 4$  and  $b = -2$ , based on the above information answer the following:

- (i) Find  $A + (B + C)$  1
  - (ii) Find  $(A^T)^T$  1
  - (iii)  $(bA)^T = ?$  2
- OR
- (iii) find  $AC - BC$

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

SET-B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025 – 2026]**  
**SUBJECT: MATHEMATICS**  
**CLASS - XII**

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 9 MCQ's and 02 Assertion – Reason based questions of 1 mark each.
3. **Section B** has 03 Short Answer (SA) – type questions of 2 marks each.
4. **Section C** has 03 Long Answer (LA-I) – type questions of 3 marks.
5. **Section D** has 02 Long Answer (LA-II) – type question of 5 marks.
6. **Section E** has 01 Case Based (CBQ) – type questions of 4 marks each with sub parts.

**SECTION - A**

**(Multiple Choice Questions)**

**Each question carries 1 mark.**

1. The matrix  $\begin{bmatrix} 0 & 5 & -7 \\ -5 & 0 & 11 \\ 7 & -11 & 0 \end{bmatrix}$  is 1
  - a) a diagonal matrix
  - b) a skew - symmetric matrix
  - c) a symmetric matrix
  - d) a null matrix
2. A matrix has 18 elements, then the possible number of orders it can have is 1
  - (a) 2
  - (b) 4
  - (c) 6
  - (d) 8
3. Assume X, Y, Z, W, and P are matrices of order  $2 \times n$ ,  $3 \times k$ ,  $2 \times p$ ,  $n \times 3$  and  $p \times k$ , respectively. 1

If  $n = p$ , then the order of the matrix  $7X - 5Z$  is

- a)  $n \times 3$   
 b)  $p \times n$   
 c)  $p \times 2$   
 d)  $2 \times n$
4. The area of a triangle with vertices  $(-3, 0)$ ,  $(3, 0)$  and  $(0, k)$  is 9 sq. units. The value of  $k$  will be 1
- a) 6  
 b)  $\pm 3$   
 c) - 9  
 d) 9
5. If the points  $(a_1, b_1)$ ,  $(a_2, b_2)$  and  $(a_1 + a_2, b_1 + b_2)$  are collinear, then 1
- a)  $a_1 - b_1 = a_2 - b_1$   
 b)  $a_1 a_2 = b_1 b_2$   
 c)  $a_1 b_2 = a_2 b_1$   
 d)  $a_1 b_1 = a_2 b_2$
6. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be defined as  $f(x) = 3x$ . Choose the correct answer. 1
- a) many – one and onto  
 b) neither one – one nor onto  
 c) one – one but not onto  
 d) one – one and onto
7. Let  $f(x) = \begin{cases} x \sin \frac{1}{x}, & \text{when } x \neq 0 \\ 0, & \text{when } x = 0 \end{cases}$ . Then 1
- a)  $f(x)$  is not defined at  $x = 0$   
 b)  $f(x)$  is discontinuous at  $x = 0$   
 c)  $f(x)$  is continuous at  $x = 0$   
 d)  $\lim_{x \rightarrow 0} f(x)$  does not exist
8. If  $y = \sec^{-1} \left( \frac{x^2+1}{x^2-1} \right)$  then  $\frac{dy}{dx} = ?$  1
- a)  $\frac{-1}{(1+x^2)}$   
 b)  $\frac{1}{(1+x^2)}$   
 c)  $\frac{2}{(1+x^2)}$   
 d)  $\frac{-2}{(1+x^2)}$

9.  $\frac{d}{dx} [\cot^{-1} \left\{ \frac{\sqrt{1-x^2}}{x} \right\}] =$  1
- (a)  $\frac{1}{\sqrt{1-x^2}}$
- (b)  $\frac{-1}{\sqrt{1-x^2}}$
- (c)  $\frac{1}{\sqrt{1+x^2}}$
- (d)  $\frac{-1}{\sqrt{1+x^2}}$

### ASSERTION – REASON BASED QUESTIONS

10. If R is the relation in the set  $A = \{1, 2, 3, 4, 5\}$  given by 1  
 $R = \{(a, b) : |a - b| \text{ is even}\}$ ,  
**Assertion (A):** R is an equivalence relation.  
**Reason (R):** All elements of  $\{1, 3, 5\}$  are related to all elements of  $\{2, 4\}$ .
- (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  $A = \{0, 1\}$  and  $N$  be the set of natural numbers. 1  
 Then, the mapping  $f: N \rightarrow A$  defined by  $f(2n - 1) = 0, f(2n) = 1, \forall n \in N$ , is onto.  
**Reason (R):** Range = Co-domain
- (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

**Section B** has 03 **Short Answer (SA) – type** questions of 2 marks each.

12. Show that the matrix  $A = \begin{bmatrix} -8 & 5 \\ 2 & 4 \end{bmatrix}$  satisfies the equation  $x^2 + 4x - 42 = 0$ . 2
13. Find the value of 'a' for which the function  $f(x)$  defined as 2  

$$f(x) = \begin{cases} a \sin \frac{\pi}{2} (x + 1), & x \leq 0 \\ \frac{\tan x - \sin x}{x^3}, & x > 0 \end{cases}$$
 is continuous at  $x = 0$ .

**OR**

For what value of k is the function  $f(x) = \begin{cases} \frac{\sin 2x}{x} & , x \neq 0 \\ k & , x = 0 \end{cases}$

continuous at  $x = 0$ ?

14. If  $\cos y = x \cos (a + y)$  then prove that  $\frac{dy}{dx} = \frac{\cos^2(a+y)}{\sin a}$  2

### SECTION – C

**Section C** has 03 **Long Answer (LA-I) – type** questions of 3 marks.

15. If  $A = \begin{bmatrix} 3 & -4 \\ 1 & -1 \end{bmatrix}$ , then prove that  $A^n = \begin{bmatrix} 1 + 2n & -4n \\ n & 1 - 2n \end{bmatrix}$  for all  $n \in \mathbb{N}$ . 3

16. Prove that a function  $f: [0, \infty) \rightarrow [-5, \infty)$  defined as  $f(x) = 4x^2 + 4x - 5$  is both one - one and onto. 3

### OR

Show that  $f: \mathbb{N} \rightarrow \mathbb{N}$  defined by

$$f(n) = \begin{cases} \frac{n+1}{2}, & \text{if } n \text{ is odd} \\ \frac{n}{2}, & \text{if } n \text{ is even} \end{cases} \text{ is many – one onto function.}$$

17. Show that the function  $f(x) = |x - 3|$ ,  $x \in \mathbb{R}$ , is continuous but not differentiable at  $x = 3$ . 3

### SECTION - D

**Section D** has 02 **Long Answer (LA-II) – type** question of 5 marks.

18. Let  $L$  be the set of all lines in  $xy$  plane and  $R$  be the relation in  $L$  define as  $R = \{(L_1, L_2) : L_1 \parallel L_2\}$ . Show that  $R$  is an equivalence relation. Find the set of all lines related to the line  $y = 2x + 4$ . 5

19. If  $x = \sin\left(\frac{1}{a} \log y\right)$ , show that  $(1 - x^2) y_2 - xy_1 - a^2 y = 0$  5

### OR

If  $y = 3 \cos(\log x) + 4 \sin(\log x)$ . Show that  $x^2 y_2 + xy_1 + y = 0$

### SECTION - E

**Section E** has 01 **Case Based (CBQ) – type** questions of 4 marks each with sub parts.

20. **Read the following text carefully and answer the questions that follow:** 4

On her birthday, Seema decided to donate some money to the children of an orphanage home. If there were 8 children less, everyone would have got ₹ 10 more. However, if there were 16 children more, everyone would have got ₹ 10 less. Let the number of children be  $x$  and the amount distributed by Seema for one child be  $y$  (in ₹).



1. Represent given information in matrix algebra.  
(1)
2. Find the adjoint of Matrix containing information about of number of children and amount she paid?  
(1)
3. Find the number of children who were given some money by Seema?  
(2)

**OR**

How much amount does Seema spend in distributing the money to all the students of the Orphanage?

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

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST -I [2025-26]**  
**BIOLOGY (044)**  
**CLASS XII**

**Time 1Hr 30 Mins.**

**Maximum Marks: 40**

**General Instructions:**

- i The question paper contains 18 questions in 5 sections.
- ii All questions are compulsory.
- iii Section A has 7 objective type questions of 1 mark each.  
Section B consists of 05 very short answer type carrying 2 marks each.  
Section C has 03 short answer questions carrying 3 marks each.  
Section D consists of 01 Source based or case based unit of assessment of 4 marks with sub-parts.  
Section E consists of 02 long answer type question carrying 5 marks each.

**SECTION A**

1. A typical angiospermic embryo sac is usually 1  
a) One celled b) Two celled c) Five celled d) Seven celled
2. How many microspore mother cells are necessary to 1  
produce 100 pollens?  
a) 100 b) 50 c) 25 d) 20
3. Leydig cells are found in:- 1  
a) Testis b) liver c) Kidney d) Pancreas
4. Which of the following is not a characteristic of an ideal 1  
contraceptive?  
a) User-friendly b) Irreversible c) Easily available  
d) Least side effects.
5. How many types of gametes would be produced if the 1  
genotype of a parent is AaBB?  
a) 1 b) 2 c) 3 d) 4

**Question No. 6 and 7 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.**

6. Assertion: - Primary endosperm nucleus is diploid. 1  
Reason: - It is the product of double fertilization.
7. Assertion :- Interstitial spaces outside the seminiferous tubules have blood vessels and Sertoli cells. 1  
Reason:- Sertoli cells provide nutrition to the germ cells.

### **SECTION B**

8. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give one reason. 2
9. How is it possible in Viola plant to produce assured set of seeds even in the absence of pollinators? 2
10. Why are male testes located outside the abdominal cavity? 2
11. Mention one advantage and one disadvantage of aminocentesis. 2
12. What are true breeding lines that are used to study inheritance pattern of traits in plants? 2

### **SECTION C**

13. State why plant breeders are interested in artificial hybridization programme. How do they carry out the process. 3
14. Schematically represent the steps of Spermatogenesis. 3
15. Snapdragon shows incomplete dominance for flower colour. Work out a cross and explain the phenomenon. 3

### **SECTION D (CASE BASED)**

16. A discussion on reproductive health is incomplete without a mention of infertility. A large number of couples all over the world are unable to produce 4

children inspite of unprotected sex.

- a) What is infertility? (1)
- b) What are the reasons of being infertile? (1)
- c) Expand the term ZIFT? How is it done? (2)

Or

- c) Expand the term GIFT? How is it done?(2)

**SECTION E**

- 17. Explain the uterine and ovarian events and the hormonal changes in Menstrual cycle. 5
- 18. How can one justify Mendel's Law of Dominance and Recessive and Independent assortment in a Dihybrid cross. Explain the phenomenon of Co-dominance with an example. 5

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

**SET-B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025-2026]**  
**BIOLOGY [044]**  
**CLASS: XII**

**Time: 1 ½ Hours**

**Maximum Marks: 40**

General instructions:

1. This question paper consists of 18 questions in 5 sections.
  2. All questions are compulsory.
  3. Section A consists of 07 objective type questions carrying 1 mark each.
  4. Section B consists of 05 very short answer type questions carrying 2 marks each.
  5. Section C consists of 03 short answer type questions carrying 3 marks each.
  6. Section D consists of 01 Source Based or Case Based unit of assessment of 4 marks with sub-parts.
  7. Section E consists of 02 long answer type question carrying 5 marks each.
- 

**Section – A**

1. The number of meiotic divisions needed to produce 50 seeds is- 1
  - a. 12.5
  - b. 50
  - c. 63
  - d. 27
2. A diploid plant has a total of 12 chromosomes. What will be the number of chromosomes in its PMC, synergid and megaspore respectively? 1
  - a. 12, 6, 6
  - b. 6,12,6
  - c. 12,6,12
  - d. 6,6,12

3. Which of the following pituitary hormone has the lowest concentration in blood during ovulation? 1
- LH
  - FSH
  - Estrogen
  - Progesterone
4. Which of the following is a bacterial STD? 1
- Hepatitis-B
  - Chlamydiasis
  - Trichomoniasis
  - Genital warts
5. Which of the following is a recessive trait for pea plants? 1
- Green pod colour
  - Violet flower colour
  - Green seed colour
  - Inflated pod shape

Question No. 6 and 7 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- Both A and R are true and R is the correct explanation of A.
- Both A and R are true and R is not the correct explanation of A.
- A is true but R is false.
- A is False but R is true.

6. Assertion: *Zostera* are pollinated by wind. 1  
Reason: it is an aquatic plant.
7. Assertion: Luteinising hormone in males help in spermatogenesis. 1  
Reason: Follicle stimulating hormone in males help in spermiogenesis.

