

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN

PERIODIC TEST III : (2025-2026)

BIOLOGY

CLASS : XI

Time: 1½ Hours

Maximum Marks: 40

GENERAL INSTRUCTIONS:

There are 5 sections; A,B,C,D & E.

Section A contains 10 questions of 1 mark each.

Section B contains 3 questions of 2 marks each.

Section C contains 5 questions of 3 marks each.

Section D contains 1 question of 5 marks each.

Section E contains 1 case-based questions of 4 marks.

There is no overall choice. However, internal choices are given with some questions. A student has to attempt only one of the alternatives in such questions. Draw neat diagrams wherever it is required.

SECTION - A

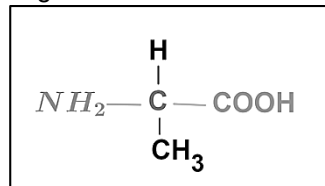
Q. No. 1 to 8 are multiple choice questions. Only one of the choices is correct. Select and write the correct choice as well as the answer to these questions.

1. Centriole takes part in the formation of _____? [1]
 a. nucleus b. spindle c. cell plate d. starting cell division

2. Plastid differs from mitochondria on the basis of the following feature or features. [1]
 Choose correct option accordingly.
 i. Presence of two layers of membrane
 ii. Presence of ribosome
 iii. Presence of thylakoids
 iv. Presence of DNA
 a. i only b. ii & iii c. ii, iii & iv d. iii only

3. Decreasing order of organic compounds in protoplasm is: [1]
 a. protein, lipid, nucleic acid, and ions
 b. protein, nucleic acid, carbohydrate and lipid
 c. carbohydrate, lipid, nucleic acid and ions
 d. carbohydrate, lipid, nucleic acid, and protein

4. Identify the structure given below and choose the correct option. [1]



- a. Glycine b. Alanine c. Serine d. Lysine
 5. In oocytes of some vertebrates, the arrest phase can last for months or years. [1]
 Identify the phase from following options.

- a. Diplotene b. Zygotene c. Pachytene d. Diakinesis
 6. Choose the events that occur in non-cyclic photophosphorylation but not in cyclic [1]
 photophosphorylation.

I. Synthesis of ATP

II. Water splitting

III. Involvement of PS I

IV. Formation of NADPH

V. Phosphorylation occurs due to cyclic flow of electrons

Choose the correct answer from the options given below option.

- a. II and IV only b. I, II and V only
 c. II, III, IV and V only d. II, IV and V only
 7. The rRNA is synthesized by _____. [1]

- a. Golgi body b. Nucleus c. Nucleolus d. Cytoplasm
 8. Which of the following does not describe the root apex meristem's cell walls? [1]

a. A secondary nature

b. Thin

c. Cellulosic

d. Numerous connections between plasmodesmata

Following two questions are assertion and reason type. Choose the any of the following options which is suitable for those questions.

- 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.

9. **Assertion (A):** Living organisms possess specific individuality with the definite shape and size. [1]

Reason (R): Both living and non-living entities resemble each other at the lower level of organisation.

10. **Assertion (A):** The long protein chain folds upon itself like a hollow ball giving rise to the tertiary structure. [1]

Reason (R): Tertiary structure gives a 3-dimensional view of a protein.

SECTION B

11. Why do green plants start evolving carbon dioxide instead of oxygen on a hot sunny day? [2]

12. Attempt either option A or B.

A. Do you know any step in the TCA cycle where there is substrate level phosphorylation? If yes, explain. [2]

OR

B. Oxygen is an essential requirement for aerobic respiration but it enters the respiratory process at the end? Why?

13. Is there a difference in the growth pattern of plants and animals? Do all parts of the plant grow endlessly? [2]

SECTION C

14. Critically describe alcoholic fermentation and lactic acid fermentation. [3]

15. "Differentiate between mitosis and meiosis based on their significance, chromosome number in daughter cells, and occurrence." Explain how these differences support their respective biological roles. [3]

16. Attempt either option A or B.

A. Describe the different functions of polysaccharides in living organisms. Explain how the glycosidic bonds are made. [3]

OR

B. Why do fats release more energy than carbohydrates in the oxidation process? What is a disaccharide? Write briefly.

17. Mention briefly three factors which control photosynthesis and how they affect photosynthesis? [3]

18. Attempt either option A or B.

A. Describe how GA, cytokinin and auxin can be applied in modern horticulture or agricultural process? [3]

OR

B. Mention the physiological role of abscisic acid, auxin and ethylene.

SECTION D

19. Attempt either option A or B.

A. What is a centromere? How does the position of the centromere form the basis of the classification of chromosomes? Support your answer with a diagram showing the position of the centromere on different types of chromosomes. [5]

OR

B. Both lysosomes and vacuoles are endomembrane structures, yet they differ in terms of their functions. Comment. What are nuclear pores? State their function.

SECTION E

20. All enzyme (except ribosomes) are proteins. An enzyme, like any other protein, has primary and secondary and tertiary structures. The protein functions as enzyme in its tertiary structure where active sites are formed. [4]

i) What is active sites of an enzyme?

ii) How are active sites may get change its shape during reaction?

Attempt either option (iii) or (iv).

iii) Mention major difference between inorganic catalyst and enzyme catalyst.

OR

iv) Mention two features of lock and key hypothesis of enzyme action.

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN

PERIODIC TEST III: (2025-2026)

CHEMISTRY

CLASS: XI

Time: $1\frac{1}{2}$ Hours

Maximum Marks: 40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

Read the following instructions very carefully and strictly follow them:

1. There are **18** questions in this question paper with internal choice.
2. **SECTION A** consists of 8 multiple-choice questions carrying **1** mark each.
3. **SECTION B** consists of 3 very short answer questions carrying **2** marks each.
4. **SECTION C** consists of 4 short answer questions carrying **3** marks each.
5. **SECTION D** consists of 1 case-based question carrying **4** marks.
6. **SECTION E** consists of 2 long answer questions carrying **5** marks each.
7. **All questions are compulsory.**
8. **Use of log tables and calculators is not allowed.**

Section A

1. For the reaction: $2\text{Al} + 3\text{Cl}_2 \rightarrow 2\text{AlCl}_3$ [1]
The total number of electrons accepted by chlorine molecule is:
a) 2 b) 3 c) 4 d) 6
2. What is the oxidation state of Cr in CrO_5 ? [1]
a) +6 b) +5 c) +10 d) +3
3. A reducing agent is an: [1]
a) electron donor species that oxidised itself.
b) electron acceptor species that reduced itself.
c) electron acceptor species that oxidised itself.
d) electron donor species that reduced itself.
4. A certain buffer solution contains equal concentration of X^- and HX . The K_b for X^- is 1×10^{-10} . What is the pH of the buffer? [1]
a) pH = 7 b) pH = 4 c) pH = 11 d) $6 < \text{pH} < 11$
5. The value of K_c for a reaction is 4×10^{-8} . This means: [1]
a) Reaction proceeds nearly to completion b) Products $\gg$ Reactants
c) Reactants $\gg$ Products d) Reaction is very fast
6. Which of the following does not decolourise bromine water? [1]
a) Ethene b) Ethyne c) Ethane d) Propene
For questions No. 7 and 8, two statements are given – one labelled as **Assertion(A)** and the other labelled as **Reason(R)**. Select the correct answers to these questions from the code (A), (B), (C) and (D) as given below.
(A) Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of the Assertion (A).
(B) Both Assertion (A) and Reason (R) are true, but Reason (R) is **not** the correct explanation of the Assertion (A).
(C) Assertion (A) is true, but Reason (R) is false.
(D) Assertion (A) is false, but Reason (R) is true.
7. **Assertion (A):** Oxidation number of oxygen in OF_2 is +2. [1]
Reason (R): Fluorine has the highest electronegativity and always shows –1 oxidation state.
8. **Assertion (A):** Propene reacts with HBr in presence of peroxide to give [1]
1-bromopropane.
Reason (R): In presence of peroxide, the reaction follows Markovnikov rule.

Section B

9. Determine the species that are being reduced and oxidised in each of the reactions below: [2]
i) $\text{Cr}^+ + \text{Pb}^{4+} \rightarrow \text{Cr}^{3+} + \text{Pb}^{2+}$ ii) $3\text{Hg}^{2+} + 2\text{Al} \rightarrow 3\text{Hg} + 2\text{Al}^{3+}$
10. **Attempt either option A or B** [2]
A. Define buffer solution. How does a buffer resist change in pH?
OR
11. B. Explain the common ion effect with a suitable example. [2]
Draw the eclipsed and staggered conformations of ethane. Which one is more stable and why?

Section C

12. Explain disproportionation reaction and give two examples with balanced equations. [3]
13. Balance the following redox reactions: [3]
- i) $\text{MnO}_4^- (\text{aq}) + \text{Fe}^{2+} (\text{aq}) \rightarrow \text{MnO}_2 (\text{s}) + \text{Fe}^{3+} (\text{aq})$ [in basic medium]
- ii) $\text{Cr}_2\text{O}_7^{2-} (\text{aq}) + \text{I}^- (\text{aq}) \rightarrow \text{Cr}^{3+} (\text{aq}) + \text{I}_2 (\text{s})$ [in acidic medium]
14. Consider the reaction: $2\text{SO}_2 (\text{g}) + \text{O}_2 (\text{g}) \rightleftharpoons 2\text{SO}_3 (\text{g}) + 189.4 \text{ kJ}$ [3]
- What would be the effect of equilibrium if
- i) the temperature is increased?
- ii) the pressure is decreased?
- iii) more amount of oxygen gas is inserted in the reaction mixture?
15. **Attempt either option A or B** [3]
- A. Define- Wurtz reaction. Explain it by taking example of 2-bromopropane and also write the IUPAC name of the product obtained by this reaction.
- OR**
- B. An alkene 'X' on ozonolysis gives equimolar quantity of acetone and acetaldehyde. Identify the alkene 'X', write its IUPAC name and also write the equation involved in it.