### SECTION B

8. State four characteristic features of anemophilous flowers. 2
9. Describe the steps involved in double fertilisation. 2
10. Point the events sequentially that lead to parturition in human females. 2

11. What is meant by the following ARTs? 2  
a. GIFT  
b. ZIFT
12. Explain co-dominance with the help of an example. 2

### SECTION C

13. a. Discuss the out-breeding devices evolved by plants to discourage inbreeding depression. 3  
b. Why is cashew a false fruit?
14. Trace the developments that take place between zygote formation and implantation which finally lead to pregnancy. 3
15. A tall pea plant bearing violet flowers was crossed with a dwarf pea plant with white flowers. The progeny obtained had the following numbers: 3  
Tall and violet - 102  
Tall and white - 95  
Dwarf and violet - 98  
Dwarf and white - 105  
Find out the genotypes of the parents showing a cross.

### SECTION D

Q.no. 16 is case based or source based unit of assessments of 04 marks with sub-parts (internal choice have been provided in one of the sub-parts).

16. Contraceptive methods help to prevent unwanted pregnancies. There have been numerous action plans initiated by the government to attain a reproductively healthy society. 4  
a. Name two natural methods of contraception,  
b. How do copper releasing IUDs help in contraception?  
c. Why are condoms the most popular contraceptive devices all over the world?

OR

- d. Are MTPs considered ideal for population control? In which situation can a doctor prescribe MTP? Why is there a statutory ban on it?

**SECTION E**

17. a. How is spermatogenesis different from oogenesis? 5  
b. Name the male accessory glands and state their functions.
18. a. Why did T.H.Morgan choose fruit flies for the 5  
experimental verification of “Chromosomal Theory of  
Inheritance”?
- b. Why is test cross conducted? How is it conducted?

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**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-1-[2025-2026]**  
**COMPUTER SCIENCE**  
**CLASS: XII**

**Time: 1 ½ Hrs.**

**Maximum Marks: 40**

**General Instructions:**

- This question paper contains 22 questions.
- All questions are compulsory
- The question paper is divided into 3 sections – A, B, C, D and E.
- Section-A, consists of 12 questions (1-12). Each question carries 1 mark.
- Section-B, consists of 05 questions (13-17). Each question carries 2 marks.
- Section-C, consists of 03 questions (18-20). Each question carries 3 marks.
- Section-D, consists of 1 question (21) of 4 marks.
- Section-E, consists of 1 question (22) of 5 marks .
- Incase of MCQ, text of the correct answer should also be written

**Section-A**

**Each question carries 1 marks**

1. The value of the expressions  $4/(3*(4 - 2))$  and  $4/3*(4 - 2)$  is the same.[True or False] 1
2. What will be the value of the expression?  
`print(14 + 13 % 15)`  
 a.14      b.27      c.12      d.0 1
3. The keys of a dictionary must be of ..... types. 1  
 a. integer                      b. mutable  
 c. immutable                    d. any of these
4. What is the value of the following expression ? 1  
`print(3 + 3.00, 3**3.0 )`  
 a.(6.0, 27.0)  
 b.(6.0, 9.00)  
 c.(6, 28)  
 d.[6.0, 20.0]



11. **Assertion.** Lists and Tuples are similar sequence types of Python, yet they are two different data types. 1  
**Reason.** List sequences are mutable and Tuple sequences are immutable.
- 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 true but Reason is false.  
d. Assertion is false but Reason is true.
12. **Assertion.** Dictionaries are mutable, hence its keys can be easily changed. 1  
**Reason.** Mutability means a value can be changed in place without having to create new storage for the changed value.
- 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 true but Reason is false.  
d. Assertion is false but Reason is true.

## SECTION-B

### Each question carries 2 marks

13. Consider the following code and write the flow of execution for this. Line numbers have been given for your reference. 2
1. def power(b, p):
  2. y = b \*\* p
  3. return y
  - 4.
  5. def calcSquare(x):
  6. a = power(x, 2)
  7. return a
  - 8.
  9. n = 5
  10. result = calcSquare(n)
  11. print(result)
14. Consider the following code : 2
- ```
import random
print(int(20 + random.random() * 5), end = ' ')
print(int(20 + random.random() * 5), end = ' ')
print(int(20 + random.random() * 5), end = ' ')
print(int(20 + random.random() * 5))
```
- Find the suggested output options 1 to 4. Also, write the least value and highest value that can be generated.
1. 20 22 24 25
  2. 22 23 24 25
  3. 23 24 23 24
  4. 21 21 21 21
15. What is the significance of Modules ? [Give 2 points]. 2
16. Predict the output of the following code snippet? 2
- ```
arr = [1, 2, 3, 4, 5, 6]
for i in range(1, 6):
    arr[i - 1] = arr[i]
for i in range(0, 6):
    print(arr[i], end = "")
```

17. Fill in the missing lines of code in the following code. The code reads in a limit amount and a list of prices and prints the largest price that is less than the limit. You can assume that all prices and the limit are positive numbers. When a price 0 is entered the program terminates and prints the largest price that is less than the limit. 2
- ```
#Read the limit
limit = float(input("Enter the limit"))
max_price = 0
# Read the next price
next_price = float(input("Enter a price or 0 to stop:"))
while next_price > 0 :
    <write your code here>
    #Read the next price
    <write your code here>
if max_price > 0:
    <write your code here>
else :
    <write your code here>
```

**Section-C**

**Each question carries 3 marks**

18. What will be the output of following program ? 3
- ```
num = 1
def myfunc():
    global num
    num = 10
    return num
print(num)
print(myfunc())
print(num)
```
19. What will be the output produced by following code fragments ? 3
- ```
x = "hello world"
print(x[:2], x[:-2], x[-2:])
print(x[6], x[2:4])
print(x[2:-3], x[-4:-2])
```

20. Predict the output of the following code snippet ? 3
- ```
Numbers = [9, 18, 27, 36]
for Num in Numbers :
    for N in range(1, Num % 8) :
        print(N, "#", end=" ")
    print()
```

**Section-D**

**Each question carries 5 marks**

21. Find and write the output of the following python code : 4
- ```
def Call(P = 40, Q = 20):
    P = P + Q
    Q = P - Q
    print(P, '@', Q)
    return P
R = 200
S = 100
R = Call(R, S)
print(R, '@', S)
S = Call(S)
print(R, '@', S)
```

**Section-E**

**Each question carries 4 marks**

22. What are the errors in following codes ? Correct the code and predict output : 5
- ```
total = 0;
def sum(arg1, arg2):
    total = arg1 + arg2;
    print("Total :", total)
return total;
sum(10, 20);
print("Total :", total)
```
- =====

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

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**COMPUTER SCIENCE (083)**  
**PERIODIC TEST-1 : (2025-2026)**  
**CLASS: XII**

Time: 1 ½ Hrs.

Maximum Marks: 40

**General Instructions:**

- This question paper contains 22 questions.
- All questions are compulsory.
- The question paper is divided into 3 sections – A, B, C, D and E.
- Section-A, consists of 12 questions (1-12). Each question carries 1 mark.
- Section-B, consists of 05 questions (13-17). Each question carries 2 marks.
- Section-C, consists of 03 questions (18-20).  
Each question carries 3 marks.
- Section-D, consists of 1 question (21) of 4 marks.
- Section-E, consists of 1 question (22) of 5 marks.
- In case of MCQ, text of the correct answer should also be written.

**Section-A**

**Each question carries 1 marks**

1. State **TRUE** or **FALSE**: 1  
'For any index  $n$ ,  $s[:n] + s[n:]$  will give you original string  $s$ '
2. Given the lists  $L=[1,3,5,7,9,11,13,15]$  1  
Write the output of `print(L[3:5])`  
a. [5, 7, 9]      b. [3, 5]      c. [7, 9]      d. none
3. The \_\_\_\_\_ operator repeats a list. 1  
a. +      b. -      c. \*      d. /
4. Which of the following is valid membership operator in 1  
Python:  
a. and in      b. or in      c. not in      d. none

5. What is printed by the following statements? 1  
`D1 = {"cat":12, "dog":6, "elephant":23, "bear":20}`  
`print ("Dog" in D1)`  
a. True                      b. False                      c. Error                      d. none
6. The \_\_\_\_ operator adds one list to the end of another. 1  
a. +                              b. -                              c. \*                              d. /
7. Which of the following function headers is correct? 1  
a. `def f(a=1, b):`                      b. `def f(a=1, b, c=2):`  
c. `def f(a=1, b=1, c=2):`                      d. `def f(a=1, b=1, c=2, d):`
8. What is the default return value for a function that does not 1  
return any value explicitly?  
a. 1                              b. None                              c. -1                              d. 10
9. The `help <module>` statement displays \_\_\_\_ from a module. 1  
a. constants                      b. functions                      c. classes                      d. docstrings
10. Which of the following is not a function/method of the random 1  
module in Python?  
a. `randfloat()`                              b. `randint()`  
c. `random()`                              d. `randrange()`

**Q11 and 12 are ASSERTION (A) and REASONING (R) based questions. 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 (or partly true) but R is true.  
(e) Both A and R are False or not fully true.
11. **Assertion (A):** If and For are legal statements in python. 1  
**Reasoning (R):** Python is case sensitive and its basic selection and looping statements are in lower case.
12. **Assertion (A):** The expression `"HELLO".sort()` in Python 1  
will give an error.  
**Reasoning (R):** `sort()` does not exist as a method/function for strings in Python.

## SECTION-B

### Each question carries 2 marks

13. What will be the output of the following code? 2
- ```
c = 10
def add():
    global c
    c = c + 2
    print("Inside add(): ", c)
add()
c=15
print("In main: ", c)
```
14. Give the outputs of the following Python statements: 2
- a. >>> "I Love India".split()
  - b. >>> "I Love India".split(" ")
15. Give the outputs of the following Python statements: 2
- a. >>> "\*" .join("BRS")
  - b. >>> "\*" .join(["BRS", "BURNPUR"])
16. Find the errors in the following code fragment and write the correct code. 2
- ```
def s(x)
    a = 'k'
    print(a * x)
    print(a * str(x))
for in [1, 2, 10]
s(n)
```
17. Give the outputs of the following Python statements: 2
- a. >>> '10'\*2
  - b. >>> '10'+2

## Section-C

### Each question carries 3 marks

18. What will be the output of the following Python code: 3
- ```
V=50
def change(N):
    global V
    V, N = N, V
    print(V, N, sep = "#", end = "@")
change(20)
print(V)
```

19. Give the outputs of the following: 3
- a) `>>>t1 = [3, 4, 5, 6.0]`  
`>>>t1.index(5)`
- b) `>>>t = tuple("abc")`  
`>>>t`
- c) `>>>t1 = tuple({1: "A", 2: "B"})`  
`>>>t1`
20. Write the output on execution of the following Python code: 3
- ```
S= "Racecar Car Radar"
L=S.split()
for W in L:
    x=W.upper()
    if x == x[::-1]:
        for I in x:
            print(I, end= "*")
    else:
        for I in W:
            print(I, end= "#")
print()
```

### Section-D

#### Each question carries 4 marks

21. Write a function EORreplace( ) in Python which accepts a list of L integers. Thereafter it increments all even numbers by 1 and decrements all odd numbers by 1. 4

#### **Example:**

If Sample input data of the list is: L=[10, 20, 30, 40, 35, 55]  
Output will be: [11, 21, 31, 41, 34, 54]

## Section-E

### Each question carries 5 marks

22. Consider a function with following header: 5  
def check(A, B=22, C=44):  
Here are some function calls given below. Find out which of these are correct and which of these are incorrect:
- a. check (obj1, obj2, obj3)
  - b. check (C=obj1, B=obj2, obj3)
  - c. check (obj2, 12)
  - d. check (obj11, A=obj12)
  - e. check (obj3, C=0)
  - f. check ( )
  - g. check (C=0, obj3)
  - h. check (B=15, A=obj4)
  - i. check (obj1)
  - j. check (B=20)
-



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

**SET-A**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST I 2025-2026**  
**ACCOUNTANCY**  
**CLASS: XII**

**Time: 1 Hour 30 mins.**

**Max. Marks: 40**

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**General Instructions:**

1. These question paper contains 17 questions.
  2. There is no choice given and advised to attempt all questions.
  3. Question 1 to 10 carries 1 mark each.
  4. Question 11 & 12 carries 3 marks each.
  5. Question 13 to 15 carries 4 marks each.
  6. Question 16 to 17 carries 6 marks each.
- 
- 

1. Forming a partnership deed is: 1  
(a) Mandatory (b) Mandatory in writing  
(c) Not Mandatory (d) None of the above
2. Any change in the relationship of the existing partnership firm which result in an end of the existing partnership firm agreements and enforces making of new agreement is called: 1  
(a) Revaluation of partnership  
(b) Reconstitution of partnership  
(c) Realization of partnership  
(d) None of the above
3. Arjun and Bhim were partners in a firm sharing profit and losses in the ration 3:2. On 31<sup>st</sup> March 2024 their capital were ₹1,29,000 and ₹ 1,08,000 respectively. Divisible profit for the year ended 31<sup>st</sup> March 2024 was ₹50,000. Interest on capital was also provided @10% p.a. in accordance with partnership deed. Determine interest on Arjun's capital for the year ended, 31.03.2024. 1  
(a) ₹ 9,900 (b) ₹ 9,000  
(c) ₹ 12900 (d) ₹ 10,400
4. Which of the following statement(s) is/are not correct 1  
(i) Goodwill is the present value of a firm's anticipated excess earning  
(ii) Goodwill is a fictitious asset  
(iii) Goodwill is an intangible asset.  
(iv) Goodwill is affected by the location of business

- (a) Only I (b) Both i and ii  
(c) Only ii (d) Only iv
5. Asha and Nisha are partners sharing profit in the ratio 2:1. Kashish was admitted for  $\frac{1}{4}$ <sup>th</sup> share out of which  $\frac{1}{8}$ <sup>th</sup> was gifted by Asha. The remaining was contributed by Nisha. Goodwill of the firm is valued at ₹40,000. How much amount of goodwill will be credited to Nisha's capital Account? 1  
(a) ₹ 2,500 (b) ₹5,000  
(c) ₹ 20,000 (d) ₹40,000
6. A, B and C were partners in a firm. As per the partnership deed, interest on drawings is to be charged @10% per annum. B withdrew a fixed amount at the end of every quarter. Interest on his drawings amounted to ₹9,000. The amount of his drawings per quarter were: 1  
(a) ₹ 2,40,000 (b) ₹ 1,80,000  
(c) ₹ 60,000 (d) ₹ 80,000
7. Net Assets minus capital Reserve is 1  
(a) Goodwill (b) Total Assets  
(c) Purchased Consideration (d) Liquid Assets
8. Assertion (A): Revaluation A/C is prepared at the time of admission a partner. 1  
Reason (R): It is required to adjust the value of assets and liabilities at the time of admission of a partner, so that the true financial position of the firm is reflected. In the context of the above two statements, which of the following is correct?  
Codes:  
(a) Both (A) and (R) are correct and (R) is the correct reason of (A)  
(b) Both (A) and (R) are correct but (R) is not the correct reason of (A)  
(c) Only (R) correct  
(d) Both (A) and (R) are wrong
9. Kanha, Resham and Nisha were partners in a firm. Nisha had given a loan of ₹1,00,000 to the firm @10 p.a. The accountant of the firm is emphasizing that interest on loan will be paid @6% p.a. At what rate the interest on loan will be paid to Nisha? 1  
(a) 6% (b) 10% p.a.  
(c) 8 % (d) No interest on loan

10. A and B are partners in a firm sharing profit and losses equally, with the effect from 1<sup>st</sup> April 2024 they agreed to share profits in the ratio of 4:3. Due to change in profit sharing ratio, A's gain or sacrifice will be: 1
- (a) Gain  $\frac{1}{14}$  (b) Sacrifice  $\frac{1}{14}$   
(c) Gain  $\frac{1}{7}$  (d) Sacrifice  $\frac{3}{7}$
11. Average profits of a firm during the last few years are ₹80,000 and the normal rate of return in a similar business is 10%. If the goodwill of the firm is ₹1,00,000 at 4 year's purchase of the super profit. Find the capital employed by the firm. 3
12. E, F and G were partners in a firm sharing profits in the ratio of 3:3:4. Their respective fixed capitals were ₹3,00,000; ₹4,00,000 and ₹5,00,000. The partnership deed provided for the allowing interest on capitals @12% p.a. even if it results into a loss to the firm. The net profit of the firm for the year ended 31<sup>st</sup> March 2024 was ₹1,10,000. Pass necessary journal entries for allowing interest on capital and division of profit/ loss in the books of the firm. 3
13. L, M and N were partners in a firm sharing profit in the ratio of 2:3:5. From 1<sup>st</sup> April, 2018 they decided to share the profits in the ratio of 1:2:2. On this date, the Balance Sheet showed a credit balance of ₹1,17,000 in General Reserve and a debit balance of ₹35,000 in profit and loss Account. The Goodwill of the firm was valued at ₹5,00,000. The revaluation of assets and reassessment of liabilities resulted in a gain of ₹30,000. 4
- Pass necessary journal entries for the above transactions on the reconstitution of the firm.
14. Benu and Leena are partners in a firm sharing profit and losses in the ratio of 5:3. They admit Deepa and Erica as two new partners. The new profit sharing ratio is decided to be 3:2:2:3. Both the new partners introduced ₹1,00,000 each as capital. Deepa pays ₹40,000 in cash for her share of goodwill but Erica is unable to contribute any amount for her share of goodwill. 4
- At the time of Deepa's and Erica's admission, the firm had an Advertisement suspense account of ₹56,000 which is written off. You are required to pass necessary journal entries to record the above adjustments at the time of admission of Deepa and Erica.
15. Parveen, Sahil and Riya are partners having Fixed capitals of ₹2,00,000 and ₹1,20,000 respectively. They share profits in the ratio 4

of 3:1:1. The partnership deed provide for the following which were not recorded in the books.

- (i) Interest on capital @5% per annum.
- (ii) Salary to Praveen ₹1,500 per month and to Riya ₹1,000 per month.
- (iii) Transfer of profit to general reserve ₹10,000. Net profit for the year ended 31<sup>st</sup> March 2023, distributed among the partners were ₹1,00,000.

Pass necessary rectifying entries for the above adjustments in the books of the firm. Also show your workings clearly.

16. On 31<sup>st</sup> March 2023 the Balance Sheet of Zoya and Zara who were sharing profit and losses in the ratio of 3:2 was as follows.

6

Liabilities		Amount	Assets		Amount
Creditors		2,90,000	Cash at bank		1,60,000
Bills Payable		60,000	Debtors	2,00,000	
General Reserve		1,60,000	Less: Provision		
<u>Capitals</u>				<u>10,000</u>	1,90,000
Zoya	5,00,000		Stock		1,50,000
Zara	<u>3,50,000</u>	8,50,000	Land and Building		1,50,000
			Plant and Machinery		3,30,000
			Goodwill		1,00,000
			Profit and Loss A/C		2,80,000
		13,60,000			13,60,000

They decided to admit Sara for 1/5<sup>th</sup> share on 1<sup>st</sup> April, 2024 in the firm on the following terms:

- (a) Goodwill of the firm is valued at ₹2,80,000.
- (b) Plant and Machinery is overvalued by 10% and Land and Building is undervalued by 40%.
- (c) The provision for doubtful debt was to be increased by ₹8,000.
- (d) A liability of ₹10,000 included in the creditors is not likely to arise.
- (e) New profit sharing ratio between the partners was decided, Zoya: Zara: Sara = 5:3:2.
- (f) Sara was to contribute capital equal to 1/5<sup>th</sup> of the total capital of Zoya and Zara after all adjustments.

You are required to prepare revaluation Account and the partners' capital account.

17. Jay, Vijay and Karan were partners of an architect firm sharing profits in the ratio of 2:2:1. Their partnership deed provided the following,

- (i) A monthly salary of ₹15,000 each to Jay and Vijay.
- (ii) Karan was guaranteed a profit of ₹5,00,000 and Jay guaranteed an annual fee of ₹2,00,000. Any deficiency arising because of guarantee of profit to Karan would be born by Jay and Vijay in the ratio of 3:2.

During the year ended 31<sup>st</sup> March, 2018 Jay earned fee of ₹1,75,000 and the profits of the firm amounted to ₹ 15,00,000. Showing your working clearly prepare profit and loss appropriation account and the partners capital account for the year ended 31<sup>st</sup> March 2018.

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

**SET-B**

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST I [2025-2026]**  
**ACCOUNTANCY**  
**CLASS: XII**

**Time: 1 Hour 30 mins.**

**Max. Marks: 40**

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General Instructions:

1. These question paper contains 17 questions.
  2. There is no choice given and advised to attempt all questions.
  3. Question 1 to 10 carries 1 mark each.
  4. Question 11 & 12 carries 3 marks each.
  5. Question 13 to 15 carries 4 marks each.
  6. Question 16 to 17 carries 6 marks each.
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- 

1. A, B, C and D are partners in a firm. What is the number of additional members that can be admitted by them in the firm 1  
(a) 02 (b) 50  
(c) 20 (d) 46
2. Assertion (A): change in the profit sharing ratio of existing partners does not amount to reconstitution of the partnership. 1  
Reason (R): Dissolution of partnership firm leads to reconstitution of partnership.  
In the context of the above statements which of the following is correct?  
Codes:  
(a) Both (A) and (R) are correct and (R) is the correct reason of (A)  
(b) Both (A) and (R) are correct but (R) is not the correct reason of (A)  
(c) Only (R) is correct  
(d) Both (A) and (R) are wrong
3. P and Q are partners in a firm. They admitted R for  $\frac{1}{4}$ <sup>th</sup> share in profits. The book value of machinery as on date of admission was ₹ 7,00,000. There was an unrecorded machinery of ₹40,000 which was bought into the books and a damaged machinery of book value ₹25,000 is to be written off 20% is to be reduced from the value of machine. 1

The revalued amount of machine will be:

- (a) ₹ 5,73,000 (b) ₹ 5,76,000  
(c) ₹ 5,75,000 (d) ₹ 5,72,000

4. Meera, Myra and Neera were partners sharing profits in the ratio of 2:2:1. They decided to share future profit in the ratio of 7:5:3 with the effect from 1<sup>st</sup> April 2019. Their Balance Sheet as on that date showed a balance of ₹ 45,000 in advertisement suspense account. The amount to be debited respectively to the capital accounts of Meera, Myra and Neera for writing off the amount is advertisement suspense account will be. 1
- (a) ₹18,000; ₹ 18,000 ₹ 9,000  
(b) ₹ 15000; ₹ 15,000 ₹ 15,000  
(c) ₹ 21000; ₹ 15,000 ₹ 9,000  
(d) ₹ 22,500 ₹ 22,500; NIL
5. Ashu and Basu are partners sharing profit and losses in the ratio of 2:1. Chetan is admitted as a new partner with 1/4<sup>th</sup> share in profits which will be acquired equally from Ashu and Basu. The new profit sharing of Ashu, Basu and Chetan will be: 1
- (a) 13:5:6 (b) 13:2:1  
(c) 2:13:5 (d) 1:1:1
6. After doing the adjustments regarding drawings ₹40,000, share of profits ₹ 24,000 and the additional capital introduced ₹32,000, the capital of Ashok, a partner as on 31.3.2022 was ₹ 5,00,000. His capital as on 01.04.2021 was, 1
- (a) ₹ 4,84,000 (b) ₹ 5,16,000  
(c) ₹ 4,46,000 (d) ₹ 5,96,000
7. Out of the following in which situation(s) the reconstitution of a firm takes place. 1
- (a) at the time of change in profit sharing ratio among the partners  
(b) at the time of admission of a new partner  
(c) Both (a) and (b)  
(d) at the time of doing past adjustments
8. Goodwill of a firm of A and B is valued of ₹30,000. It is appearing in the books of ₹12,000. C is admitted for 1/4<sup>th</sup> share. What amount he is supposed to bring goodwill. 1
- (a) ₹ 3,000 (b) 4,500  
(b) ₹7,500 (d) 10,000
9. Ikka, Dukka and Teeka were partners sharing profits and losses in the ratio of 2:2:1. Their fixed capital balances were ₹5,00,000: ₹4,00,000 and ₹3,00,000 respectively. For the year ended March 31, 2024 1

profits was ₹ 84,000 were distributed without providing for the interest on capital @ 10% p.a. as per the partnership deed. While passing an adjustment entry, which of the following is correct?

- (a) Teeka will be debited by ₹4,200
- (b) Teeka will be credited by ₹4,200
- (c) Teeka will be credited by ₹6,000
- (d) Teeka will be debited by ₹6,000

10. Disha and Abha were partners in a firm. Farad was admitted as a new partner for  $\frac{1}{5}$ <sup>th</sup> share in profit of the firm. Farad brought proportionate capital. Capital of Disha and Abha after all adjustment were ₹64,000 and ₹46,000 respectively. Capital brought by Farad was:

- (a) ₹ 22,000
- (b) ₹27,500
- (c) ₹ 55,000
- (d) ₹28,000

11. Asha and Babita were partners in a firm. Their capitals were ₹15,00,000 and ₹10,00,000 respectively. The normal rate of return was 15%.

The profits of the last four years were

2019	₹2,50,000
2020	₹(50,000)
2021	₹8,00,000
2022	₹5,00,000

The closing stock for the year 2022-23 was undervalued by ₹1,00,000. Goodwill is to be valued at two year purchase of the last four years average super profit. Calculate the value of goodwill.

12. Mudit and Uday are partners in a firm sharing profits in the ratio 2:3. Their capital accounts as on April 1, 2015 showed a balance of ₹ 70,000 and ₹60,000 respectively. The drawings of Mudit and Uday during the year 2015-16 were ₹16,000 and ₹12,000 respectively. Both the amounts were withdrawn on 1<sup>st</sup> January, 2016. It was subsequently found that the following items has been omitted while preparing the final accounts for the year ended 31<sup>st</sup> March, 2016.

- (a) Interest on capitals @6% p.a.
  - (b) Interest on drawing @6% p.a.
  - (c) Mudit was entitled to a commission of ₹ 4,000 for the whole year.
- Showing your working clearly pass a rectifying journal entry.