Section D

16. The idea of pH concerns the 'logarithm of the equilibrium' process of water autoionisation. The pH of an aqueous solution' is determined using the pH scale, which in water varies typically from 0 to 14. A pH of 7 is neutral. A pH of less than 7 is acidic, while that of above 7 is considered basic. A salt is an ionic compound that is formed when an acid and a base neutralize each other. While it may seem that salt solutions are always neutral, they can frequently be either acidic or basic. Salt hydrolysis is a reaction in which one of the ions from a salt reacts with water, forming either an acidic or basic solution. Strong acid + Strong base=Neutral salt, Strong acid + Weak base=Acidic salt, Weak acid + Strong base=Basic salt [4]
- Answer the following questions:**
- i) Lemon juice (10 ml) is diluted with an equal amount of water (10 ml). What impact on the pH of the solution is most likely to be seen?
- ii) Which of the given salts provides the highest pH in water?
 KCl , NaCl , Na_2CO_3 , CuSO_4
- Attempt either option iii or iv**
- iii) The pK_a of weak acid HA is 4.80 and pK_b of a weak base BOH is 4.78. What will be the pH of an aqueous solutions of corresponding salt BA?
- OR**
- iv) What will be the value of pH of $0.01 \text{ mol dm}^{-3} \text{ CH}_3\text{COOH}$ ($K_a = 1.74 \times 10^{-5}$)?
(Given $\log 4.17 = 0.62$)

Section E

17. **Attempt either option A or B** [5]
- A.i) Derive the relationship between K_p and K_c .
- ii) At 400 K, the equilibrium constant K_c for $\text{H}_2 (\text{g}) + \text{CO}_2 (\text{g}) \rightleftharpoons \text{H}_2\text{O} (\text{g}) + \text{CO} (\text{g})$ is 4. Initially, 2 mol of H_2 and 1 mol of CO_2 are taken in a 2 L vessel. Calculate the equilibrium concentrations of all species.
- OR**
- B.i) The species H_2O and HSO_4^- can act as both conjugate acids and bases. Write the corresponding conjugate acid and base.
- ii) The solubility product of AgCl is 1.5×10^{-10} . Predict whether there will be any precipitation by mixing 50 mL of 0.01 M NaCl and 50 mL of 0.01 M AgNO_3 solution.
18. **Attempt either option A or B** [5]
- A.i) Convert
- a) 2-chlorobutane to but-2-ene
- b) Propyne to propanone
- ii) Complete the following reactions:
- a) $2\text{CH}_3\text{CH}_3 + 3\text{O}_2 \xrightarrow{(\text{CH}_3\text{COO})_2\text{Mn}, \Delta}$
- b) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3 \xrightarrow{\text{Anhy. AlCl}_3/\text{HCl}}$
- c) $\text{CH}_3\text{CH}_2\text{CH}_2\text{Cl} + \text{H}_2 \xrightarrow{\text{Zn, H}^+}$
- OR**
- B.i) Convert
- a) Propene to 1,2-dibromopropane
- b) Ethyne to benzene
- ii) Identify A and B in the following reactions:
- a) $\text{BrCH}_2\text{-CH}_2\text{Br} \xrightarrow{\text{alc. KOH}} \text{A} \xrightarrow{\text{NaNH}_2/\text{liquid NH}_3} \text{B}$
- b) $\text{CH}_3\text{C}\equiv\text{CH} \xrightarrow{\text{HBr}} \text{A} \xrightarrow{\text{HBr}} \text{B}$
- c) $\text{CH}_3\text{COOH} \xrightarrow{\text{NaOH}} \text{A} \xrightarrow{(\text{NaOH}+\text{CaO}), \Delta} \text{B}$

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
ANNUAL EXAMINATION: (2025-2026)
GENERAL STUDIES
CLASS: XI

Time: 50 Minutes**Maximum Marks: 50****NAME: _____ SEC: _____ ROLL NO.: _____****General Instructions:**

- Answer all the questions. Marks are indicated against each question.
- Choose the correct option.

1. _____ is a term used to describe a set of basic skills acquired through learning. 1
 a) Life skills b) vocational skills
 c) literacy skills d) none of the above
2. What type of skills are-time management, getting a job, interview, computer, cooking, driving? 1
 a) Livelihood skills b) Life skills
 c) Learning skills d) None of the above
3. Which of the following concepts describe the beliefs of an individual or culture? 1
 a) Values b) Attitude c) Behaviour d) Personality
4. _____ is a balanced curiosity leading to a deeper understanding of another human being. 1
 a) Empathy b) Sympathy c) SWOT d) Cooperation
5. Analysing the information, Thinking creatively, Problem-solving, Reasoning, and Evaluating are the skills of _____. 1
 a) Critical thinking b) Creative thinking
 c) Problem solving d) Decision making
6. Which of these basic qualities is required for Critical thinking? 1
 a) Open-mindedness b) Flexibility
 c) Persistence d) All the above
7. Identify & explore, set goals & look at alternatives, select & implement, evaluate & reflect are the steps of _____. 1
 a) Problem-solving b) Creative thinking
 c) Communication d) Decision making
8. _____ is an ability to express ourselves both verbally & non-verbally. 1
 a) Communication b) Creative thinking
 c) Decision-making d) Problem-solving
9. Rapport building, Questioning, Attending, Reassurance, and Sensitivity are the sub-skills of _____. 1
 a) Self-awareness b) Problem-solving
 c) Coping with emotion d) Effective communication
10. Match the following: 1
 1) Rapport building - A) Emotionally Supportive
 2) Genuineness - B) Honest about our reaction
 3) Sensitivity - C) Focus attention with interacting
 4) Attending - D) Accepting others feelings
 a) 1-B, 2-D, 3-C, 4-A b) 1-A, 2-B, 3-D, 4-C
 c) 1-A, 2-B, 3-C, 4-D d) 1-D, 2-C, 3-A, 4-B
11. Stress signals fall into which of the following categories? 1
 a) Thoughts b) Behaviour
 c) Physical symptoms d) All of the above
12. Self - Concept is influenced by _____. 1
 a) Stressful life events b) Previous experience c) Role Transition
 d) Incomplete crisis of psychological development
13. Which of the following factors influence self-concept? 1
 a) Biological make-up b) Cultural values and beliefs
 c) Coping with stress tolerance d) All of the above

14. How to improve your self-formation? 1
 a) Identify and recognize your strengths to improve your confidence
 b) Learn to praise yourself
 c) Develop a positive attitude
 d) All of the above
15. Self-image means "How you see _____". 1
 a) Others b) Yourself c) Your friends d) None of the above
16. Statement A: Creativity is an ability 1
 Statement B: Creativity is also an attitude
 a) Statement A is only true. b) Statement B is only true.
 c) Both the statements are true. d) Both the statements are false.
17. Training is most effective in resolving _____. 1
 a) Skill gaps b) Attitudinal problems
 c) Poor motivation d) Attendance issues
18. The phrase "transfer of training" refers to _____. 1
 a) Moving training schedules around to accommodate production concerns.
 b) Freely sharing written training material with colleagues.
 c) Acquiring and evaluating skills during a training course.
 d) Implementing and maintaining new knowledge and skills back in the workplace.
19. Labour Market adjustment services refers to the stakeholder interests of _____ 1
 a) Supply side training such as anticipated shortages for particular trades
 b) Skill mismatches
 c) Those who have difficulty entering or re-entering the workforce
 d) Those who have suffered a job loss
20. A potential advantage of centralizing the training function is that _____. 1
 a) Control and economies of scale. b) Customization and ownership.
 c) Local budget control. d) All of the above.
21. One of the differences between pedagogy and andragogy is that _____. 1
 a) Adult motivation is primarily intrinsic, not extrinsic
 b) Adults are keenly receptive to change
 c) Adults are oriented to learning using a subject-centred approach
 d) None of the above
22. What is Interpretive analysis? 1
 a) Focuses on the processes used to achieve organizational goals.
 b) Uses talk (accounts, stories, metaphors) as the primary data collection method.
 c) Is a method of job analysis.
 d) All of the above.
23. When structuring training objectives, the trainer should _____. 1
 a) Give trainees a clear understanding of what to expect
 b) Isolate all learning objectives in a single learning domain
 c) Encourage trainees to evaluate whether they can omit certain course objectives
 d) None of the above
24. The cognitive domain hierarchy of learning starts with _____. 1
 a) Knowledge b) Receiving c) Perception d) Motivation
25. Which of the following is not true about globalization and its impact on India? 1
 a) It has expanded trade in goods and services.
 b) It has led to a greater flow of Foreign Direct Investment.
 c) Increase in exports is greater than increase in imports.
 d) More than one of the above
26. Which of the following is/are incorrect? 1
 Statement 1: Karve Committee is related to the MSME sector.
 Statement 2: The Micro, Small, and Medium Enterprises (MSME) are classified into two enterprises as per the Micro, Small & Medium Enterprises Development (MSMED) Act, 2006.
 Statement 3: Small scale enterprise is one in which investment in Plant and Machinery is more than twenty-five lakh rupees but does not exceed ten crore rupees.
 a) Statements 1 and 2 only b) Statements 2 and 3 only
 c) Statements 1 and 3 only d) More than one of the above.

27. Which out of the following sets of industries is not a part of the eight core industries in India? 1
 a) Coal, crude oil and natural gas
 b) Steel, cement and electricity
 c) Coal, natural gas and refinery products
 d) Mining, metallurgical operations and pharmaceuticals
28. The programme "Make in India" was started on _____. 1
 a) November 2012 b) September 2014
 c) January 2014 d) September 2016
29. Largest Cancer Institute was inaugurated by PM Narendra Modi at _____. 1
 a) Hisar b) Jhajjar c) Bhiwani d) Sonipat
30. Given below are two statements: 1
 Statement I: Takshila is an e-learning platform that offers online courses for various subjects and exams.
 Statement II: It provides both professional and academic courses all free of cost.
 In light of the above statements, choose the correct answer from the options given below:
 a) Both Statement I and Statement II are true.
 b) Both Statement I and Statement II are false.
 c) Statement I is true but Statement II is false.
 d) Statement I is false but Statement II is true.
31. Match List I with List II: 1
- | List I
Initiatives | List II
Objectives |
|--|--|
| A. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) | I. To improve the quality and relevance of skill development programs in India |
| B. National Apprenticeship Promotion Scheme (NAPS) | II. To provide training and placement to unemployed rural youth |
| C. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) | III. To increase the number of apprenticeships in India |
| D. Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) | IV. To provide training to youth for self-employment and entrepreneurship |
- a) A-IV, B-III, C-II, D-I b) A-IV, B-I, C-III, D-II
 c) A-I, B-III, C-II, D-IV d) A-I, B-II, C-III, D-IV
32. Which ministry is responsible for the formation of The National Council for Vocational Education and Training (NCVET) in India? 1
 a) Ministry of Education
 b) Ministry of Skill Development and Entrepreneurship
 c) Ministry of Home Affairs
 d) Ministry of Finance
33. NSQF organises qualification according to series of levels of _____. 1
 a) knowledge, skills, and aptitude b) knowledge, skills, and experience
 c) skills, achievement, and aptitude d) skills, experience, and aptitude
34. How many life skills are there? 1
 a) 9 b) 10 c) 8 d) 6
35. The objective of Indian Government behind the setting up of HEFA (Higher Education Finance Agency) is to provide financial support for _____. 1
 a) improvement of infrastructure in premier institutions of the country.
 b) research projects of faculty.
 c) research collaboration between Indian and foreign universities.
 d) research collaboration between Indian Institutions and Industry.
36. Global Citizenship Education promotes _____. 1
 a) common international laws for global citizenship.
 b) issues pertaining to citizenship across countries involving VISA.
 c) international public relations.
 d) more peaceful, tolerant, including, secure and sustainable societies.
37. What is the Maximum accident insurance coverage for account holders of Pradhan Mantri Jan Dhan Yojna (PMJDY) Accounts? 1