13. A, B and C are partners sharing profit and losses in the ratio of 3:3:2. Their balance sheet as at 31<sup>st</sup> March 2023 was as follows.

Liabilities	Amount	Assets	Amount
Sundry creditors	24,000	Cash at Bank	37,000
General Reserve	36,000	Sundry Debtors	44,000
<u>Capital Accounts</u>		Stock	1,20,000
A - 2,00,000		Machinery	1,59,000
B – 1,50,000		Building	2,00,000
C – <u>1,50,000</u>	5,00,000		
	5,60,000		5,60,000

Partners decided that with effect from 1<sup>st</sup> April 2023, they would share profits and losses in the ratio of 4:3:2. It was agreed that:

- (i) stock to be valued at ₹1,10,000
- (ii) Machinery to be depreciated by 10%
- (iii) A provision for doubtful debts is to be made on debtors @5%
- (iv) Building to be appreciated by 20%
- (v) A liability for ₹2,500 included in Sundry creditors is not likely to arise.

Partners agreed that the revised value are to be recorded in the books. They do not however want to distribute the general reserve. You are required to prepared the revaluation Account.

14. Rohit and Mohit were partners in a firm sharing profit and losses in the ratio of 3:2. Rahul was admitted into partnership for 1/3<sup>rd</sup> share of profit. Goodwill of the firm was valued at ₹3,00,000. Rahul brought ₹4,00,000 as capital and ₹70,000 out of his share of goodwill premium in cash. At the time of Rahul's admission, goodwill was appearing in the books of the firm ₹1,50,000. 4

Pass necessary journal entries for the above transactions in the books of the firm at the time of Rahul's admission.

15. The capital accounts of Alka and Archana showed credit balances of ₹4,00,000 and ₹3,00,000 respectively after taking into accounts drawings and net profit of ₹2,00,000. 4

The drawings of the partners during the year 2018-19 were

- (i) Alka withdrew ₹10,000 of the end of each quarter.

- (ii) Archana's drawings were

31<sup>st</sup> May, 2018                      ₹8,000

1<sup>st</sup> November 2018                ₹7,000

1<sup>st</sup> February 2019                 ₹5,000

Calculate interest on partners capital @10% p.a. and interest on partners drawings @6% p.a. for the year ended 31<sup>st</sup> March 2019.

16. A and B are partners in a firm sharing profit and losses in the ratio of 3:2 on 31<sup>st</sup> March 2024, their Balance Sheet was under. 6

Liabilities	Amount	Assets	Amount
Creditors	70,000	Bank	40,000
Capital A/cs		Debtors	1,20,000
A – 1,50,000		Stock	60,000
B – <u>80,000</u>	2,30,000	Furniture	50,000
		Goodwill	30,000
	3,00,000		3,00,000

On the above date C was admitted as a partner. A surrendered 1/6<sup>th</sup> of his share and B 1/3<sup>rd</sup> of his share in favour of C. Goodwill is valued at ₹1,20,000. C brings in only 1/2 share of his goodwill in cash and ₹1,00,000 as his capital.

Following adjustments are agreed upon:

- (i) Stock to be reduced to 56,000 and furniture by ₹5,000.
  - (ii) One months rent of ₹15,000 is outstanding.
  - (iii) There is an unrecorded asset worth ₹30,000.
  - (iv) A creditor for goods purchased for ₹10,000 has been omitted to be recorded although the goods has been correctly recorded in stock.
  - (v) Insurance premium amounting to ₹8,000 was debited to P&L A/C of which ₹2,000 is related to the period after 31<sup>st</sup> March 2024
  - (vi) Expenses are revaluation of ₹10,000 are paid by A. You are required to prepare revaluation account and partners capital Account and show the working of the new profit sharing ratio.
17. The partners of a firm distributed the profits for the year ended 31<sup>st</sup> March 2024, ₹90,000 in the ratio of 3:2:1 without providing for the following adjustments. 6
- (i) A and B were entitled to a salary of ₹1,500 each per annum.
  - (ii) B was entitled to a commission of ₹4,500
  - (iii) B and C had guaranteed a minimum profit of ₹35,000 p.a. to A
  - (iv) Profit were to be shared in the ratio of 3:3:2.
- Pass necessary journal entries for the above adjustments in the books of the firm showing the workings.

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Name: \_\_\_\_\_

Sec: \_\_\_\_\_

Roll No.: \_\_\_\_\_

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**

**PERIODIC TEST I: [2025-2026]**

**BUSINESS STUDIES**

**CLASS: XII**

**Time: 1 ½ Hours**

**Maximum Marks: 40**

**General Instruction:**

Read the following instructions very carefully and strictly follow them:

- (i) This question paper contains 17 questions. **All** questions are **compulsory**.
- (ii) Marks are indicated against each question.
- (iii) Answers should be brief and to the point.
- (iv) Answers to questions carrying **3** marks may be from 50 to 75 words.
- (v) Answers to questions carrying **4** marks may be in about 150 words.
- (vi) Answers to questions carrying **6** marks may be in about 200 words.
- (vii) Attempt all parts of a question together.

1. Which of the following is a function of top-level management? 1  
(a) Analysing the business environment and its implications for survival of the firm  
(b) Looking to safety of workers  
(c) Ensuring that their department has necessary personnel  
(d) Motivating people in their department to achieve desired results
  
2. The objective of which of the following techniques of scientific management is to determine the number of workers to be employed in the organisation? 1  
(a) Method study  
(b) Motion study  
(c) Time study  
(d) Differential piece wages system

3. Statement I: Business Environment is dynamic as it differs from country to country 1

Statement II: Business Environment is largely uncertain as it is very difficult to predict future happenings.

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

4. Management has its own vocabulary of terms and concepts. Managers need to communicate with one another with the help of a common vocabulary for the better understanding of their work situation. 1

Which feature of Management as a Science is highlighted in the above statement?

- (a) Principles based on experimentation
- (b) Systematised body of knowledge
- (c) Universal Validity
- (d) Personalised Application

5. Match the various characteristics of Business Environment given in Column I with their respective explanation in Column II: 1

Column I	Column II:
A. Dynamic Nature	i. Environment is phenomenon that is relatively easier to understand in parts but difficult to grasp in its totality.

B. Complexity	ii. Business Environment differs from country to country and even region to region.
C. Relativity	iii. Business Environment keeps on changing, whether in terms of technological improvement or shifts in consumer preferences.

(a) A-iii B-ii C-i

(b) A-ii B-iii C-i

(c) A-iii B-i C-ii

(d) A-i B- ii C-iii

6. The CEO of Radha cycles private limited Mr. Kumar wants to get maximum output from the employees at a competitive cost. On the other hand, Ramakant an employee of the company wants to get the maximum salary while working the least. The principle of management given by Feyol being violated by Ramakant is \_\_\_\_\_. 1

(a) Remuneration

(b) Equity

(c) Discipline

(d) Subordination of individual interest to generate

7. This principle will give rise to a spirit of mutual trust and belongingness among the members. 1

Identify principle of management stated by Feyol highlighted by this statement:

(a) Initiative

(b) Esprit De Corps

(c) Equity

(d) Remuneration of employee

8. Assertion: Coordination is the essence of management 1  
Reason: Coordination is required at top level management.  
(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
9. Choose the incorrect statement with respect to demonetization: 1  
(a) The two largest denomination notes of ₹500 and ₹1,000 were demonetized with immediate effect, ceasing to be legal tender except for buying properties.  
(b) The aim of this step was to curb corruption and accumulation of black money.  
(c) It led to the tax administration channelizing savings into the formal financial system.  
(d) Restrictions were placed on the convertibility of domestic money and bank deposits.
10. As per Plastic Waste Management Rule 2022, single use plastic items were prohibited in Delhi from 1st July, 2022. The dimension of business environment referred to here is \_\_\_\_\_ 1  
(a) Economic Environment  
(b) Legal Environment  
(c) Technological Environment  
(d) Political Environment
11. Rishitosh Mukherjee has recently joined AMV Ltd., a company manufacturing refrigerator. He found that his departments were understaffed and other departments were not cooperating with his departments for smooth functioning of the organization. Therefore, he ensured that his departments have the required number of employees and its cooperation with other departments is improved. 3

- (i) Identity the level at which Rishitosh Mukherjee was working.
- (ii) Also, state two more functions required to be performed by Rishitosh Mukherjee at this level.
12. Explain briefly (i) unity of direction and (ii) order as principles of management. 3
13. With change in the consumption habit of people, Neelesh who was running a sweet shop shifted to chocolate business. On the eve of Diwali he offered chocolates in attractive packages at reasonable prices. He anticipated huge demand and created a website 'chocolove.com' for taking orders online. He got a lot of orders online and earned huge profit by selling chocolates. Identify and explain the dimensions of business environment discussed in the above case. 4
14. Explain following features of principles of management 4  
 (i) General guideline  
 (ii) Mainly behavioral
15. Ashita & Lakshita are employees working in Dazzling enterprise dealing in costume jewellery. The firm secured an urgent order for 1,000 bracelets that were to be delivered within 4 days. They were assigned the responsibility of producing 500 bracelets each at a cost of 100 per bracelets. Ashita was able to produce the required number within the stipulated time at the cost of ₹55,000 whereas Lakshita was able to produce only 450 units at a cost of ₹90 per unit. State whether Ashita and Lakshita are efficient and effective. Give reason to justify your answer. 4
16. Explain the following techniques of Scientific Management: 6  
 (i) Method Study  
 (ii) Differential Piece Wage System  
 (iii) Fatigue Study

17. Praveen and Naveen are friends. Praveen become a professional after completing his MBBS from Hindu Medical College. Naveen completed his MBA from IIM, Bangalore. In a discussion with Praveen, Naveen said that he too is a professional and is working with a multinational company as a senior manager getting a good package. Praveen was not convinced about the fact that Naveen was a professional in spite of being aware that nowadays there is increasing emphasis on managed business concerns. Praveen gave three reasons in support of his opinion.  
Explain the three reasons that Praveen might have given.

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Name: \_\_\_\_\_ Sec: \_\_\_\_\_ Roll No.: \_\_\_\_\_  
SET-B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST I: [2025-2026]**  
**BUSINESS STUDIES**  
**CLASS: XII**

**Time: 1 ½ Hours**

**Maximum Marks: 40**

**General Instruction:**

Read the following instructions very carefully and strictly follow them:

- (i) This question paper contains 17 questions. **All** questions are **compulsory**.
- (ii) Marks are indicated against each question.
- (iii) Answers should be brief and to the point.
- (iv) Answers to questions carrying **3** marks may be from 50 to 75 words.
- (v) Answers to questions carrying **4** marks may be in about 150 words.
- (vi) Answers to questions carrying **6** marks may be in about 200 words.
- (vii) Attempt all parts of a question together.

- 
1. Statement I: Management is multidimensional 1  
Statement II: The activities involved in managing an enterprise are the common to all organisation whether economic, social, or political.
- (a) Statement I is true and II is false
  - (b) Statement II is true and I is false
  - (c) Both the statements are false
  - (d) Both the statements are true
2. Frequent transfer and turnover of employees lead to violation 1  
of:
- (a) Principal of Esprit De Corps
  - (b) Principle of discipline
  - (c) Principle of initiative
  - (d) Principle of stability of personal

3. Due to increasing presence of women in the work force 'Kishan Mart' comes out every Friday with big discount offers on daily use items to attract office going women to shop on weekend. 1
- Identify the dimension of business environment is being highlighted in the above case:
- (a) Social environment                      (b) Legal environment  
(c) Political environment                      (d) Technological Environment
4. Different organisations have different goals. Zeepo is an upcoming retail chain for providing goods door to door, the objective of this organisation is to increase sales. Allie is an educational organisational organisation working with an objective of providing education to under privilege children of the society. Management of each of these organisations unite the effort of their employees towards achieving organisational goals. 1
- Which characteristics of management is highlighted above?
- (a) Management is goal oriented  
(b) Management is continuous process  
(c) Management is dynamic function  
(d) Management is an intangible force
5. Assertion(A): Business environment is largely certain. 1  
Reason(R): The future happenings in the business environment cannot be predicted easily.
- (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.

6. Vanguard Inc., a company manufacturing footwear for men, women and children has been earning consistent profit for the last many years. It has a democratic style of working. Workers are encouraged to develop and carry out plans for improvement in organisation. Varun who is working in the production department give a suggestion which result in 10% reduction in the cost of production of shoes. He was awarded for his suggestion. 1

Identify the principle of management followed by Vanguard Inc. in the above case:

- (a) Esprit De Corps
- (b) Subordinate of individual interest to general interest
- (c) Initiative
- (d) Equity

7. Rest intervals of job decided by: 1

- (a) Method Study
- (b) Fatigue Study
- (c) Motion Study
- (d) Time Study

8. Match the level of management given in column I with the function performed at each level given in column II: 1

Column I	Column II
1. Top level management	i. The directly oversee the efforts of workforce.
2. Middle level management	ii. The ensure that their department has the necessary personnel.
3. Operational level management	iii. They are responsible for the welfare and survival of organisation.

- (a) 1-(i) 2-(ii) 3(iii)
- (b) 1-(iii) 2-(ii) 3(i)
- (c) 1-(iii) 2-(i) 3(ii)
- (d) 1-(ii) 2-(iii) 3(i)

9. Raunaq, while studying at the University felt that there should be a food joint in the University campus to provide food to students round the clock. After passing out of college he set up 'Hunger Point' a food joint with a varied menu ranging from burger, Pizza, street food and much more in the University campus. For this he obtained necessary formation from the university administration. Since he was the first one to recognise the need for the food joint for all the students in an environment where students study day and night, it soon become a popular eating joint. Within 6 months 'Hunger Point' started earning good profits.
- Identify the importance of business environment discussed in the case:
- (a) It enables the firm to identify opportunities and get the first moved advantages
  - (b) It helps the farm to identify threats and early warning signals
  - (c) It helps in assisting in planning and policy formulation
  - (d) It helps in improving performance
10. Which of the following is an element of social environment?
- (a) Rates of savings and investment
  - (b) Expectation from the workforce
  - (c) The nature of relationship of our country with foreign country
  - (d) Planned outlay in public and private sector.
11. Rohan, Sohan and Mohan are three friends, they work in same company. One day they were having a conversation, when Rohan said, "I have purchased two new machines and it has become very difficult to motivate workers at shop floor to use this machine."
- Sohan said, "I am facing problems in finding the exact number and types of employees for my department."

Mohan said, "I have to decide the long-term plans of organization and I am responsible for the overall welfare of the organization."

(i) Identify the level of management in which Mohan is working?

(ii) Explain two functions performed by Mohan.

12. Explain the following techniques of Scientific Management: 3

(i) Time Study

(ii) Motion Study

13. A recent rate cut in the interest on loans announced by the Banks encouraged Amit, a science student of progressive school to take a loan from SBI to experiment and develop cars to be powered by fuel produced from garbage. He developed such a car and exhibited in the Science fair organized by Directorate of Education. He was awarded first prize for his invention. 4

Identify and explain the dimensions of business environment discussed in the above case.

14. Explain the following features of principles of management: 4

(i) Formed by practice and experimentation

(ii) Flexible

15. Management has to see that tasks are completed and goals are achieved with the least amount of resources at a minimum cost. 4

Identify & explain the concept/s stated above.

16. Explain the following principles of management: 6

(i) Science not rule of thumb

(ii) Harmony, not discord

17. Monika, Rashmi and Garima are childhood friends. After completing their education, Monika joined a school as a teacher. Rashmi joined a firm as Chartered Accountant and Garima as a general manager in an MNC. After a long time in a re-union function of the school, they meet each other. 6

Rashmi said that they were all professionals now. Garima told

Rashmi that she can say this about Monika and herself, but not about her since Manager is not considered a full-fledged professional.

Why did Garima say that she was not a professional? State any three points in support of your answer.

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

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I : [2025-2026]**  
**ECONOMICS(030)**  
**CLASS : XII**

Time: 1½ Hrs.

Maximum Marks : 40

**General Instructions :**

- 1) This paper contains 10 Multiple Choice Questions type questions of 1mark each.*
- 2) This paper contains 2 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.*
- 4) This paper contains 3 Short Answer Questions type questions of 4 marks is to be answered in 80 to 100 words*
- 5) This paper contains 1 Long Answer Questions type questions and 1 case based question of 6 marks each to be answered in 100 to 150 words.*
- 6) All questions are compulsory.*

- 
1. Which of the following is the main feature of macroeconomics? 1
    - a. Study of an individual
    - b. Subnormal equilibrium
    - c. Partial equilibrium
    - d. None of these
  
  2. Distribution of working population among different sectors of the economy is called:- 1
    - a. Occupational structure
    - b. Output structure
    - c. Population structure
    - d. Gender structure

3. Read the following statements carefully. 1

**Statement 1: Capital goods lead to direct satisfaction of human wants.**

**Statement 2: Higher production of consumption goods leads to higher production capacity in the economy.**

In light of the given statements, choose the correct alternative from the following:

- a. Statement 1 is true and Statement 2 is false
- b. Statement 1 is false and Statement 2 is true
- c. Both statements are true
- d. Both statements are false

4. Read the following statements-Assertion(A) and Reason(R). Choose one of the correct alternatives given below:- 1

**Assertion(A)- The gains of Green Revolution eluded small and marginal farmers.**

**Reason(R)- HYV technology required expensive inputs which were beyond the reach of marginal farmers.**

**Alternatives:**

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

5. Read the following dialogue between two people: 1

**Rohit:** I want 1 kg of mango.

**Aarushi:** What will you give in exchange?

**Rohit:** I can give you one pair of shoes in return for the mangoes.

**Aarushi:** I don't need shoes. I want some chocolates.

Which of the following problems is being faced by **Rohit** and **Aarushi** in their exchange process?

- a. Lack of store of value
- b. Lack of double coincidence of wants
- c. Lack of standard of deferred payments
- d. Absence of common units of value

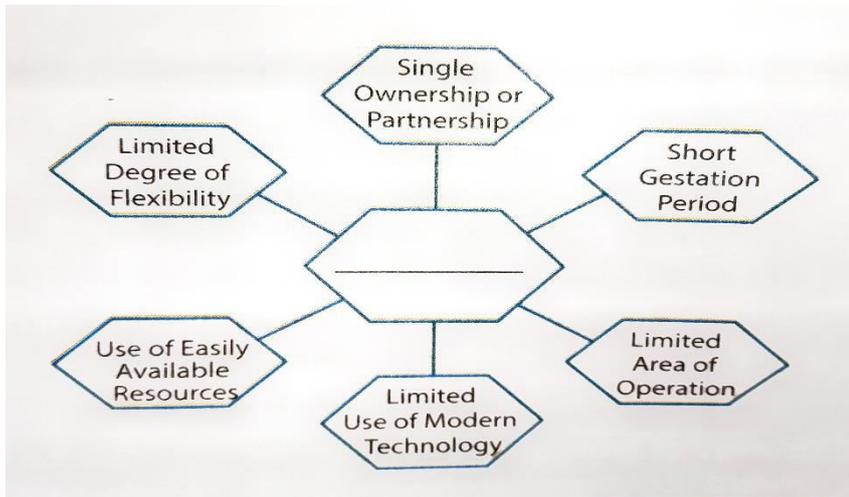
6. From the set of statements given in column I and column II, choose the correct pair of statements: 1

Column I	Column II
A. Demonetization	i. An event of 2016
B. Privatization	ii. Outright sale of the private enterprises
C. Trade and investment policy reforms	iii. Increase in tariff rates
D. Financial sector reforms	iv. Freedom to import capital goods

- a. A-(i)  
b. B-(ii)  
c. C-(iii)  
d. D-(iv)
7. Which of the following functions of the central bank is shown below: 1
- a. Issuer of currency  
b. Banker's Bank  
c. Lender of last resort  
d. None of the above
8. How can globalisation increase the standard of living of the people in a country? 1
- a. By offering more products to buy  
b. By increasing rural to urban migration  
c. By improving working conditions for factory workers  
d. By making cheaper products available due to increased competition
9. Net investment is equal:- 1
- a. Gross investment + depreciation  
b. Gross investment - depreciation  
c. Gross investment  $\times$  depreciation  
d. Gross investment  $\div$  depreciation

10. On the basis of the given chart answer the following question:-

1



The given listed features pertain to which type of industry?

- a. Small scale industry
  - b. Large scale industry
  - c. Both a and b
  - d. None of these
11. Write an observation each for agricultural and industrial sectors, suggesting colonial exploitation of these sectors under the British rule. 3
12. Elaborate any two instruments of credit control, exercised by the RBI. 3
- OR**
- Commercial banks create credit only on the advice of the Government. Is it true?
13. State the importance of “*Growth with equity*” as the objective of Indian economic planning. 4
14. “*Circular flow of income in a two sector economy is based on the axiom that one’s expenditure is another’s income*”. 4  
Support your answer with valid reasons.
15. “*The railways affected the structure of the Indian economy positively, as well as negative*”. 4  
Discuss.
16. Explain the process of money creation by a commercial bank using a hypothetical numerical example. 6

**OR**

Imagine yourself the RBI Governor.

How would you use the instrument of CRR to increase investment in the economy?

**17. Read the following case study carefully and answer the questions on the basis of the same:**

Industrial licensing, which was earlier applicable for all industries except a defined list, was now abolished for all but a handful of industries. This meant investment in new plants and capacity expansion in existing plants could now be undertaken for a very wide range of industries without any approval from the central government. Since the location of industries was previously specified in the license, the abolition of industrial licenses meant that location was left to investors to decide, setting the stage for different states to compete with each other to attract private investment. Earlier, the Monopolies and Restrictive Trade Practices(MRTP) Act provided that all investments by companies with total assets exceeding Rupees 1 billion needed special scrutiny to ensure that it would not increase concentration of economic power. These restrictions were abolished and the MRTP Act was to be used to check anti-competitive behavior. Foreign Direct Investment (FDI) was earlier allowed only in a defined list of high priority industry and each application needed to be cleared on a case-by-case basis, with foreign equity limited to 40%. FDI was now freely allowed up to 51% in this list and higher limits were considered on the merits of each case. The government also announced that it would seek for an investment pro-actively in areas where it could make a major contribution.

- a. Liberalization of the economy heralded a Paradigm shift in the approach towards management of the economy. Discuss. **3**
  
- b. State some trade and investment policy related reforms that were initiated in 1991. **3**

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

SET-B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I: [2025-2026]**  
**ECONOMICS(030)**  
**CLASS: XII**

Time: 1½ Hrs.

Maximum Marks: 40

**General Instructions :**

- 1) This paper contains 10 Multiple Choice Questions type questions of 1 mark each.*
- 2) This paper contains 2 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.*
- 4) This paper contains 3 Short Answer Questions type questions of 4 marks is to be answered in 80 to 100 words*
- 5) This paper contains 1 Long Answer Questions type questions and 1 case based question of 6 marks each to be answered in 100 to 150 words.*
- 6) All questions are compulsory.*

1. Which of the following is a macroeconomic variable? 1
  - a. National Income
  - b. Consumption expenditure in the economy
  - c. Investment expenditure in the economy
  - d. All of these
  
2. Which of the following factors further caused decline of jute textile after partition of the country? 1
  - a. British policies
  - b. Famines
  - c. Lack of raw materials
  - d. All of the above
  
3. Read the following statements carefully. 1

**Statement 1: Stock variables are measured at a point of time**  
**Statement 2: Flow variables and stock variables are same.**

In light of the given statements, choose the correct alternative from the following:

- a. Statement 1 is true and Statement 2 is false
- b. Statement 1 is false and Statement 2 is true
- c. Both statements are true
- d. Both statements are false

4. Read the following statements-Assertion(A) and Reason(R). Choose one of the correct alternatives given below:- 1

**Assertion(A)- The goal of equitable distribution of land was fully served by abolition of intermediaries, in the post independence India.**

**Reason(R)- Big landlords challenged the land ceiling legislation, delaying the implementation and subsequently escaping from the legislation.**

**Alternatives:**

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

5. Dynamic functions of money are related to:- 1

- a. Exchange of goods and services
- b. Valuation of goods and services
- c. Transfer of wealth across different parts of the economy.
- d. Stability and growth of the economy

6. From the set of statements given in Column I and Column II, choose the correct pair of statements:- 1

Column I	Column II
A. Outsourcing	i. An important outcome of the process of liberalisation
B. Foreign exchange reforms	ii. Initiated with the devaluation of the Indian rupee against foreign currency
C. Goods and Service Tax	iii. A direct tax
D. Contraction of public sector	iv. A measure of privatization

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

7. Find the missing figures and choose the correct alternative:-

1

Round	Deposits	Loans(80%)	Reserve Ratio(20%)
I	5000	4000	..(i)..
II	4000	..(ii)..	800
...	...	...	...
...	...	...	...
Total	..(iii)..	..(iv)..	5000

Alternatives:

- a. 1000, 800, 20000, 25000
  - b. 5000, 3200, 25000, 20000
  - c. 1000, 3200, 25000, 20000
  - d. 1000, 800, 20000, 25000
8. Read the following statements carefully.
- Statement 1: Air India, a fully owned Public Sector Undertaking(PSU) was disinvested and sold to a private entity.**
- Statement 2: Public Sector Undertaking are sold to create more direct and/or indirect employment opportunities in the country.**
- In light of the given statements, choose the correct alternative from the following:
- a. Statement 1 is true and Statement 2 is false
  - b. Statement 1 is false and Statement 2 is true
  - c. Both statements are true
  - d. Both statements are false
9. A car running between Delhi and Agra at a speed of 120 km per hour includes:-
- a. Only stock variables
  - b. Only flow variables
  - c. Both a stock and a flow variables
  - d. None of these

1

1

Periods	GDP (Growth Rate in Plan Period)	Saving Rate (% of GDP)	Investment Rate (% of GDP)	Incremental Capital- Output Ratio	Current Account Deficit (% of GDP)
First Plan (1951 to 1955-56)	3.61	10.28	10.64	2.9	0.36
Second Plan (1956-57 to 1960-61)	4.27	11.73	14.50	3.4	2.77
Third Plan (1961-62 to 1965-66)	2.84	13.21	15.46	5.4	2.25
Plan Period (1966-67 to 1970-71)	4.66	14.35	15.98	3.4	1.63
Plan Period (1971-72 to 1975-76)	3.08	17.98	17.88	5.8	0.6
Plan Period (1976-77 to 1980-81)	3.20	21.65	21.46	6.7	-0.19
Sixth Plan (1981-82 to 1985-86)	5.20	19.82	21.42	4.1	1.6
Seventh Plan (1985-86 to 1989-90)	5.8	20.36	22.74	3.9	2.38

On the basis of the above mentioned information answer the following question:-

The saving rate has increased by \_\_\_\_\_ (approximately from the first to the seventh plan.