- a) 3 Lakhs b) 2 Lakhs c) 1 Lakhs d) 50,000 Rupees
38. Which was the first company to get licence by the RBI to open White Label ATMS? 1
a) Tata communications payment solutions limited (TCPSEL)
b) Muthoot Finance c) HDFC d) SBI
39. The Government of India has been actively working on the provisions of 'FRDI' Bill, 2017. What does 'D' stand for in 'FRDI'? 1
a) Destruction b) Demand c) Deposit d) Department
40. Which of the following ATMs are owned and operated by NBFCs? 1
a) Brown label ATM b) Green Label ATM
c) White label ATM d) Yellow Label ATM
41. What is Yellow Label ATM? 1
a) When banks outsourced the ATM operations to a third party.
b) ATM is provided for Agricultural Transaction.
c) Provided for E-commerce.
d) Such ATMs are monitored by guards who ensure that only women access these ATMs.
42. What is meant by financial inclusion? 1
a) Providing Banking Services at an Affordable Cost.
b) Disbursing funds through rural branches.
c) Savings account opening in rural areas without any deposit.
d) Disbursing salary through bank accounts.
43. In which year Leopold suggested the land 'ethics'? 1
a) 1933 b) 1938 c) 1944 d) 1932
44. Who coined the term "Environmental Pragmatism"? 1
a) Smith Harry b) Henry Willison c) David Walker d) Bryan Norton
45. When was the first earth day celebrated? 1
a) December 23, 1956 b) May 21, 1965
c) April 22, 1970 d) July 24, 1976
46. Which one of the following is not an ethical guideline? 1
a) Developing respect for all life.
b) Understanding how earth works.
c) Considering humans as the predominant species.
d) Seeking of environmental wisdom.
47. Who was one of the influential proponents of sustainable ethics? 1
a) Aldo Leopold b) James Hanson
c) Vandana Shiva d) Wendell Berry
48. "Ethical Sequence" refers to a philosophy _____. 1
a) Limitation on freedom of speech
b) Limitation on freedom of action
c) Limitation on freedom of benefits
d) Limitation on freedom of interest deduction
49. Recycling and the use of renewable energy, helps in preventing _____. 1
a) Acid deposition b) Global warming
c) Resource depletion d) Cross-contamination
50. In Asia, Japan is known as a world leader in exploiting the _____. 1
a) Tropical Resources b) Global Forests
c) Global Environment d) Animal and Plants

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN

PERIODIC TEST III : (2025-2026)

ACCOUNTANCY

CLASS: XI

Time: 1½ Hours

Maximum Marks: 40

Name: _____ Sec.: _____ Roll No.: _____

General Instructions:

- (i) This paper has 18 questions. All questions are compulsory
- (ii) Marks are indicated against each question.
- (iii) Question 1-11 carry 1 mark.
- (iv) Question 12-14 carry 3 marks.
- (v) Question 15-16 carry 4 marks.
- (vi) Question 17-18 carry 6 marks.
- (v) Attempt all parts of the questions together.

1. Assertion (A): Repairs to second-hand machinery purchased before it is put to use are capitalized. 1
Reason (R): All expenses incurred on assets before it is put to use are capital expenditure.

Choose the correct alternative:

- (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

2. Which of the following statements are correct about "Provision"? 1
(i) Provisions are a charge against the profits of an enterprise.
(ii) Provisions are created out of divisible profits.
(iii) Creation of provision are not necessary for a business.
(iv) Provisions are created to meet a known liability.

Options:

- (A) (i), (ii) and (iii) (B) (i) and (iv) only
- (C) (ii), (iii) and (iv) (D) (i) and (iv) only

OR

Which of the following statements is not appropriate in relation to "Provision"?

- (A) Provision is a charge against profit
- (B) Provision is created for known liability
- (C) Provision is created for strengthening the financial position of the business
- (D) Creation of provision satisfies the principle of conservatism

3. Following information is given in the Trial Balance: 1
Bad Debts – ₹ 3,000

Provision for Bad Debts – ₹ 3,500

Debtors – ₹ 40,000

Additional Information:

It is desired to make a provision for doubtful debts @10% on debtors. The amount debited to Profit & Loss A/c is:

- (A) ₹ 4,000 (B) ₹ 5,000 (C) ₹ 6,500 (D) ₹ 3,500

4. Creation of reserves: 1
(A) Increases the profit (B) Decreases the profits
(C) Decreases the divisible profit (D) Increases the divisible profit

5. Revenue Reserve is created from: 1
(i) Out of profit on sale of fixed assets
(ii) Out of general profits
(iii) Out of capital profits
(iv) Out of profits on the purchase of a running business
(v) Profits earned during normal business operations

Which of the above relating to Revenue Reserves?

- (A) Only (i) (B) (iii) and (iv) (C) Only (v) (D) (ii) and (v)

6. On 1st April 2022, a machine is purchased for ₹ 1,00,000 and CGST and SGST are paid @ 9% each. Depreciation is provided @10% p.a. Depreciation for the year ending 31st March 2023 will be: 1
- (A) ₹ 11,800 (b) ₹ 10,900 (c) ₹ 10,000 (d) ₹ 8,200
- OR**
- On 1st July 2021, a firm purchased a machinery for ₹ 4,00,000. On 1st October in the same year additional machinery was purchased for ₹ 1,00,000. Depreciation is provided each year on 31st December @10% p.a. on written down value of the assets. The amount of depreciation in the second year will be:
- (a) ₹ 45,000 (b) ₹ 47,750 (c) ₹ 47,000 (d) ₹ 45,750
7. Business paid to Mr. A ₹50,000 as salary on 25th March 2023. Mr. A went to bank to deposit cheque in his account on 3rd April 2023. What is the entry to be passed while preparing the Balance Sheet as at 31st March 2023? 1
- (a) No entry (b) Bank A/c Dr. To Salary A/c
(c) Outstanding Salary A/c Dr. To Bank A/c (d) Salary A/c Dr. To Outstanding Salary A/c
8. Match the following:- 1
- | Column I | Column II |
|-----------------------|---|
| A) Trading Account | i) Net purchases + Opening stock - Closing Stock |
| B) Cost of Goods Sold | ii) Debit side of Trading Account |
| C) Adjusted Purchases | iii) For the year ended |
| D) Wages | iv) Opening stock + Purchases + Direct expenses - Closing Stock |
- Codes:
- | | |
|------------------------|------------------------|
| A B C D | A B C D |
| a) (iv) (ii) (iii) (i) | b) (i) (ii) (iii) (iv) |
| c) (iii) (iv) (i) (ii) | d) (iii) (iv) (ii) (i) |
9. Statement I: Suspense account is a temporary account opened to rectify one-sided errors. Statement II: Debit balance of suspense account is taken to the asset side of Balance sheet. 1
- a) Both statements are correct.
b) Both statements are incorrect.
c) Statement I is correct and Statement II is incorrect.
d) Statement I is incorrect and Statement II is correct.
10. While calculating operating profit, the following are not taken into account: 1
- A) Normal transactions B) Abnormal items
C) Expenses that are purely financial in nature D) Both (B) and (C)
- OR**
- Capital expenditure _____ the earning capacity or _____ the operating expenses of a business
- A) increases, reduces B) reduces, increases
C) maintain, reduces D) reduces, maintain
11. Which of the following options reflect correct rectification entry for purchased furniture for cash worth ₹ 100000 but debited to building account? 1
- A) Furniture A/c Dr. 100000 C) Building A/c Dr. 100000
To Building A/c 100000 To Suspense A/c 100000
B) Building A/c Dr. 100000 D) Suspense A/c 100000
To Furniture A/c 100000 To Furniture A/c 100000
- OR**
- Which of the following options reflect correct rectification entry for purchase book understated by ₹ 3000?
- A) Purchases A/c Dr. 3000 C) Purchases A/c Dr. 3000
To Suspense A/c 3000 To Creditors A/c 3000
B) Suspense A/c Dr. 3000 D) Suspense A/c Dr. 3000
To Purchases A/c 3000 Purchases A/c Dr. 3000
To Creditors A/c 6000
12. Distinguish Between Provision and Reserve on the following basis: 3
- A) Necessity B) Mode of creation C) Utilisation for dividends

13. Rectify the following errors: 3
- A) Goods for ₹ 5500 were purchased from Modern Traders on credit, but no entry has yet been passed in the books.
- B) Purchase return for ₹ 1500 not entered in the books.
- C) Goods for ₹ 2000 sold to 'Geeta Traders on credit were entered in the sales book as ₹ 200 only.
- D) Goods of the value of ₹ 1800 returned by Sushil & Co. were included in stock, but no entry was passed in the books.
- E) Goods purchased for ₹ 900 entered in the purchases book as ₹ 9000.
- F) An invoice for goods sold to X was overcast by ₹ 100

OR

- Rectify the following errors:
- A) ₹ 4500 spent on the extension of Buildings were debited to Repairs A/c.
- B) Wages paid to the firm's own workmen ₹2600 for the installation of a new Machinery was posted to Wages A/c.
- C) Contractor's Bill for the construction of a godown for ₹ 10000 has been charged to Repairs A/c.
- D) ₹1500 paid as Wages to a worker 'Bahadur Singh' has been debited to his personal A/c.
- E) Sale of old furniture for ₹ 500 has been credited to Sales A/c.
- F) A cheque of ₹620 received from Ram has been wrongly credited to Shyam.
14. Net Sales during the year 2021 is ₹ 285000. Find out gross profit and cost of goods sold, if 3
- i) Gross profit is 25% on sales.
- ii) Gross profit is 25% on cost.
15. There was a difference of ₹ 430 in Trial Balance. It was placed on the Dr. side of a 4
- Suspense A/c. Later on the following errors were discovered. Pass rectifying entries and prepare Suspense A/c.
- (i) Purchase book was overcast by ₹100.
- (ii) Sales book was overcast by ₹1000.
- (iii) Goods for ₹800 purchased from Umakant, through entered in the purchase book, has not been posted to his account.
- (iv) An amount of ₹500 has been posted to the credit side of commission account instead of ₹570.
- (v) Goods sold to Bharti for ₹ 4400 has been posted to her account as ₹4000.
- (vi) Goods sold to X for ₹ 750 were recorded in purchase book.
16. Given below is the Trial Balance of Gopi Chand Bros. as at 31.03.2020. Prepare Trading & 4
- Profit & Loss A/c for the year ending 31.03.2020.

Debit Balances	Amount	Credit Balances	Amount
Opening Stock	45000	Sundry Creditor	22100
Purchases	120000	Return Outwards	2500
Return inwards	3200	Sales	350000
Carriage inwards	2400	Capital	200000
Carriage outwards	1500	Loan from Bank	24000
Office furniture	8000	Discount Received	2000
Sundry Debtors	68000	Commission	1600
Dock Charges	5000		
Electric Power	10000		
Fuel, Gas and Water	12000		
Bad debts	1100		
Advertisement	25000		
Salary	36000		
Cash In Hand	8100		
Cash at Bank	30000		
Motor Vehicles	58000		
Motor Repairs	3000		
Interest on Bank Loan	2400		
Rent and Insurance	24500		

Business Premises	106000		
Household expenses	33000		
	602200		602200

OR

State the importance of Trading A/c.