- 90%
- 98%
- 92%
- 94%

11. Discuss briefly the estimates made by notable scholars regarding the national income and per capita income during the colonial rule in India. 3

**OR**

Colonial exploitation of the Indian economy during the British Raj have some positive side effects for the Indian economy. Do you agree?

12. Explain the components of legal reserve ratio. 3
13. What is Green Revolution? Why was it implemented and how did it benefit the farmers ? Explain in brief. 4
14. What is true at the micro level may be a paradox at the macro level? Explain with an example. 4
15. How did the construction of railways affect the structure of the Indian economy? 4

16. What is money multiplier? What determines the value of this multiplier?

6

OR

*“Money is something which is used by everyone on a daily basis for variety of purposes including exchanging goods and services to investing purposes”.*

In the light of the statement, explain the primary functions of money.

17. **Read the following text carefully and answer the questions on the basis of the given text and common understanding:**

In order to improve efficiency, infuse professionalism and enable them to compete more effectively in the liberalized global environment, the government identifies public sector enterprises and declare them as Maharatnas, Navratnas and Miniratnas. They were given greater managerial and operational autonomy, in taking various decisions to run the company efficiently and does increase their profits. Greater operational, financial and managerial autonomy has also been granted to profit-making enterprises referred to as miniratna’s. The central public sector enterprises are designated with different status: I. Maharatnas, II. Navratnas and III. Miniratnas.

Many of these profitable public sector enterprises were originally formed during the 1950 and 1960 when Self Reliance was an important element of public policy. They were set up with the intention of providing infrastructure and direct employment to the public so that quality end-product reaches the masses at a nominal cost and the companies themselves were made accountable to all stakeholders.

The granting of status result in better performance of these companies. Scholars allege that instead of facilitating public enterprises in their expansion and enabling them to become global players, the government partly privatized them through disinvestment. Of late, the government has decided to retain them in the public sector and enable them to expand themselves in the global markets and raise resources by themselves from financial markets.

**Source: NCERT**

- a. Why did the Government of India design Navratna Policy for the public sector enterprises? **3**
- b. State the objective behind the formation of profit-making enterprises. **3**

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

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST 1: [2025-2026]**  
**GEOGRAPHY**  
**CLASS: XII**

**Time Allowed-1 ½ Hours**

**Maximum Marks-40**

**General Instructions:**

- i. Question number 1 to 21 are MCQ type questions.
- ii. Question number 22 is a Short Answer type question.
- iii. Question number 23 -24 are Long Answer type questions (120-150 words).
- iv. Question number 25 and 26 are Source based questions.

1

Which one of the following statement does not describe geography:

1

- a) an integrative discipline
- b) study of the inner relationship between humans and environment
- c) subjected to dualism
- d) not relevant in the present time due to the development of technology.

2

**Complete the table with the given options.**

1

<b>Column I</b>	<b>Column II</b>
Population Geography	Demography
Urban Geography	_____

Options:

- a) Geography of Leisure
- b) Urban Studies and Planning
- c) Urban/Rural Planning
- d) Behavioural Geography

3 Consider the following statements and choose the correct sequence from the given options: 1

i) This stage has high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply.

ii) In this stage both fertility and mortality decline considerably

iii) The population becomes urbanized, literate and has high technical know-how and deliberately controls the family size.

iv) In the beginning of this stage fertility remains high but it declines with time. This is accompanied by reduced mortality rate.

Options:

a) i—iii—iv---ii

b) ii---iii----i----iv

c) i----ii----iii----iv

d) i----iv---ii----iii

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

**Assertion (A)**- The population growth or population change refers to the change in number of inhabitants of a territory during a specific period of time

**Reason (R)**- Population change in an area is an important indicator of economic development, social upliftment and historical and cultural background of the region.

**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) Both (A) and (R) are incorrect

d) (A) is correct but (R) is incorrect

5 Which of the following is not a key area in the Human Development ? 1

a) Access to resources

b) Long and healthy life

c) Education

d) Economic disadvantage

6 \_\_\_\_\_ approach was initially proposed by the International Labour Organization. 1

- a) Income Approach
- b) Welfare Approach
- c) Basic Needs Approach
- d) Compatibility Approach

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

Statement I: Plantation type of agriculture was introduced by the Europeans.

Statement II: Plantations were subsistence oriented large scale production system.

- a) Both the statements are correct.
- b) Only statement I is correct.
- c) Only statement II is correct.
- d) Both the statements are incorrect.

8 **Choose the incorrect statement about mining :** 1

- a) Depending on the mode of occurrence and the nature of the ore, mining is of two types: surface and underground mining.
- b) The surface mining is known as open cast mining and is the cheapest way of mining minerals that occur close to the surface.
- c) When the ore lies deep below the surface, opencast mining method is used.
- d) Shaft mining requires specially designed lifts, drills, haulage vehicles, ventilation systems etc, for safety and efficient movement of people and material.

9 Population of India according to occupation can be categorized into : 1

- a) Main workers, Marginal workers, Non-workers.
- b) Main workers, Household industrial workers, Non-workers.
- c) Agricultural labourers, Marginal workers, Non-workers.
- d) Cultivators, Main workers, Marginal workers.

10 The clustered rural settlement has----- 1

- a) closely built houses
- b) far houses
- c) planned houses
- d) all of these

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

Assertion (A)- Majority of metropolitan and mega cities are urban agglomerations.

Reason (R)- Cities accommodating population size between one to five million are called Mega Cities and more than five million population are called Metropolitan Cities.

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.

- 12 Which of the following facts, about jute cultivation in India ,is true? 1
- a) West Bengal is the leading producer of Jute .
  - b) Jute is a cash crop for Punjab and Haryana.
  - c) Madhya Pradesh and Maharashtra are other leading jute producing states.
  - d) India produces about 30% of the jute production of the world.
- 13 Choose incorrect statement: 1
- a) Rice is a staple food for the overwhelming majority of population in India .
  - b) Rice is a rabi crop.
  - c) West Bengal, Uttar Pradesh and Punjab are the leading rice producing states.
  - d) Rice cultivation in the irrigated areas of Punjab and Haryana was introduced in 1970s following the Green Revolution.
- 14 Human beings were able to develop technology after they developed the understanding of ----- 1
- a) natural laws      b) human laws
  - c) space laws      d) all of these
- 15 Which of the following are the characteristics of population in developed countries? 1

- a) Share of older people is large.
- b) Population in higher age group has increased due to increased life expectancy.
- c) The proportion of children has declined due to reduction in birth rate.
- d) All of the above.

16 It took 1500 years for population to reach from 5 million to 500 million. 1  
If it is considered as the 'first stage of demographic transition', which of the following is the main reason for the slow pace of population growth?

- a) High birth rate, low death rate.
- b) High birth rate, high death rate.
- c) Low birth rate, high death rate.
- d) Low birth rate, low death rate.

17 Which of the following activities comes under primary activities? 1

- a) Pastoralism
- b) Basket weaving
- c) Milk wending
- d) Tailoring

18 Which one of the following is the largest linguistic group of India? 1

- a) Sino Tibetan
- b) Austric
- c) Indo Aryan
- d) Dravidian

19 Which one of the following is the feature of clustered settlements? 1

- a) They are fragmented.
- b) They are isolated.
- c) Closely built -up areas of houses.
- d) Units are known as panna, para, palli etc

- 20 In India, which state produces the most jowar? 1  
a)Punjab  
b)Maharashtra  
c)Karnataka  
d)Rajasthan

- 21 During which period did India see a negative population growth rate? 1  
a)1911-1921  
b)1901-1910  
c)1921-1930  
d)None of these.

- 22 Give three characteristics of dry land farming in India. 3

OR

Explain the various farming seasons in India. In each season name the crops that are grown?

- 23 ‘There is low yield per acre but high yield per person in the interior parts of semi arid lands of the mid latitudes in the world’. Support the statement with suitable examples from different parts of the world. 5

OR

Describe the basic characteristics of pastoral nomadism and the locations where it occurs.

- 24 How are towns classified based on their functional roles? 5

- 25 **Read the given passage carefully and answer the questions that follow:** 3

Equity refers to making equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income and in the Indian case, caste. Yet this is very often not the case and happens in almost every society. For example, in any country, it is interesting to see which group the most of the school dropouts belong to. This should then lead to an understanding of the reasons for such behaviour. In India, a large number of women and persons belonging to socially and economically backward groups drop out of school. This shows how the choices of

these groups get limited by not having access to knowledge. Empowerment means to have the power to make choices. Such power comes from increasing freedom and capability. Good governance and people-oriented policies are required to empower people. The empowerment of socially and economically disadvantaged groups is of special importance.

i) Arrange the correct sequence of column II against column I.

Column I	Column II
I) Equity	1) refers to human labour productivity
II) Empowerment	2) refers to continuity in the availability of opportunities
III) Sustainability	3) refers to have the power to make choices
IV) Productivity	4) refers to making equal access to opportunities

A) I-4, III-2, II-1, IV-3  
B) I-4, III-2, IV-1, II-3  
C) III-4, I-2, IV-1, II-3  
D) I-1, II-2, III-3, IV-4

ii) Which one of the following is not a pillar of Human Development?

- A) Equity
- B) Sustainability
- C) Productivity
- D) Only women's choice

iii) Good governance and people-oriented policies to empower people leads to

- A) Population change
- B) Population growth
- C) Human development
- D) Human growth

**Read the given passage carefully and answer the questions that**

**follow:**

26

3

An important aspect of population growth in India is the growth of its adolescents. At present the share of adolescents up to the age group of 10 to 19 years is about 20.9%( 2011) among which male adolescents considered 52.7% and female adolescents constitutes 47.3%. The adolescent population, though, regarded as useful population having high potentials but at the same time they are not they are quite vulnerable if not guided and channelized properly.

- i) What is the percentage of female adolescents and male adolescents in total adolescent population?
  - a) 52.7% to 47.3%      b) 56% to 44%
  - c) 47.3% to 52.7%      d) none of this
- ii) What are the consequences of not channelizing and guiding the adolescents properly?
  - a) HIV and aids infection                      b) low intake of nutrients
  - c) illiteracy    d) all of the above
- iii) Out of the total population, what is the percentage of adolescent population in India ?
  - a) 20.9%                      b) 15%                      c) 24%                      d) 8%

\*\*\*\*\*

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

SET-B

BURNPUR RIVERSIDE SCHOOL, BURNPUR

PERIODIC TEST 1: [2025-2026]

GEOGRAPHY

Class: XII

Time Allowed-1 ½ Hours

Maximum Marks-40

**General Instructions:**

- i. Question number 1 to 21 are MCQ type questions.
- ii. Question 22 is a Short Answer type question question.(80-100)
- iii. Question number 23 & 24 are Long Answer type question (100-120 words).
- iv. Question number 25 and 26 are Source based questions .

1 Which one of the following statement is incorrect about the term possibilism: 1

- a) Humans create possibilities with the resources obtained from the environment.
- b) Nature provides opportunities and human beings make use of these.
- c) Slowly nature gets humanized and starts wearing the imprints of human endeavour.
- d) There is an interaction between primitive human society and strong forces of nature.

2 Complete the table and select the correct options. 1

Column I	Column II
A) Welfare or humanistic school of thought	i) Employed Marxian theory.
B) Behavioral School of thought	ii) Mainly concerned with the different aspects of social well being of the people.
C) Radical School of thought	iii) Laid great emphasis on lived experience.

OPTIONS:

- a)A-iii B-i C-ii
- b)A-ii B-iii C-i
- c)A-i B-ii C-iii

3 **Consider the following statements and choose the one which is not a fact:** 1

- a)Human population increased more than 10 times during the past 500 years.
- b) It's 200 years for the population to rise from five billion to six billion.
- c) Population growth is high in the first stage of demographic transition.
- d) Nearly 80 million people are added to the world's population each year.