17. You are given the following balances as on April 1 2022:

6

Machinery A/c ₹500000

Provision for Depreciation A/c ₹116000

Depreciation is charged on machinery at 20% p.a. by the diminishing balance method. A piece of machinery purchased on April 1, 2020 for ₹100000, was sold on Oct 1, 2022 for ₹60000. Prepare the Machinery A/c & Provision for Depreciation A/c for the year ended 31.03.2023. Also prepare Machinery Disposal A/c.

18. Prepare Trading A/c and Profit & Loss A/c for the year ended 31.03.2020. and a Balance Sheet as at the date from the following Trial Balance-

6

Dr. Balance	Amount	Cr. Balance	Amount
Opening stock	32000	Sales less return	2,20,000
Purchase less returns	76000	Sundry creditor	30000
Pratik Kumar	3000	Capital	67800
Wages	15400	Mortgage and interest to date	15600
Carriage Inward	2600	Rent outstanding	1000
Carriage Outward	1500		
Salaries	40000		
Advertisements	9000		
Trade Expenses	4800		
Rent	12000		
Establishments	5400		
Stable Expenses	2100		
Mortgage and interest	600		
Sundry Debtors	40000		
Cash in Hand	2500		
Machinery	87500		
	334400		334400

Adjustments:

1. Closing Stock was ₹46,000.
2. Provision for Doubtful Debts be created on Sundry Debtors @ 5% and a provision for discount on Sundry Debtors @ 2%.
3. Salary of ₹3,000 paid to Sh. Pratik Kumar, an employee of the firm, stands debited to his personal account and it is to be corrected.
4. A stationery bill for ₹ 200 remains unpaid and unrecorded.
5. Write off one-third of advertisement expenses.
6. Sundry Creditors include ₹10,000 loan taken from Mr. Sudhir on Sept 1, 2019, bearing interest @ 12% p.a.

OR

Enumerate the objectives of Financial Statements.

Time: 1½ Hours

Maximum Marks: 40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **16 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (4 + 12 =) 16 questions, a candidate has to answer (4 + 7 =) 11 questions in the allotted (maximum) time of 1 hour 30 minutes.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (20 MARKS):**
 - i. This section has 04 questions.
 - ii. There is no negative marking.
 - i. Do as per the instructions given.
 - ii. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (20 MARKS):**
 - i. This section contains 12 questions.
 - ii. A candidate has to do 7 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION-A: OBJECTIVE TYPE QUESTIONS**1. Answer any 4 out of the given 6 questions on Employability Skills: (1 X 4 = 4 marks)**

- i. The shortcut to insert a table in Open Office is – 1
 - a) Ctrl+F7 b) F7 c) F6 d) Ctrl+F12
- ii. _____ shortcut key is used to save a file in OpenOffice Writer. 1
- iii. Define “Adding substitutes” in terms of growing business and improvement. 1
- iv. Which of the following is a type of values of an entrepreneur? 1
 - a) Personal b) Environmental c) Mental d) Psychological
- v. The shortcut for find and replace in Writer is – 1
 - a) Ctrl+N b) Ctrl+O c) Ctrl+A d) Ctrl+F
- vi. How do entrepreneurs contribute towards the development of the country? 1

2. Answer any 4 out of the given 6 questions: (1 X 4 = 4 marks)

- i. Which among the following is not included in the 5 Cs of lending? 1
 - a) Character b) Correctness c) Capacity d) Capital
- ii. Which of the following is a Third Party Product? 1
 - a) Insurance b) Mutual Fund c) Cheque d) Both (a) & (b)
- iii. Full form of ALM is _____. 1
- iv. Which type of loan is granted by the bank for the purchase of white goods? 1
 - a) Consumption Loan b) Consumer Durable Loan c) Mortgage Loan d) Home Loan
- v. An interim loan for the new house is known as: _____. 1
- vi. Define the term Endorsement. 1

3. Answer any 6 out of the given 7 questions: (1 × 6 = 6 marks)

- i. Dishonour of a cheque due to insufficient funds is punishable under which section of the NI Act? 1
 - a) Sec 128 b) Sec 131 c) Sec 138 d) Not punishable
- ii. ‘A PN payable by instalments, grace period of 5 days is allowed’. 1
 - a) True b) False
- iii. Stamp duty is applicable on bills payable after ____ days. 1
- iv. What is the notice of dishonour? 1
- v. Name two types of crossings. 1

- vi. Which of the following is true when 'Not-negotiable' are included in a generally or specially crossed cheque? 1
- Cheque becomes non-transferable.
 - Cheque can be further transferred, but the transferee cannot get the better title than the transferor.
 - An open or uncrossed cheque with the words "Not negotiable" has similar effect.
 - Cheque does not want noting or protesting.
- vii. If the due date is a public holiday, what will be the due date of the PN or Bill? 1
- Following business day
 - Preceding business day
 - The same day only
 - One month later

4. Answer any 6 out of the given 8 questions: (1 × 6 = 6 marks)

i. **Assertion (A):** Noting should be made by the notary within a reasonable time after dishonour. 1

Reason (R): Cheques don't require noting and protesting.

Choose the correct alternative as stated below:

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

ii. According to Section 130, a person taking a cheque crossed generally or specially bearing the words "Not Negotiable" _____.

- gets a better title than the transferor. 1
- shall not have and shall not be capable of giving a better title.
- cannot cash it at a bank.
- must return it to the drawer.

iii. Section 131 protects which party when acting in good faith and without negligence? 1

- The drawer
- The collecting banker
- The endorser
- The drawee

iv. Which of the following is not the right of a Mortgagee? 1

- Right to sue for mortgage-money
- Right of possession
- Right for purchase
- Right of foreclosure

v. Define the term hypothecation. 1

vi. A revolving credit limit _____.

- is the same as open-ended limit
- is the same as close-ended limit
- is partially open-ended and partially close-ended
- None of them

vii. EMI stands for _____. 1

viii. Grace period may vary, but usually ranges from _____.

- 30 to 35 days
- 30 to 60 days
- 15 to 45 days
- 55 to 65 days

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Subject Specific Skills. Answer each question in 20-30 words. (2 × 3 = 6 marks)

- Alka wants to add a border in a document in Writer. Help her with the steps. 2
- Write down the steps to save a document in OpenOffice Writer. 2
- What is the significance of Accept and Reject changes dialog box in Track Changes? 2
- 'Entrepreneurship brings about more entrepreneurs.' Justify the statement. 2
- List any two attitudes required in an entrepreneur. 2

Answer any 2 out of the given 3 questions in 30 – 50 words each: (3 × 2 = 6 marks)

- What are the rights that a pledgee can exercise if the pledger fails to pay his debt or complete the performance, of an obligation at the stipulated time? 3
- Mention the legal effects of negotiation by endorsement. 3
- Enumerate the essentials of a cheque. 3

Answer any 2 of the given 4 questions in 50–80 words each: (4 × 2 = 8 marks)

- Differentiate between Bill of exchange and Cheque. 4
- Enumerate the elements of a credit card to the card holder. 4
- What are the conditions in order to operate as mode of negotiation an endorsement must comply? 4
- Explain the various types of house loan. 4

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN

PERIODIC TEST III: (2025-2026)

BUSINESS ADMINISTRATION

CLASS: XI

Time: 1½ Hours

Maximum Marks: 40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **16 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (4 + 12 =) 16 questions, a candidate has to answer (4 + 7 =) 11 questions in the allotted (maximum) time of 1 hour 30 minutes.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (20 MARKS):**
 - i. This section has 04 questions.
 - ii. There is no negative marking.
 - i. Do as per the instructions given.
 - ii. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (20 MARKS):**
 - i. This section contains 12 questions.
 - ii. A candidate has to do 7 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION-A: OBJECTIVE TYPE QUESTIONS**1. Answer any 4 out of the given 6 questions on Employability Skills: (1 X 4 = 4 marks)**

- i. The shortcut to insert a table in Open Office is -
a) Ctrl+F7 b) F7 c) F6 d) Ctrl+F12 1
- ii. _____ shortcut key is used to exit from the Open Office writer. 1
- iii. Define Business Plan in a sentence. 1
- iv. Which of the following is **not** a type of values of an entrepreneur?
a) Personal b) Social c) Professional d) Psychological 1
- v. The shortcut to open an already existing file in Writer is _____.
a) Ctrl+N b) Ctrl+O c) Ctrl+A d) Ctrl+M 1
- vi. Who is an entrepreneur? 1

2. Answer any 4 out of the given 6 questions. (1 X 4 = 4 marks)

- i. _____ is not one of the 7 C's of communication. 1
a) Clarity b) Conciseness c) Concreteness d) Character
- ii. _____ means setting the plant at a particular place. 1
a) Plant layout b) Plant location c) Procurement d) Planning
- iii. Which is one of the crucial functions of the business activity? 1
- iv. Define Business Function. 1
- v. The study of behaviour at the group level is known as _____. 1
a) Micro-organizational behaviour b) Macro-organizational behaviour
c) Neuro-organizational behaviour d) Inter-organizational behaviour
- vi. Communication is a _____ process of understanding between two or more persons sender or receiver. 1
a) Easy b) Two-way c) Motivational d) Difficult

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

- i. What is Business Memorandum? 1
- ii. Which of the following statements is correct? 1
a) Communication is a static process.
b) Coherence refers to the difficult flow of ideas in the text.
c) The Business Correspondence should avoid using pompous words.
d) A Business letter should use negative words.

- iii. **Assertion (A):** The sender must adjust the message according to the needs and interest of the receiver. 1
- Reason (R):** The message should be thought-provoking to arouse response from the listeners. Choose the correct alternative as stated 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
- iv. Explain the term Conciseness. 1
- v) To get real feedback of employees, the manager must make use of: 1
- a) Formal communication b) Informal communication
 c) Both (a) and (b) d) Written communication
- vi. **Statement (I):** Motivation can be either positive or negative. 1
- Statement (II):** Motivation is a complex process as the individuals are heterogeneous in their expectations, perceptions and reactions. Choose the correct answer:
- a) Statement I is true and II is false
 b) Statement II is true and I is false
 c) Both statements are true
 d) Both statements are false
- vii. Which letter is further divided into routine and special-purpose letters? 1
- 4. Answer any 6 out of the given 8 questions: (6 x 1 = 6 marks)**
- i. Mention the objectives of OB. 1
- ii. 'Managers can describe how people behave in different conditions'. Which behaviour is highlighted here? 1
- iii. Name the level of OB which deals with organisational culture, values and inter-organisations conflict. 1
- a) Individual level b) Hierarchy level c) Group level d) Organisational level
- iv. Which of the following is called a negative process? 1
- a) Recruitment b) Training c) Selection d) Development
- v. What can be marketed? 1
- a) Any physical object with a definite shape.
 b) Any physical object which creates value to customers.
 c) Any physical object that has a selling price.
 d) Any physical object that can be tested.
- vi. Explain the term Branding. 1
- vii. IT enables information exchange amongst different stakeholders of the business. 1
- a) True b) False
- viii. _____ is the act of designing and producing package for a product. 1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of given 5 questions on Subject Specific Skills: (2 × 3 = 6 marks)

Answer each question in 20–30 words.

5. Shachi wants to save a document in writer. Help her with the steps of the same. 2
6. Write down the steps to create a table in Open Office Writer. 2
7. Define Track change with an example. 2
8. Differentiate between Entrepreneurship and Business. 2
9. List any two qualities required to become a successful entrepreneur. 2

Answer any 2 out of the given 3 questions in 30-50 words each. (3 × 2=6 marks)

10. Describe briefly the Levels of Analysis of organisational Behaviour. 3
11. "Production management is responsible for production planning." Justify this statement with the help of its objectives. 3
12. Enumerate the different forms and types of Business Letters. (any three) 3

Answer any 2 out of the given 4 questions in 50–80 words each. (4 × 2=8 marks)

13. How would you characterize the organisational behaviour role in management? 4
14. 'Finance functions has come out as a separate functions of a business enterprise'. Justify the statement and give diagrammatic representation. 4
15. Explain the functions of Marketing Management on the basis of: 4
- a) Function of Exchange b) Function of Physical Supply
16. Mention any four C's of Communication. 4

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN

PERIODIC TEST III: (2025-2026)

ECONOMICS

CLASS: XI

TIME : 1½ Hours

MAXIMUM MARKS: 40

NAME : _____ SEC. _____ ROLL NO. _____

General Instructions:

- Marks for questions are indicated against each question.
- Question No. 1-10 are 1 mark questions and are to be answered in one word/ sentence.
- Question No. 11-12 are 3 marks questions and are to be answered in 60-80 words each.
- Question no. 13-15 are 4 marks questions and are to be answered in 80-100 words each.
- Question No. 16-17 are 6 marks questions and are to be answered in 100-150 words each. Question No. 17 is Case-Based question.
- Answers should be brief and to the point and the above word limit be adhered to as far as possible.

QUESTIONS

- Statement 1: MR and AR are identical in imperfect competition. 1
Statement 2: In perfect competition, MR is steeper than AR.
a) Both the statements are true.
b) Both the statements are false.
c) Statement 1 is true and Statement 2 is false.
d) Statement 2 is true and Statement 1 is false.

(Choose the most appropriate option)

- Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I: 1

COLUMN I	COLUMN II
A. Long run production function	i) Additional output due to additional input
B. Short run production function	ii) Change in curvature of TP curve
C. Marginal Product	iii) Both fixed and variable factors exist
D. Point of inflexion	iv) All inputs are variable

Alternatives:

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

(Choose the most appropriate option)

- Assertion (A): AFC is rectangular hyperbola. 1
Reason (R) : $AFC = TFC/\text{output}$.
Choose the most appropriate option from the following:
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.
- In case of contraction of supply, we move 1
a) from lower to upper point b) from upper to lower point
c) to the right on another supply curve d) to the left on another supply curve.
- Law of supply can not hold true for 1
a) vegetable b) teakwood c) milk d) all of these
- Assertion (A): Profit attracts new firm and loss removes exiting firm. 1
Reason (R) : Free entry and exit are the features in perfect competition.
Choose the most appropriate option from the following:
a) Both A and R are true and R is the correct explanation of A
b) Both A and R are true and R is not the correct explanation of A
c) A is true but R is false
d) A is false but R is true.

7. Statement 1: We use Spearman's formula to calculate rank correlation. 1
 Statement 2: Pearson's formula is useful when ranks are given but not the exact values.
 a) Both the statements are true.
 b) Both the statements are false.
 c) Statement 1 is true and Statement 2 is false.
 d) Statement 2 is true and Statement 1 is false.
8. If a frequency distribution series has two modal classes, we can calculate mode by 1
 a) Step deviation method b) Grouping method
 c) Short cut method d) None of these
9. Maximum value of positive correlation is 1
 a) +1 b) infinity c) -1 d) 0
10. A mobile network company in India may be an example of 1
 a) monopoly b) perfect competition c) oligopoly d) monopsony
11. Explain graphically AR and MR curve in an imperfectly competitive market. 3
OR
 What is Marginal Revenue? Prove that Average Revenue is equal to Price.
12. Write three properties of correlation coefficient. 3
13. Calculate the value of correlation coefficient from the following data by direct method. 4
- | | | | | | | | | |
|----------|----|----|----|---|----|---|---|--|
| X | 11 | 10 | 9 | 8 | 7 | 6 | 5 | |
| Y | 20 | 18 | 12 | 8 | 10 | 5 | 4 | |
14. Establish the relationship between AC, AVC and MC graphically and explain it. 4
OR
 Complete the following table:
- | Output | TVC | AVC | MC |
|--------|-----|-----|----|
| 1 | 10 | - | - |
| - | - | 8 | 6 |
| 3 | 27 | - | - |
| - | - | 10 | 13 |
15. How are equilibrium price and quantity affected when income of the consumers decreases and supply being perfectly inelastic? 4
16. Calculate mode by using graphic technique. 6
- | | | | | | |
|-----------------------|------|-------|-------|-------|-------|
| Wage | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| No. of workers | 30 | 44 | 55 | 40 | 31 |
- OR**
- Find the mode mathematically from the following data.
- | | | | | | |
|------------------|------|-------|-------|-------|-------|
| Size | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| Frequency | 5 | 25 | 21 | 18 | 7 |
17. Read the following passage carefully and answer the questions given below. 6
 Each firm in a perfectly competitive market is a price taker. The equilibrium price and industry output are determined by demand and supply. Price taking behavior is central to the model of perfect competition. Perfectly competitive firm have no reason to charge a price lower than the market price. Buyers have complete information and each firm's product is identical to that of its rivals. Thus firms are unable to charge a price higher than the market price. A firm in a perfectly competitive market has no influence over its price, but it determines the output it will produce. In selecting the quantity of that output one important consideration is the revenue the firm will gain by producing it. (2+2+2)
 i) Why do you think that under perfect competition the seller is the price taker?
 ii) Why the firms are unable to earn abnormal profits under perfect competition in the long run?
 iii) Write any two features of perfect competition.

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III: (2025 – 2026)
COMPUTER SCIENCE
CLASS: XI

Time: 1 ½ Hours

Maximum Marks: 40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

- This question paper contains 23 questions.
- All questions are compulsory. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions
- The paper is divided into 5 Sections- A, B, C, D and E.
- Section A, consists of 15 questions (1 to 15). Each question carries 1 Mark
- Section B, consists of 3 questions (16 to 18). Each question carries 2 Marks.
- Section C, consists of 2 questions (19 and 20). Each question carries 3 Marks.
- Section D, consists of 2 questions (21 and 22). Each question carries 4 Marks.
- Section E, consists of 1 question (23). The question carries 5 Marks.
- All programming questions are to be answered using Python Language only.
- In case of MCQ, text of the correct answer should also be written.

SECTION – A: (1 x 15 = 15 marks)

1. What will be the output of the following code? 1

```
>>>t2=[]
>>>t2.pop()
```

a) Error b) IndexError c) 0 d) []
2. What will be printed by the following code? 1

```
print(list(range(3)))
```

a) [0,1,2] b) [0,1,2,3] c) 0,1,2 d) [1,2,3]
3. _____ method is used to add an element at any place in a list. 1

a) append() b) extend() c) insert() d) add()
4. What will be the output of the following code fragment? 1

```
>>> t=(10,20,30,40,50,60,70)
>>> print(t[5:-1])
```

a) (60,70) b) (10,20,30,40,50) c) (70,) d) (60,)
5. Consider the following tuple: tuple1=(23,1,57,45,72,42,57,9,57) 1
What will be the output of the following code: print(tuple1.count(57))

a) 1 b) 2 c) 3 d) error
6. State True or False: 1
You can add an element at the end of an existing tuple using append().
7. Which of the following will create a single element tuple? 1

a) (1,) b) (1) c) tuple(1) d) ([1])
8. Unauthorized monitoring of other people's communication is called _____ 1

a) bullying b) scams c) phishing d) eavesdropping
9. Which of the following will **not** raise an error if the given dictionary is empty? 1

a) del statement b) pop() c) popitem() d) remove()
10. State True or False: 1
The copy() method of dictionaries creates a shallow copy of a dictionary.
11. The _____ method is used to create a new dictionary from a sequence containing all the keys and a common value. 1

a) keys() b) values() c) fromkeys() d) setdefault()
12. Which of the following is used to protect a network from unauthorized access? 1

a) Firewall b) Router c) Compiler d) Modem
13. A common sign of a computer infected with malware is: 1

a) Faster performance b) Unusual pop-ups and slow speed
c) More storage space d) Automatic system updates

ASSERTION AND REASON:

In the following questions, a statement of **Assertion (A)** is followed by a statement of **Reason (R)**. Mark the correct choice as

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

14. **ASSERTION (A):** Digital footprints are the records and traces individuals leave behind as they use the internet. 1
REASON(R): Passive footprints are the ones that we create knowingly.
15. **ASSERTION (A):** Values of a dictionary can be searched using in/not in operators. 1
REASON(R): The membership operators do not work with dictionaries' values.

SECTION – B: (2 x 3 = 6 marks)

16. Find the output of the following code: 2
adict = {"Bhavna":1,"Richard":2, "Firoza":10, "Arshoon":20}
temp = 0
for value in adict.values():
 temp=temp+value
print(temp)
17. Write a program to input a 4-element tuple and unpack it to four variables. Recreate the tuple with elements swapped as 1st element with 3rd and 2nd with 4th. 2
18. Write a program to find the largest and smallest element in a list. 2

SECTION – C: (3 x 2 = 6 marks)

19. Write six social media etiquettes that one should follow while using the social media. 3
OR
Write a program to count the frequency of a given element in a list of numbers. The list should be taken as input by the user.
20. Write a program to create a sentence and then create a dictionary that contains the frequency of letters and digits in the sentence. Ignore other symbols, if any. 3

SECTION – D: (4 x 2 = 8 marks)

21. Write a menu driven program to do the following operation in a list. 4
a) Append an element b) Insert an element
OR
What are the differences between deep copy and shallow copy? Explain with examples.
22. Write a program to check if the elements in the first half of a tuple are sorted in ascending order or not. 4

SECTION – E: (5 x 1 = 5 marks)

23. Write a program to create a third dictionary from two dictionaries having some common keys, in way so that the values of the common keys are added in the third dictionary. 5
OR
Write any five ways to ensure confidentiality of information.