4 In the question given below there are two statements marked as Assertion(A)and Reason(R). Mark your answer as per the option provided : 1

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

**Assertion(A):** Demographic transition theory can be used to describe and predict the future population of any area.

**Reason(R):** The theory tells us the population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society.

5 Which one of the following scholars introduced the concept human development? 1

- a) Professor Amartya Sen                      b) Ellen C Semple
- c) Dr Mahabub-ul-Haq                        d) Ratzel

6 The \_\_\_\_\_ approach was initially proposed by the International Labour Organization. 1

- a) Income Approach                            b) Welcome Approach
- c) Basic Needs Approach                      d) Capability Approach

7 **Statement I:** Plantation type of agriculture was introduced by the Europeans. 1

**Statement II:** Plantations were subsistence-oriented large scale production systems.

**OPTIONS**

- a) Both statement I and statement II are correct.
- b) Both statement I and statement II are incorrect'
- c) Only statement I is correct.  
Only statement II is correct.

8 **Identify the type of agriculture with the given clues.** 1

1. This sort of agriculture is common in monsoon in Asia's densely inhabited areas.
2. Wet paddy cultivation and crops other than paddy are dominant in this form of farming.
3. The productivity per unit area is great, but land holdings are limited due to high population density ,reduced use of machines ,family labour and the usage of farm yard manures.
4. Wheat, soyabean, barley ,sorghum are some of the other crops grown in northern China, Manchuria ,North Korea and Japan.

**OPTIONS**

- a)Plantation Agriculture.
- b)Extensive Commercial Grain Farming .
- c) Intensive Commercial Grain Farming.
- d) Collective Farming .

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

**Assertion (A)-** The decades 1951 to 1981 are referred to as the period of population explosion in India.

**Reason (R)-** After Independence the centralized development planning improved the living condition of people leading to low mortality rate but high potential rate.

**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) Both (A) and (R) are incorrect
- d) (A) is correct but (R) is incorrect

10 Which one of the following is the main feature of rural settlement? 1

- a) Derive economic needs from primary activities.
- b) Derive economic needs from secondary activities.
- c) Derive economic needs from tertiary activities.
- d) Derive economy needs from quarterly activities.

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

**Assertion (A)-** Towns flourished since prehistoric times in India.

**Reason (R)-** Even at the time of Indus Valley Civilization towns like Harappa and Mohenjodaro were in existence.

### **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

12 **Which of the following is not a feature of Dryland farming?** 1

- a) It is practiced where annual amountof rainfall is less than 75 cms
- b) Practice in black soil areas.
- c) Measures are taken to preserve soil moisture.
- d) drought resistant crops are grown.

13 India is the world's leading producer of which crop? 1

- a) Jute    b) Rice    c) Tea    d) Coffee

- 14 Naturalisation of human means \_\_\_\_\_. 1  
a) Low level of technological development.  
b) Moderate level of technological development.  
c) High level of technological development.  
d) No technological development.
- 15 Which one of the following is a thickly populated region? 1  
a) The Himalayan region.  
b) Osaka Kobe Region of Japan.  
c) Siberian region of Russia.  
d) Central Chile.
- 16 Which of the following best describes development? 1  
a) An increase in size.  
b) A constant in size.  
c) A positive change in quality.  
d) A simple change in quality.
- 17 Citrus cultivation is particularly essential in which of the following forms of agriculture? 1  
a) Market gardening.  
b) Plantation agriculture.  
c) Mediterranean agriculture.  
d) Co-operative farming.
- 18 Which one of the following states has the highest population? 1  
a) West Bengal      b) Bihar      c)Uttar Pradesh      d)Punjab
- 19 Choose the correct pair from the following: 1  
a. Industrial town :Visakhapatnam  
b. Transport town :Satna.  
c. Commercial town : Bhillai  
d. Administrative town :Bhopal
- 20 In irrigated areas which of the following is the most common kind of degradation? 1  
a) Gully erosion .  
b) Wind erosion.  
c) Salanisation of soils.  
d) Siltation of land.
- 21 Which one of the following is the largest linguistic group of India? 1  
a) Sino-Tibetan    b)Indo-Aryan    c)Austrian    d)Dravidian

- 22 Enlist and describe three problems of Indian agriculture? 3
- 23 What are the four pillars of human development describe. 5
- 24 Enlist and describe the characteristics of urban settlements? 5
- 25 Read the given passage carefully and answer the questions that follow by choosing the most appropriate option: 3
- High level of human development group has 53 countries. Providing education and healthcare is an important government priority countries with higher human development are those where a lot of investment in the social sector has taken place altogether a higher investment in people and good governance has set this group of countries apart from the others.
- Many of these countries have been the former Imperial powers the degree of social diversity in these countries is not very high many of the countries with a high development score are located in Europe and represent the industrialized Western world yet there are striking numbers of non European countries also who have made it to this list.
- i) Which one of the following is an important priority of human development index countries?
- a. Education and health care
  - b. Health care and territorial security
  - c. Education and Industrial Development
  - d. Economic development and per capita income
- ii) Which one of the following differentiates the higher human development countries from others?
- a. Higher gross domestic production
  - b. Higher investment in social sector
  - c. Higher industrialization
  - d. Higher per capita income.
- iii) How many countries are under high human development index category?
- iv) a) 51      b) 52      c) 53      d) 54

An important aspect of population growth in India is the growth of its adolescents. At present the share of adolescents up to the age group of 10 to 19 years is about 20.9%( 2011) among which male adolescents considered 52.7% and female adolescents constitutes 47.3%. The adolescent population, though, regarded as useful population having high potentials but at the same time they are not they are quite vulnerable if not guided and channelized properly.

- i) What is the percentage of female adolescents and male adolescents in total adolescent population?
  - a) 52.7% to 47.3%
  - b) 56% to 44%
  - c) 47.3% to 52.7%
  - d) none of this
- ii) What are the consequences of not channelizing and guiding the adolescents properly?
  - a) HIV and aids infection
  - b) low intake of nutrients
  - c) illiteracy
  - d) all of the above
- iii) Out of the total population, what is the percentage of adolescent population in India ?
  - a) 20.9%
  - b) 15%
  - c) 24%
  - d) 8%

\*\*\*\*\*



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

SET-A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-I [2025-26]**  
**PHYSICAL EDUCATION**  
**Class – XII**

Time: 1 ½ Hrs.

Max Marks: 40

General Instructions:

1. There are 18 questions in the question papers. All questions are compulsory.
2. Question no 1 to 7 which has 7 MCQS. Each question carries 1 mark.
3. Question no 8 to 12 are very short answer type questions. Each question carries 2 marks. (30 to 50 words)
4. Question No 13 to 15 are short answer type questions. Each question carries 3 marks. (80 to 100 words)
5. Question No 16 is a value based question, carry 4 mark
6. Question No 17 & 18 are long answer type questions. Each question carries 5 marks. (100 to 150 words)

**SECTION - A**

Q.1

Match the following:

1

Column I	Column II
1. Knock out	(i) League tournament
2. Cyclic	(ii) After loosing get out of tournament
3. Bye	(iii) Resolve dispute
4. Technical Committee	(iv) Given when teams are not in power of 2

- a) 1-(i), 2- (ii), 3- (iii), 4- (iv)
- b) 1-(i), 2-(iii), 3- (iv), 4- (ii)
- c) 1-(iv), 2-(iii), 3-(ii), 4-(i)
- d) 1-(ii), 2-(i), 3-(iv), 4-(iii)

Q.2

Which of the following is not a spinal curvature deformity?

1

- a) Kyphosis
- b) Flat foot
- c) Scoliosis
- d) Lordosis

- Q.3 A healthy normal menstrual period is called. 1  
 a) Menarche b) Menopause c) 28 day cycle d) None of the above
- Q.4 \_\_\_\_\_ asana resembles the face of a cow. 1  
 a) Bhujangasana b) Halasana c) Padmasana d) Gomukhasana
- Q.5 Which asana is helpful in maintaining normal blood pressure? 1  
 a) Shavasana b) Padmasana c) Shalabhasana d) Anulom-Vilome
- Q.6 The founder of special Olympic was. 1  
 (a) Eunice Kennedy Shriver  
 (b) John F, Kennedy  
 (c) Lyndon B. Johnson  
 (d) Donald Trump
- Q.7 Assertion (A): Education is meant for all the students 1  
 irrespective of the state of their physical and mental health.  
 Reason (R): Education is a fundamental right of every child between the age group of 6 to 14 years.  
 In the context of the above statements which one of the following is correct?  
 (a) Both (A) and (R) are true, (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

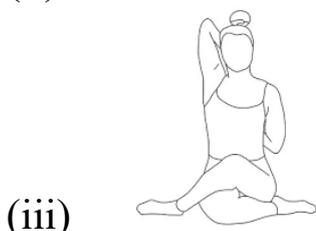
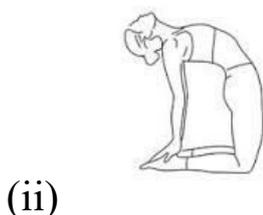
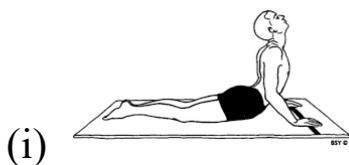
- Q.8 Explanation any two functions of planning. 2
- Q.9 Discuss any two objectives of intramural. 2
- Q.10 What is female athlete's triad? 2
- Q.11 What is Yoga? 2
- Q.12 What do you mean by Disability? 2

OR

What do you mean by Deaflympics?

### SECTION -C

- Q.13 Explain the causes of kyphosis and lordosis. 3
- Q.14 Identify the below given asanas and write the name: 3



- Q.15 What do you mean by inclusion in education? 3

OR

Draw fixture of six teams on league basis following the staircase method.

### SECTION - D

- Q.16. Meena's coach was training her for district level competition. Which giving coaching he realized that her knees are always getting close to one and other. Then he recommended her two asanas, like garudasana and ardha matasyendra asana. By continuous practice her problem was rectified. 4
- (a) Meena was suffering from which deformity?
- (b) Garudasana and Ardha Matasyendra asana is recommended for which deformity.
- (c) Write two causes of Bow legs deformity.
- (d) Another name of Bow legs is \_\_\_\_\_

### SECTION – E

- Q.17 Draw the fixture of 13 teams on knockout basis. 5
- Q.18 Discuss the advantages of physical activities for children with special needs in details. 5

OR

What do you mean by obesity? Discuss the benefits and contraindication of katichakrasana and tadasana.



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

SET: B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-1: [2025-2026]**  
**PHYSICAL EDUCATION (048)**  
**CLASS: XII**

Time: 1 ½ Hrs.

Maximum Marks: 40

**General Instructions:**

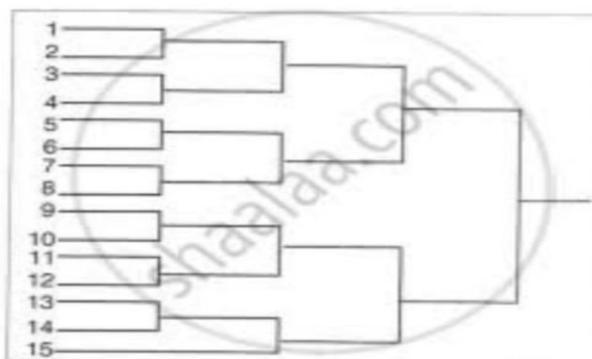
- The question paper is divided into 5 sections – A, B, C, D and E and 18 questions.
- Section-A, consists of 07 questions (1-07). Each question carries 1 mark and are multiple choice questions.
- Section-B, consists of 05 questions (08-12). Each question carries 2 marks each and are very short answer types and their answers should not exceed 60-90 words.
- Section-C, consists of 03 questions (13-15). Each question carries 3 marks each and are short answer types and their answers should not exceed 100-150 words.
- Section-D, consists of 1 question (16) of 4 marks and are case-study based question.
- Section-E, consists of 02 questions (17-18) of 5 marks each and are long answer types and their answers should not exceed 200-300 words.

**SECTION-A**

**Each question carries 1 marks**

Q.1. Study the knock-out fixture given of 15 teams below.

1



As shown in the fixture if the winner team plays least number of matches, then which number of team is the winner?

- a) 1      b) 9      c) 14      d) None of these

Q.2.

Match the following.

1

	List -I		List-II
A.	Genu Varum	(i)	Flat Foot
B.	Genu Valgum	(ii)	Lordosis
C.	Pes-planus	(iii)	Knock knees
D.	Sway Back	(iv)	Bow Legs

Match the items of list-I with list-II and choose the correct option from the following:-

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

Q.3.

Given below are the two statements, one of which is labelled as Assertion (A) and other is labelled as Reason (R). Read the both statements carefully:

1

Assertion (A):- Scoliosis is much tougher to treat with correct exercises.

Reason ( R ):- One must perform abdominal strengthening exercises.

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

- (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 true, but Reason is false.  
 (D) Assertion is false, but Reason is true.