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III: (2025-2026)
ENGLISH CORE
CLASS: XI

Time: 1^{1/2} Hours

Maximum Marks:40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

Read the following instructions very carefully and strictly follow them:

i. This question paper has 08 questions. All questions are compulsory.

ii. This question paper contains three sections:

Section A: Reading Skills

Section B: Grammar and Creative Writing Skills

Section C: Literature

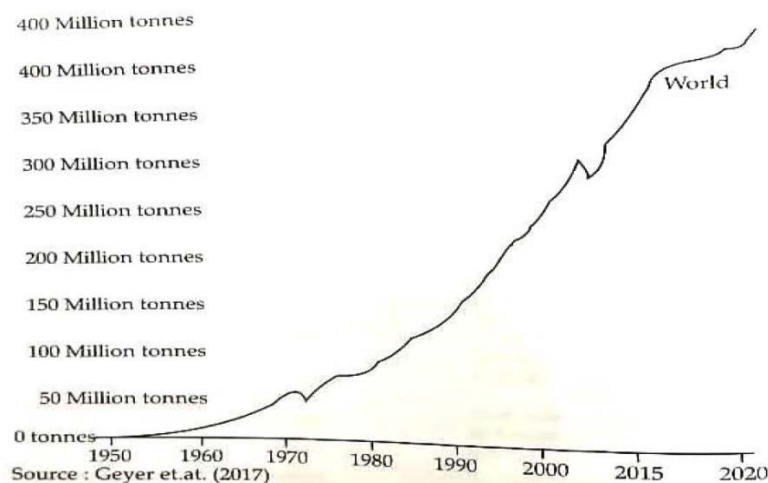
iii. Attempt all questions based on specific instructions for each part. Write the correct question number and part thereof in your answer sheet.

iv. Separate instructions are given with each question/part, wherever necessary.

v. Adhere to the prescribed word limit while answering the questions.

Section A: READING SKILLS (11 marks)**1. Read the following text.****11m**

- (1) Our history makes it evident that the Indian Plastics Industry made a vigorous beginning in 1957 but it took more than 30 years for it to pervade Indian lifestyles. In 1979, 'the market for plastics' was just being seeded by the state-owned Indian Petro-Chemicals and it was only in 1994 that plastic soft drink bottles became a visible source of annoyance.
- (2) In the same year, people in other cities were concerned about the state of public sanitation and also urged regulatory bodies to ban the production, distribution and use of plastic bags. However, the challenge was greater than it appeared at first.
- (3) The massive generation of plastic waste in India is due to rapid urbanisation, spread of retail chains, plastic packaging from grocery to food and vegetable products, to consumer items and cosmetics. The projected high growth rates of GDP and continuing rapid urbanisation suggest that India's trajectory of plastic consumption and plastic waste is likely to increase.
- (4) Annual global polymer resin and fibre production (plastic production), measured in metric tonnes per year:



Global plastics production 1950 to 2020

- (5) According to the United Nations Environment Programme (UNEP) report of 2018, India stands among few other countries like France, Mongolia and several African countries that have initiated total or partial national level bans on plastics in their jurisdictions. On World Environment Day in 2018, India vowed to phase out single-use plastics by 2022, which gave a much needed impetus to bring this change.

- (6) In this context, thereafter ten states (Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Meghalaya, Odisha, Rajasthan and Tamil Nadu) are currently sending their collected waste to cement plants for co-processing, twelve other states/UTs are using plastic waste for polymer bitumen road construction and still four other states are using the plastic waste for waste-to-energy plants and oil production. A world of greater possibilities has now opened up to initiate appropriate and concrete actions to build up the necessary institutions and systems before oceans turn, irreversibly into a thin soup of plastic. However there is no one single masterstroke to counter the challenges witnessed by the staggering plastic waste management in the country. The time is now to formulate robust and inclusive National Action Plans and while doing so, the country will establish greater transparency to combat the plastic jeopardy in a more sustainable and holistic way.

Answer the following questions, based on the passage above.

- | | | |
|-------|---|---|
| I. | Does the following statement agree with the information given in the passage. Pollution as a menace came into limelight in early 1990s. Select from the following.
(A) True, if the statement agrees with the information.
(B) False, if the statement contradicts the information.
(C) Not Given, if there is no information on this. | 1 |
| II. | What does the writer mean by the visible source of annoyance? | 2 |
| III. | Complete the sentence appropriately:
The market for plastic was introduced by _____. | 1 |
| IV. | The fact that India's trajectory of plastic consumption and plastic waste is likely to increase is suggested by _____.
(A) high growth rates of GDP (B) rapid urbanisation
(C) Industrialisation (D) Both (A) and (B) | 1 |
| V. | Complete the sentence appropriately.
The last paragraph of the passage _____.
(A) states the need for effective garbage disposal
(B) states the need for effective plastic waste management
(C) states the need for urgent government action
(D) states the need for an effective implementation of strategies | 1 |
| VI. | What steps must be taken to combat the challenges of plastic waste management? What will be its impact? | 2 |
| VII. | What does the upward trend of the graph indicate? | 2 |
| VIII. | What does the line, 'oceans turning irreversibly into a thin soup of plastic' suggest? | 1 |

Section B: GRAMMAR and CREATIVE WRITING SKILLS (13 marks)

- | | | |
|-----------|---|--------------|
| 2. | Do as Directed: | 1x5=5 |
| | I. Seeing the rain, he stayed at home. (change into Compound Sentence) | |
| | II. He was tired, but he continued working. (change into Complex Sentence) | |
| | III. If you study hard, you will succeed. (change into Compound Sentence) | |
| | IV. Rearrange the parts of the sentence in the correct order.
P- critical thinking
Q-of reading
R-books develops
S- the habit | |
| | V. Identify the part of the sentence that has an error in it.
I am (P) / looking (Q) / forward to (R) / meet you (S).
A. P B. Q C. R D. S | |
| 3. | Attempt ANY ONE of the two, in about 50 words. | 3 |
| | A. You are the Principal of Green Valley International School, Jaipur. Draft a classified advertisement for The Times of India inviting applications for the post of TGT English, minimum 3 years' experience. | |
| | OR | |
| | B. You are Meera/Manoj, of 21, Shahid Enclave, Vadodara. You want to sell your Honda Activa 2021 model in excellent condition. Draft a suitable classified advertisement for the newspaper. | |

4. Attempt **ANY ONE** of the two, in about 120-150 words. 5
- A. You are Sahil/Sanya, the school's Head Girl/Head Boy. Write a debate for or against the topic, "Celebrities Should Not Be Role Models."
- OR**
- B. "Reality Shows Exploit Children Rather Than Promote Talent." Write a debate for/against this topic for your school's Literary Club. You are Shivam/ Shivani, Literary Club Captain.

**SECTION C: LITERATURE TEXTBOOK AND SUPPLEMENTARY
READING TEXT (16 marks)**

5. Read the given extracts and answer the questions for **ANY ONE** of the two, given. 4
- A. I would have him prodigal, returning to
his father's house, the home he knew,
rather than see him make and move
his world. I would forgive him too,
shaping from sorrow a new love. (Father to Son)
- I. Assertion (A): The father is willing to forgive his son if he returns. 1
Reason (R): The father wants his son to experience the consequences of his mistakes before accepting him again.
Choose the correct option:
(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.
- II. Choose the correct option after reading the following statements: 1
1. The father compares his son to a prodigal child who is welcome to return.
2. The father prefers the son to remain independent and distant.
3. The father feels pain because of the emotional distance between them.
4. The father believes love can be rebuilt from sorrow.
Options:
(A) 1, 2, and 4 are true
(B) 1, 3, and 4 are true
(C) 2 and 3 are true
(D) Only 3 is true
- III. Why does the father refer to the son as "prodigal" in this context? 1
(A) He wants to criticize the son for wasting his potential.
(B) He compares the situation to a Biblical story of return and forgiveness.
(C) He wants to emphasise the son's selfish behaviour.
(D) He wants the son to leave permanently to learn independence.
- IV. Choose the line that uses the same poetic device as that used in 'his father's house, the home he knew': 1
(A) "The world is a stage where all must play."
(B) "The wind whispered softly in the trees."
(C) "Full of feuds and fears, he fled."
(D) "Her smile shone like sunlight."

OR

- B. The mummy was scanned to create a three-dimensional image. Tut's head, neck, and hands were carefully removed and reassembled after the scan. It gave an insight into how he might have looked in life and revealed interesting details about his condition at the time of death.
(Discovering Tut: The Saga Continues)
- I. Assertion (A): The CT scan of Tutankhamun's mummy helped reveal his physical appearance. 1
Reason (R): The scan produced a detailed three-dimensional image of his body parts.
Choose the correct option:
(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.

- II. The word “_____” in the passage means ‘joined together again after being separated’. 1
 (A) Removed
 (B) Revealed
 (C) Reassembled
 (D) Created
- III. What was the main purpose of scanning Tut’s mummy? 1
 (A) To find the treasure buried with him
 (B) To recreate his royal tomb
 (C) To study his physical features and cause of death
 (D) To transport the mummy safely
- IV. Read the statements given below and choose which of them are true according to the extract. 1
 Statements:
 1. The scan was performed to create a 3D image of Tut’s mummy.
 2. Tut’s body was damaged during the process of scanning.
 3. Scientists reassembled Tut’s body parts after completing the scan.
 4. The scan helped scientists know about Tut’s physical condition and appearance.
 Options:
 (A) 1, 2 and 3 are true
 (B) 1, 3 and 4 are true
 (C) 2 and 4 are true
 (D) Only 1 and 2 are true
6. Answer **ANY ONE** of the following two questions, in about 40-50 words. **3x1=3**
- i. What message does the poem give about individuality within families? (Father to Son)
 ii. Why did the narrator feel uncomfortable on reaching Darchen? (Silk Road)
7. Answer **ANY ONE** of the following two questions, in about 40-50 words. **3x1=3**
- i. How did Andrew feel after the baby began breathing? (Birth)
 ii. What do Andrew’s actions reveal about professional responsibility? (Birth)
8. Answer **ANY ONE** of the following two questions, in about 120-150 words. **6x1=6**
- i. “The Adventure blends history with imagination.” Discuss how Jayant Narlikar uses scientific ideas like the catastrophic theory to reshape Gangadharpant’s experience in an alternative world. (The Adventure)
- OR**
- ii. As Andrew, write a letter to your colleague Dr. Page telling him how you revived a stillborn child and the emotional struggle you went through during the process. (Birth)

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III: (2025-2026)
PHYSICAL EDUCATION
CLASS: XI

Time : 1½ Hours

Maximum Marks : 40

NAME: _____ SEC.: ____ ROLL NO.: ____

General Instructions :

- (i) The question paper consists of **5** sections and **20** questions.
(ii) **Section - A** consists of question **1- 7** carrying 1 mark each and is multiple choice questions. All questions are compulsory.
(iii) **Section - B** consists of question **8-11** carrying 2 marks each and are Very short Answer Types and should not exceed 60-90 words. Attempt any **3**.
(iv) **Section - C** consists of question **12- 15** carrying **3** marks each and are Short Answer Types and should not exceed **100-150** words. **Attempt any 3**.
(v) **Section - D** consists of question **16-17** carrying **4** marks each and are case studies.
(vi) **Section - E** consists of question **18-20** carrying **5** marks each and are Long Answer Types and should not exceed **200-300** words. Attempt any **2**.

SECTION A**(All Questions are Compulsory)**

1. The term test refers to: 1
 - a) A fitness program b) Tool or instrument used to collect data
 - c) Type of game d) A method of evaluation
2. Harvard Step Test is used to measure: 1
 - a) Muscular strength b) Speed c) Cardiovascular endurance d) Flexibility
3. The body structure of Mesomorphic people is like 1
 - a) Large muscles and bones b) Obese c) Fatty d) Lazy
4. The heart is enclosed in a -----sac 1
 - a) Pericardial b) cardial c) organal d) bony
5. An example of Hinge joint is: 1
 - a) Ankle b) Wrist c) Elbow d) Shoulder
6. Sports biomechanics can be described as 1
 - a) Mechanics b) Kinesiology c) Physics of sports d) Sports dynamics
7. Opening of hand sideways when our hand is moving away from the body is an example of: 1
 - a) Flexion b) Abduction c) Extension d) Addition

SECTION- B**(Attempt any 3 questions)**

8. Write the formula to calculate the BMI. Give an Example. 2
9. What do you understand by Anatomy and Physiology? 2
10. Explain the importance of Kinesiology? 2
11. What are the functions of the heart? 2

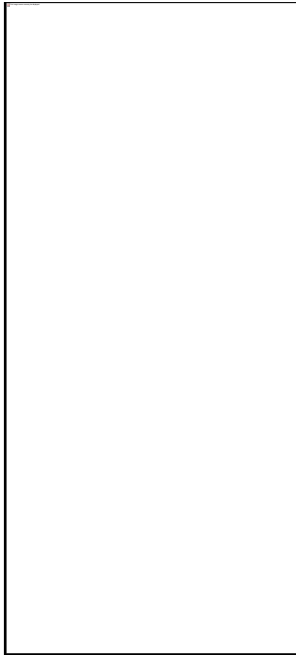
SECTION- C**(Attempt any 3 questions)**

12. Discuss the personality classification given by Sheldon. 3
13. Explain functions of skeletal system. 3
14. Differentiate between kinetics and kinematics. 3
15. Explain Rock port one mile walk test. 3

SECTION-D

16.

1 × 4



On the basis of the given picture, answer the following questions.

- i) Scapula and skull are examples of -
(a) Short bones. (b) Long bones. (c) Irregular bones. (d) Flat bones.
- ii) Carpus and tarsus are the examples of -
(a) Sesamoid bones. (b) Short bones. (c) Flat bones. (d) Long bones.
- iii) The number of ribs are -
(a) 24 (b) 22 (c) 12 (d) 26
- iv) The number of bones in skull are -
(a) 22 (b) 18 (c) 12 (d) 24

17.

Various body movements :

1 × 4



On the basis of the above body movements given in the pictures, answer the following questions.

- i) The body movements shown in the figure (c) is called.....
- ii) The body movements shown in the figure (a) is called.....
- iii) The body movements shown in the figure (d) is called.....
- iv) In which figure extension is shown?

SECTION-E (Attempt any 2 questions)

- 18. Explain the process of Respiratory system of human beings. 5
- 19. Describe the axes and planes in body movement. 5
- 20. Explain the importance of Test and Measurement in the field of sports. 5

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III : (2025-26)
PHYSICS
CLASS: XI

Time: 1 ½ Hours

Maximum Marks:

40

NAME: _____ **SEC.:** _____ **ROLL**

NO. _____

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 eight MCQ of one mark each, **Section B** contains three questions of two marks each, **Section C** contains four questions of three marks each, **Section D** contains one case study-based question of four marks and **Section E** contains two long answer type questions of five marks each.
- (iv) There is no overall choice. However, an **internal choice** has been provided in one question in Section B, one question in Section C, one subpart of case study-based question in Section D and both the questions in Section E. You have to attempt only one of the choices in such questions.
- (v) Use of calculator is not allowed.

SECTION - A

1. Hook's law is applicable for - 1
(a) plastic material (b) elastic material (c) Both A & B (d) brittle material
2. Water in a capillary tube rises to a height of 6 cm. If the area of cross section of the capillary is made one-fourth, water will raise up to - 1
(a) 6 cm (b) 12 cm (c) 3 cm (d) 24 cm
3. An ideal fluid flows through a pipe of circular cross section made of two sections with diameters 2.5 cm and 3.75 cm. The ratio of the velocities in two pipes is - 1
(a) 9:4 (b) 3:2 (c) $\sqrt{3}:\sqrt{2}$ (d) $\sqrt{2}:\sqrt{3}$
4. 100 g ice at 0°C is mixed with 100 g water at 20°C. The final temperature will be - 1
(a) 0°C (b) 10°C (c) 20°C (d) -10°C
5. An adiabatic process is characterised by - 1
(a) constant temperature (b) no heat transfer (c) constant pressure (d) constant volume
6. The average kinetic energy of a molecule of an ideal gas is proportional to - 1
(a) absolute temperature (b) pressure (c) volume (d) nature of gas
7. **Assertion(A):** Stress is directly proportional to strain for all materials under all conditions. 1
Reason(R): These stress-strain curve for materials like rubber exhibits linear behaviour beyond a certain point.
a) Both A and R are true, and R is correct explanation of the assertion.
b) Both A and R are true, but R is not the correct explanation of the assertion.
c) A is true, but R is false.
d) Both A and R are false.
8. **Assertion:** Stokes' law helps determine terminal velocity of a spherical object. 1
Reason: Terminal velocity occurs when gravitational force equals viscous drag force.
a) Both A and R are true, and R is correct explanation of the assertion.
b) Both A and R are true, but R is not the correct explanation of the assertion.
c) A is true, but R is false.
d) A is false, but R is true.

SECTION - B

9. Two rods of different material having coefficient of linear expansion α_1 and α_2 and Young's modulus Y_1 and Y_2 respectively are fixed between two rigid walls. The rods are heated for same rise in temperature. If $\alpha_1 : \alpha_2 :: 2:3$ and the thermal stress in two rods is same, then find the ratio Y_1/Y_2 . 2
10. On removing the valve, the air escaping from a cycle tube becomes cool. Explain the phenomena mentioning the thermodynamic process involved. 2
11. Find out the root mean square velocity of molecules of oxygen gas in terms of the root mean square velocity of molecules of hydrogen gas. 2

OR

At what temperature is the root mean square speed of an atom in an argon gas cylinder equal to the rms speed of a helium gas atom at -20 °C? (atomic mass of Ar = 40.0 u, of He=4.0 u).

SECTION - C

12. (i) What is the Young's modulus for a perfect rigid body? 3
 (ii) A wire of length L and radius r is clamped rigidly at one end. When the other end of the wire is pulled by a force f , its length is increased by l . When another, wire of the same material of length $2L$ and radius $2r$, is pulled by a force $2f$, find the increase in length of the wire.
13. The cylindrical tube of a spray pump has a cross-section of 8 cm^2 one end of which has 40 fine circular holes each of diameter 1 mm . If the liquid flow inside the tube is 1.5 m/min , what is the speed of ejection of the liquid through the holes? 3
14. Estimate the fraction of molecular volume to the actual volume occupied by oxygen gas at STP. Take the diameter of an oxygen molecule to be $3\text{ \AA}$. 3
15. (i) Write the dimensions of thermal conductivity. 3
 (ii) A cubical ice box (made of thermocol) of side 30 cm has a thickness of 5 cm . If 4 kg of ice is put in the box, estimate the amount of ice remaining after 6 hours. Given outside temperature is 45°C , coefficient of thermal conductivity of thermocol is $0.01\text{ Js}^{-1}\text{m}^{-1}\text{K}^{-1}$ and heat of fusion of water $335 \times 10^3\text{ Jkg}^{-1}$.

OR

- (i) Define latent heat.
 (ii) When 0.20 kg of ice at 0°C is mixed with 0.50 kg of water at 40°C in a container, the resulting temperature is 6°C . Calculate the heat of fusion of ice. (Specific heat of water $4200\text{ Jkg}^{-1}\text{K}^{-1}$)

SECTION – D

16. **Read the text carefully and answer the questions:** 4

Every equilibrium state of a thermodynamic system is completely described by specific values of some macroscopic variables, also called state variables. For example, an equilibrium state of a gas is completely specified by the values of pressure, volume, temperature, and mass. During the rapid expansion, pressure of the gas may not be uniform throughout. Similarly, a mixture of gases undergoing an explosive chemical reaction is not an equilibrium state such that temperature and pressure are not uniform. To decide which variable is extensive and which intensive, think of a relevant system in equilibrium, and imagine that it is divided into two equal parts.

- (i) In which of the following processes, the external work is restricted?
 (a) Isothermal (b) Isobaric (c) Adiabatic (d) Isochoric
- (ii) When air comes out from tyre of a vehicle, it appears cold because its -
 (a) Pressure suddenly reduces (b) Volume suddenly reduces
 (c) Pressure remains constant (d) Volume remains constant
- (iii) Which of the following correctly describes an adiabatic process?
 (a) $PT^\gamma = \text{constant}$ (b) $VT^\gamma = \text{constant}$ (c) $V^{\gamma-1}T = \text{constant}$ (d) $PV^{\gamma-1} = \text{constant}$

$1 = \text{constant}$

- (iv) **Attempt either option A or B**

- A. The unit of PdV is –
 (a) Newton (b) Pascal-sec (c) Joule (d) Joule-sec

OR

- B. Choose the correct relation between C_P and C_V from the following -
 (a) $C_P / C_V = R$ (b) $C_V - C_P = R$ (c) $C_P - C_V = R$ (d) $C_V / C_P = \gamma$

SECTION – E

17. (i) Define the following terms and write their SI units: 5
 a. terminal velocity b. surface tension c. gauge pressure
 (ii) Six raindrops each of radius 1.5 mm , come down with a terminal velocity of 6 cms^{-1} . They coalesce to form bigger drop. What is the terminal velocity of the bigger drop?
- OR**
- (i) Define streamline motion and turbulent motion.
 (ii) Derive the equation of continuity for an incompressible fluid.
 (iii) A 30 cm diameter pipe carries oil at a velocity 4 m/s . At another section the diameter is 25 cm . Find the velocity of oil at this section.
18. (i) Show that when two rods of equal length and area of cross-section are joined in parallel, their equivalent thermal conductivity will become $k_1 + k_2$. (Where k_1 and k_2 are their individual thermal conductivities) 5
 (ii) A metal sphere of radius ' r ' and specific heat ' s ' is rotated about an axis passing through its centre at a speed of ' n ' rotations per second. It is suddenly stopped and 50% of its energy is used in increasing its temperature. Prove that the rise in temperature of the sphere is $2n^2r^2/5s$.

OR

- (i) Explain the following phenomenon with proper reasons:
 a. Steam at 100°C produces severe burns than water at 100°C .
 b. Water is preferred as coolant over other liquids.

- c. The base of heating utensil generally has greater area.
- d. Sawdust is used to cover ice to prevent melting.
- e. Specific heat of water during boiling is infinite.