- Q.4. What are the symptoms of Asthma? 1
- Extra production of mucus
  - Excessive coughing
  - Wheezing and shortness of breath
  - All of these
- Q.5. The advantage of Vajrasana is..... 1
- Relieves stomach ailments
  - Tones up the body
  - Get the blood sugar stable
  - Control your habits
- Q.6. What is the right term that should be used for children with special needs? 1
- Viklang
  - Divyang
  - Differently Abled
  - All of these
- Q.7. To participate in Special Olympics, minimum age should be \_\_\_\_\_ years old. 1
- 7
  - 6
  - 8
  - None of these

**SECTION-B**

- Q.8. What is Tournament? 2
- Q.9. Round-Robin Tournament is two types. Name them and given one major difference between them. 2
- Q.10. What do you mean by fine motor development? 2
- Q.11. "Matsyasana gives backward stretch to whole spine." Comment. 2
- Q.12. What is the concept of classification and divisioning in sports? 2

**OR**

Discuss the Aim of Special Olympics.

**SECTION-C**

- Q.13. Write about the deformities of Spinal curvature. 3
- Q.14. "Asanas can be used as a preventive measures." Comment. 3
- Q.15. "Participation in physical activities is advantageous for children with special needs." Briefly explain any three advantages. 3

**OR**

What do you understand by the term inclusion? Explain its need and implementation in India.

**SECTION-D**

Q.16. Read the given case study carefully and answer the questions that follow: 4×1=  
4

Ridhima, a student of class XII, used to read books in the school library. One day she was studying the history of eating disorder and amenorrhea and felt that more girls and women must be encouraged to create awareness about female athlete troid. She believed that impossible things can be achieved through participating in sports.

**Answer the following questions based on the above case and your prior knowledge:**

- (a) In which year did women first participate in Olympics?
- (b) Female athlete troid includes \_\_\_\_\_.
- (c) Amenorrhea is a condition of \_\_\_\_\_.
- (d) Name two female role models athletes who encourages sports of women in India.

**SECTION-E**

Q.17. Draw Single elimination fixture of 11 teams with all specific steps. 4+1

**OR**

What are the benefits of organising community sports programmes?

Q.18. Briefly write about the opening and closing ceremonies of Paralympics Games. 2.5+2.5

\*\*\*\*\*

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

CODE: A

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-1 : [2025-2026]**  
**INFORMATION TECHNOLOGY (802)**  
**CLASS – XII**

**Time: 1 ½ Hrs.**

**Maximum Marks: 40**

**General Instructions:**

1. *Please read the instructions carefully.*
2. *This Question Paper consists of 10 questions in two sections – Section-A & Section-B.*
3. *Section-A has Objective type questions whereas Section-B contains Subjective type questions.*
4. *All questions are compulsory.*
5. *All questions of a particular section must be attempted in the correct order.*
6. **SECTION-A : Objective Type Questions (19 Marks)**
  - i. *This section has 02 questions.*
  - ii. *There is no negative marking.*
  - iii. *Do as per the instructions given.*
  - iv. *Marks allotted are mentioned against each question/part.*
7. **SECTION-B : Subjective Type Questions (21 Marks)**
  - i. *This section contains 08 questions.*
  - ii. *Do as per the instructions given.*
  - iii. *Marks allotted are mentioned against each question/part.*

## **SECTION-A: OBJECTIVE TYPE QUESTIONS**

1. **Answer the following 10 questions on Employability Skills (1 x 10 = 10 marks)**
- i. Who are IT entrepreneurs? 1
  - ii. Identify the preposition from the sentence given below: 1  
“The dog jumped upon the table.”
  - iii. Identify the type of sentence: 1  
‘Stop feeding the dog!’  
a. Declarative Sentences                      b. Interrogative sentences  
c. Imperative Sentences                      d. none
  - iv. Which of the following is not a stage of Active Listening? 1  
a. Receiving                                      b. Non-responding  
c. Both (a) & (b)                              d. none
  - v. Individuals, who focus on developing solutions that benefit the 1  
society, are called \_\_\_\_\_.  
a. Social Entrepreneurs                      b. Family Business Entrepreneurs  
c. Professional Entrepreneurs              d. none
  - vi. \_\_\_\_\_ means Entrepreneurs monitor that everything is carried out 1  
in their organisations as per their decisions but at the same time  
gives flexibility to the employees.  
a. Effective Monitoring                      b. Adaptability  
c. Assertiveness                              d. none
  - vii. **Fill in the blank:** 1  
\_\_\_\_\_ is the ability to decode the meaning of an audio string.
  - viii. **Fill in the blank:** 1  
The ability to negotiate with suppliers, customers etc. is \_\_\_\_\_  
skill.
  - ix. State TRUE or FALSE: 1  
“Communication involves a sender, who sends a message through  
a channel.”
  - x. State TRUE or FALSE: 1  
“The entrepreneurial journey is full of doubts and uncertainties.”

2.

**Answer the following 9 questions**

**(1 x 9= 9 marks)**

- i. What is the use of SELECT command? 1
- ii. What is web-based application? 1
- iii. \_\_\_\_\_ key constraint is used to establish a relationship between two tables. 1
- a. Primary      b. Foreign      c. Both (a) & (b)      d. none
- iv. \_\_\_\_\_ command is used to delete records from a table. 1
- a. DELETE      b. REMOVE  
c. DROP      d. none
- v. Which of the following is a client-side script? 1
- a. JavaScript      b. HTML      c. Both (a) & (b)      d. none
- vi. Which of the following is a server-side script? 1
- a. PHP      b. ASP      c. Both (a) & (b)      d. none
- vii. Fill in the blank: 1
- DDL stands for \_\_\_\_\_.
- viii. Fill in the blank: 1
- NIC stands for \_\_\_\_\_.
- ix. State TRUE or FALSE: 1
- ‘A default value is specified for a column if no value is specified.’

**SECTION-B: SUBJECTIVE TYPE QUESTIONS**

**Answer the following 2 questions on**

**Employability Skills (2 x 2 = 04 marks)**

3. Write down the four steps to Active Listening. 2
4. ‘Resourcing’ is one of the roles and functions of an entrepreneur. 2
- What do you understand by ‘Resourcing’?
5. Who are Technical Entrepreneurs? 2
- Technical Entrepreneurs are also known as what?

**Answer the following 3 questions**

**(2 x 3 = 06 marks)**

6. Name any two online shopping stores. Give an advantage of online shopping. 2
7. The following commands are giving errors. Write the correct MYSQL commands. 2
- (a) **DESC TABLE STUDENT;**
- (b) **ALTER STUDENT DROP SNAME;**

**Answer the following 1 question**

**(3 x 1 = 03 marks)**

8. Mention the first six stages of a web development cycle. 3

**Answer the following 2 questions**

**(4 x 2 = 08 marks)**

9. Consider the following SCHOOL table and answer the questions (i) to (iv) given below. 4

School_Code	School_Name	Medium	Address
101	ABC School	English	Asansol
103	MNO School	Hindi	Dhanbad
105	XYZ School	Bengali	Malda

- i) What is the degree of the SCHOOL relation.
- ii) What is the cardinality of the SCHOOL relation.
- iii) Write down the Relation Schema of the SCHOOL relation.
- iv) Name the constraint that should be applied on the field named as School\_Code.

10. Consider the following **Sales** table and write SQL queries for the following:

sale_id	product_id	quantity_sold	sale_date	total_price
1	101	5	2024-01-01	2500.00
2	102	3	2024-01-02	900.00
3	103	2	2024-01-02	60.00
4	104	4	2024-01-03	80.00
5	105	6	2024-01-03	90.00

- i. Retrieve the sale\_id and sale\_date from the Sales table.**
- ii. Filter the Sales table to show only sales with a total\_price greater than 100.**
- iii. Retrieve the sale\_id and total\_price from the Sales table for sales made on January 3, 2024.**
- iv. Calculate the total revenue generated from all sales in the Sales table.**

=====



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

CODE: B

**BURNPUR RIVERSIDE SCHOOL, BURNPUR**  
**PERIODIC TEST-1 : [2025-2026]**  
**INFORMATION TECHNOLOGY (802)**  
**CLASS – XII**

**Time: 1 ½ Hrs.**

**Maximum Marks: 40**

**General Instructions:**

1. *Please read the instructions carefully.*
2. *This Question Paper consists of 10 questions in two sections – Section-A & Section-B.*
3. *Section-A has Objective type questions whereas Section-B contains Subjective type questions.*
4. *All questions are compulsory.*
5. *All questions of a particular section must be attempted in the correct order.*
6. **SECTION-A : Objective Type Questions (19 Marks)**
  - i. *This section has 02 questions.*
  - ii. *There is no negative marking.*
  - iii. *Do as per the instructions given.*
  - iv. *Marks allotted are mentioned against each question/part.*

**SECTION-B : Subjective Type Questions (19 Marks)**

- v. *This section contains 08 questions.*
- vi. *Do as per the instructions given.*
- vii. *Marks allotted are mentioned against each question/part.*

## **SECTION-A: OBJECTIVE TYPE QUESTIONS**

1.

**Answer the following 10 questions on  
Employability Skills (1 x 10 = 10 marks)**

- i. Who are Industrial Entrepreneurs? 1
- ii. Identify the adjective from the sentence given below: 1  
“The man is starring with red eyes.”
- iii. Identify the type of sentence: 1  
‘Mangoes are sweet’  
a. Declarative Sentences                      b. Interrogative sentences  
c. Imperative Sentences                      d. none
- iv. Which of the following can be a barrier to Active Listening? 1  
a. Noisy environment                      b. Not being attentive  
c. Both (a) & (b)                      d. none
- v. Priya believes that she does not have the ability to work with a 1  
team when she starts her business. The barrier she is facing is  
known as \_\_\_\_\_.  
a. Getting capital                      b. Self-doubt  
c. Risk-taking                      d. none
- vi. When women take initiative and do business they are called as 1  
\_\_\_\_\_.  
a. Ladies Entrepreneurs                      b. Women Entrepreneurs  
c. Girl Power Entrepreneurs                      d. none
- vii. **Fill in the blank:** 1  
\_\_\_\_\_ is the ability to decode the meaning of a written string.
- viii. **Fill in the blank:** 1  
\_\_\_\_\_ Management refers to handling hectic work life and handle  
stress.
- ix. State TRUE or FALSE: 1  
“Feedback is important as it helps in knowing whether the  
receiver has understood the message or not.”

- x. State TRUE or FALSE: 1  
“A waged employee has to do his/her job and not to worry about the company.”

2. **Answer the following 9 questions**

**(1 x 9= 9 marks)**

- i. What is the use of DISTINCT keyword? 1
- ii. Write down the Indian e-governance portal. 1
- iii. \_\_\_\_\_ command is used to delete a table from a database. 1  
a. DELETE TABLE                      b. REMOVE TABLE  
c. DROP TABLE                         d. none
- iv. A table can also join to itself, which is known as \_\_\_\_\_. 1  
a. True Join      b. Self Join      c. Primary Join      d. none
- v. In ‘https://’, what does ‘s’ stands for? 1  
a. standard      b. standalone      c. secure              d. none
- vi. Which of the following is an email program? 1  
a. Yahoo              b. AOL              c. Both (a) & (b)      d. none
- vii. **Fill in the blank:** 1  
The syntax to view the structure of a table in SQL is  
\_\_\_\_\_ <tablename>;
- viii. **Fill in the blank:** 1  
NSP stands for \_\_\_\_\_.
- ix. State TRUE or FALSE: 1  
‘Primary key field cannot contain NULL or Duplicate values.’

**SECTION-B: SUBJECTIVE TYPE QUESTIONS**

**Answer the following 2 questions on**

**Employability Skills (2 x 2 = 04 marks)**

3. Write any two importance of active listening at the workplace? 2
4. Mention four qualities that motivate an entrepreneur. 2
5. ‘Resourcing’ is one of the roles and functions of an entrepreneur. 2  
What do you understand by ‘Resourcing’?

**Answer the following 3 questions**

**(2 x 3 = 06 marks)**

6. 'For making a web application operational, we need a web server, an application server, and a database.' 2  
What is the function of a web server and an application server?
7. What are the two main disadvantages of using a DBMS. 2

**Answer the following 1 question**

**(3 x 1 = 03 marks)**

8. Why do we prefer online reservation? (Give 3 valid points) 3

**Answer the following 2 questions**

**(4 x 2 = 08 marks)**

9. Consider the following **Products** table and write SQL queries for the following: 4

product_id	product_name	category	unit_price
101	Laptop	Electronics	500.00
102	Smartphone	Electronics	300.00
103	Headphones	Electronics	30.00
104	Keyboard	Electronics	20.00
105	Mouse	Electronics	15.00

- i. Retrieve the product\_name and unit\_price from the Products table.
- ii. Filter the Products table to show only products in the 'Electronics' category.

- iii. Retrieve the `product_id` and `product_name` from the `Products` table for products with a `unit_price` greater than 100.
- iv. Calculate the average `unit_price` of products in the `Products` table.

10. Consider the following LIBRARY table and answer the questions (i) to (iv) given below. 4

Book_No	Book_Name
1001	ABC
1002	DEF
1004	GHI
2003	JKL
2005	MNO
3003	PQR
4005	STU

- i) What is the degree of the LIBRARY relation.
- ii) What is the cardinality of the LIBRARY relation.
- iii) Write down the Relation Schema of the LIBRARY relation.  
Name the constraint that should be applied on the field named as `Book_No`.

=====