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III: (2025 – 2026)
INFORMATION TECHNOLOGY
CLASS: XI

Time: 1 ½ Hours

Maximum Marks: 40

NAME: _____ SEC.: _____ ROLL NO.: _____

General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **18 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5 + 13 =) 18 questions, a candidate has to answer (5 + 8 =) 13 questions in the allotted (maximum) time of 1 ½ hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (20 MARKS):**
 - i. This section has 05 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 (20 MARKS):**
 - i. This section contains 13 questions.
 - ii. A candidate has to do 8 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

1. **Answer any 4 out of the given 6 questions on Employability Skills: (1 X 4 = 4 marks)**
 - i. The shortcut for checking Spelling and Grammar option is - 1
 - a) Ctrl+F7 b) F7 c) F6 d) Ctrl+F12
 - ii. The area in the document window where we can enter the text is known as _____. 1
 - a) window b) word wrap c) formatting d) work area
 - iii. Business is a/an _____ activity. 1
 - a) Social b) Economic c) Hazardous d) Selling
 - iv. Which of the following is **not** a type of value of an entrepreneur? 1
 - a) Personal b) Social c) Professional d) Familial
 - v. Which menu option has the commands Save, Print and Close? 1
 - a) Insert b) File c) Tools d) Format
 - vi. Define Entrepreneurship in a sentence. 1
2. **Answer any 4 out of the given 5 questions: (1 X 4 = 4 marks)**
 - i. Expand the given terms: a) WAN b) PPP 1
 - ii. Define Virus. 1
 - iii. Which command do you need to write in actionPerformed() event handler of a button, in order to make it exit button? 1
 - iv. The keyboard shortcut to build a project in Java Netbeans is _____. 1
 - a) F10 b) F2 c) F11 d) F12
 - v. Define Class in Java. 1
3. **Answer any 4 out of the given 5 questions: (1 X 4 = 4 marks)**
 - i. A device used to connect dissimilar networks is called a /an _____. 1
 - a) Hub b) Switch c) Bridge d) Gateway
 - ii. Expand the term TCP/IP. 1
 - iii. 4 GB = 2^x MB. Find X. 1
 - iv. Which device is used to connect multiple networks together? 1
 - a) Switch b) Router c) Hub d) Repeater
 - v. There are _____ types of Primitive data types in Java. 1
 - a) 1 b) 2 c) 3 d) 4

4. **Answer any 4 out of the given 5 questions: (1 X 4 = 4 marks)**
- Which operator is used for comparing two values in Java? **1**
a) = b) == c) := d) !=
 - Which out of these is **not** a primitive data type? **1**
a) int b) char c) Array d) Boolean
 - Expand UDP. **1**
 - _____ also infects the entire network of devices by replicating itself. **1**
a) File virus b) Macro Virus c) Polymorphic Virus d) Worm
 - What is meant by a "Wrapper" class? **1**
5. **Answer any 4 out of the given 5 questions: (1 X 4 = 4 marks)**
- Which of the following is **not** an access specifier in Java? **1**
a) Personal b) Private c) Public d) Protected
 - Packaging of data and methods together in a single unit is called _____. **1**
a) Inheritance b) Polymorphism c) Abstraction d) Encapsulation
 - What is DoS? **1**
 - Define a MODEM. **1**
 - Identify the invalid variable name among the following in Java. **1**
a) Account1 b) my_age c) 1salary d) salary1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of given 5 questions on Employability Skills (2 X 3 = 6 marks)

Answer each questions in 20-30 words

- Differentiate between toggle case and sentence case in change case option. **2**
- Write down the steps to find and replace a given word in OpenOffice Writer. **2**
- Roshni wants to create a bulleted list inside a numbered list. Is it possible? If yes, how will she do so? **2**
- Write any two Principles for improving and growing a business. **2**
- List any two Entrepreneurial attitudes visible in Entrepreneurs. **2**

Answer any 2 out of the given 3 questions (2X2=4 marks)

- Differentiate between getters and setters in Java? **2**
- For communication to happen 4 important components are required. Name them. **2**
- Define Domain Name Resolution. **2**

Answer any 2 out of the given 3 questions (3X2= 6 marks)

- Write the code to be written in the source of a Java form to print in the output box whether the number inputted by the user in the input box is Even or Odd. **3**
- Write three characteristics of a variable in Java. **3**
- What is digital footprint? Name the types of digital footprints. **3**

Answer any 1 out of the given 2 questions (4X1= 4 marks)

- What is a Trojan Horse? Name any three types of Trojan Horses. **4**
- Write the code to be written in the source of a Java form to accept the cost price and selling price from the user in two text fields thereby calculating the profit or loss incurred. **4**

BURNPUR RIVERSIDE SCHOOL, CHITTARANJAN
PERIODIC TEST III: (2025-2026)
MATHEMATICS
CLASS: XI

Time : 1 ½ Hours

Maximum Marks : 40

NAME: _____ SEC.: _____ ROLL NO: _____

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 01 Assertion-Reason based questions of 1 mark each.
3. Section B has 3 Very Short Answer (VSA)-type questions of 2 marks each.
4. Section C has 2 Short Answer (SA)-type questions of 3 marks each.
5. Section D has 2 Long Answer (LA)-type questions of 5 marks each.
6. Section E has 2 source based/case based/passage based/integrated units of assessment (4 marks each) with subparts.

SECTION-A

This section comprises of MCQs of 1 mark each. Select the correct option (Question 1-Question 9)

1. The coefficient of x^p and x^q (p and q are positive integers) in the expansion of $(1+x)^{p+q}$ are
 (A) equal (B) equal with opposite signs.
 (C) reciprocal of each other. (D) none of these 1
2. The equation of the line passing through (1,2) and perpendicular to the line $x+y+1=0$ is
 (A) $y-x+1=0$ (B) $y-x-1=0$ (C) $y-x-2=0$ (D) $y-x-2=0$ 1
3. If the line $\frac{x}{a} + \frac{y}{b} = 1$ passes through the point (2,-3) and (4,-5). then (a,b) is
 (A) (1,1) (B) (-1,1) (C) (1,-1) (D) (-1,-1) 1
4. The distance of the point of intersection of the lines $2x-3y+5=0$ and $3x+4y=0$ from the line $5x-2y=0$ is
 (A) $\frac{130}{17\sqrt{29}}$ (B) $\frac{13}{7\sqrt{29}}$ (C) $\frac{130}{7}$ (D) $\frac{13}{7}$ 1
5. If the circle $x^2 + y^2 + 2ax + 8y + 16 = 0$ touches the x-axis, then the value of a is
 (A) ± 16 (B) ± 4 (C) ± 8 (D) ± 1 1
6. The latus rectum of the hyperbola $16x^2 - 9y^2 = 144$ is
 (A) $\frac{16}{3}$ (B) $\frac{32}{3}$ (C) $\frac{8}{3}$ (D) $\frac{4}{3}$ 1
7. Three positive numbers forms an increasing GP. If the middle term in this GP is doubled, the new numbers are in AP. Then the common ratio of the GP is
 (A) $2 - \sqrt{3}$ (B) $2 + \sqrt{3}$ (C) $\sqrt{3} + \sqrt{2}$ (D) $3 + \sqrt{2}$ 1
8. The second term of a GP is 2 and the sum of its infinite term is 8, then the first term is
 (A) $\frac{1}{4}$ (B) $\frac{1}{2}$ (C) 2 (D) 4 1
9. The two geometric mean between the number 1 and 64 is
 (A) 1 and 64 (B) 4 and 16 (C) 2 and 16 (D) 8 and 16 1

Assertion –Reason Based Questions

- A) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion.
- B) Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion.
- C) Assertion is true but the Reason is false.
- D) Reason is true but the Assertion is false.

10. **Assertion (A):** Point $(a+1, a-1, a^2-1)$ lies on y-axis, if $a=-1$.
Reason (R): For any point (x,y,z) on y-axis $x=0, y=0$. 1

SECTION-B

This section comprises of 3 very short answer type questions of 2 marks each.

11. (A) Find the equation of the perpendicular bisector of the line joining the points A(2, 12) and B(6, -5). 2

OR

12. (B) Find the angle between the lines whose slopes are $\frac{1}{2}$ and 3.
 Find the sum of the progression $x(x+y) + x^2(x^2+y^2) + x^3(x^3+y^3) + \dots$ to n terms. 2

13. Find the point in xy-plane which is equidistant from the points A(2, 0, 3), B(0, 3, 2) and C(-1, 0, 1). 2

SECTION-C

This section comprises of 2 short answer type questions of 3 marks each.

14. Find the middle term in the expansion of $\left(3x - \frac{x^3}{6}\right)^7$. 3
15. (A) The focus of a parabolic mirror is at a distance of 6 cm from its vertex. If the mirror is 20 cm deep, find its diameter. 3

OR

- (B) An arch is in the form of a semi ellipse. It is 8 m wide and 2 m high at the centre. Find the height of the arch at a point 1.5 m from one end.

SECTION-D

This section comprises of 2 long answer type questions of 5 marks each.

16. The 3rd, 4th, and 5th terms in the expansion of $(x + a)^n$ are respectively 84, 280 and 560. Find the values of x, a and n . 5

OR

Find the sum of the following series:

$0.7 + 0.77 + 0.777 + \dots$ to n terms.

17. One side of a rectangle lies along the line $4x + 5y = 20$. Two of its vertices are (3, 1) and (4, 1). Find the equations of the other three sides. 5

SECTION- E

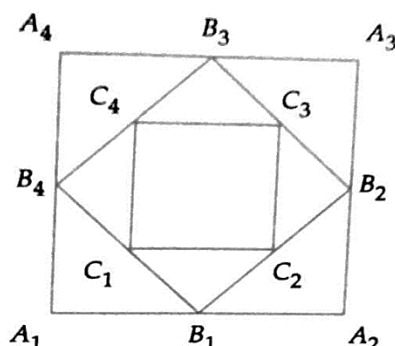
This section comprises of 3 case study / Passage-based questions of 4 marks each with subparts. The first case study have three subparts (i),(ii),(iii) of marks 1,1,2 respectively. The 2nd case study question has two subparts of 2 marks each.

18. Case Study-1

A square is drawn by joining the midpoints of the sides of a square of side 10 cm.

A third square is drawn inside the second square in the same way, and the process is continued indefinitely.

Using the above information, answer the following questions:



- (i) Find the sum of the perimeters of all the squares so formed. 1
- (ii) Find the sum of the lengths of diagonals of all the squares so formed. 1
- (iii) (A) What is the sum of the areas of all squares so formed? 2

OR

(B) In a G.P. of positive terms, any term is equal to the sum of the next two terms. Then find the common ratio of the G.P.

19. Case Study-2

A man running a race-course notes that he is always 32 metres nearer to flagpost B than its distance from flagpost A.

The two flagposts are 40 metres apart.

Based on this information, answer the following questions:

- (i) What is the equation of the path traced by the man, if the midpoint of AB is taken as the origin, AB along x-axis and line perpendicular to it as y-axis? 2
- (ii) What are the lengths of axes of the conic and the coordinates of the focus/foci of the conic? 2