Monthly Progressive Test

Class: IX (G)

Subject: PCMB

Test Booklet No.: MPT04(G)

Test Date: 2 4 0 7 2 0 2 4

Time: 180 mins

Full Marks: 200

Important Instructions :

1. The Test is of 180 mins duration and the Test Booklet contains 100 multiple choice questions of single correct option only. There are four sections with four subjects. You have to attempt all 100 questions (Candidates are advised to read all 100 questions). Questions 1 to 25 contain Physics, Questions 26 to 50 contain Chemistry, Questions 51 to 75 contain Mathematics, Questions 76 to 100 contain Biology.

2. Each question carries 2 marks. For each correct response, the candidate will get 2 marks. There is no negative mark for wrong response. The maximum mark is 200.

3. Use Blue / Black Ball point Pen only for writing particulars marking responses on Answer Sheet.

4. Rough work is to be done in the space provided for this purpose in the Test Booklet only.

5. On completion of the test, the candidate must handover the Answer Sheet to the invigilator before leaving the Room / Hall. The candidates are allowed to take away this Test Booklet with them.

6. The CODE for this Booklet is Off Line MPT0424072024(G).

7. The candidates should ensure that the Answer Sheet is not folded. Do not make any stray marks on the Answer Sheet. Do not write your UID No. anywhere else except in the specified space. Use of white fluid for correction is NOT permissible on the Answer Sheet. **Do not scrible or write on or beyond discrete bars of OMR Sheet at both sides**.

8. Each candidate must show on-demand his/her Registration document to the Invigilator.

9. No candidate, without special permission of the Centre Superintendent or Invigilator, would leave his/her seat.

10. Use of Electronic Calculator/Cellphone is prohibited.

11. The candidates are governed by all Rules and Regulations of the examination with regard to their conduct in the Examination Hall. All cases of unfair means will be dealt with as per Rules and Regulations of this examination.

12. No part of the Test Booklet and Answer Sheet shall be detached under any circumstances.

13. There is no scope for altering response mark in Answer Sheet.

Physics

1. If a body starts from rest and moves with uniform acceleration, then:

    Ⓐ $v \propto t$ Ⓑ $s \propto t$ Ⓒ $v \propto s$ Ⓓ $s \propto \sqrt{t}$

2. A body from rest, moves with an acceleration of $2 \, m\,s^{-2}$. Then the distance travelled in the 4th second is (m).

    Ⓐ 10   Ⓑ 6   Ⓒ 7   Ⓓ 28

3. A man is at a distance of 6 m from a bus. The bus begins to move with a constant acceleration of $3 \, m\,s^{-2}$. In order to catch the bus, the minimum speed with which the man should run towards the bus is (in 2 s)

    Ⓐ $2 \, m\,s^{-1}$ Ⓑ $4 \, m\,s^{-1}$ Ⓒ $6 \, m\,s^{-1}$ Ⓓ $8 \, m\,s^{-1}$

4. Which one of the following represents uniform motion?
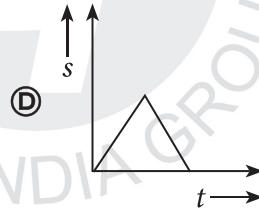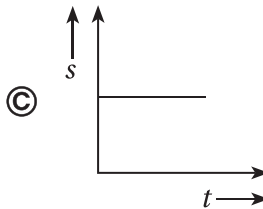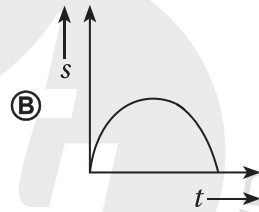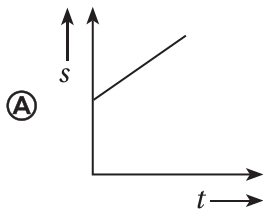
5. A stone is thrown upwards from the surface with an initial speed of 5 m/s. The stone comes to rest height of ($g = 10 \, m/s^2$) h m from ground. Then $10h =$

    Ⓐ 1.25 m   Ⓑ 12.5 m   Ⓒ 125 m   Ⓓ 2.45 m

6. A pebble is thrown vertically upwards from a bridge with an initial velocity of 4.9 m/s. It strikes the water after 2 s. The $\dfrac{height}{2}$ of the bridge is :

    Ⓐ 19.6 m   Ⓑ 14.7 m   Ⓒ 9.8 m   Ⓓ 4.9 m

7. A body falls freely for 10 sec. Its average velocity during this journey (take $g = 10 \, m\,s^{-2}$)

    Ⓐ $100 \, m\,s^{-1}$ Ⓑ $10 \, m\,s^{-1}$ Ⓒ $50 \, m\,s^{-1}$ Ⓓ $5 \, m\,s^{-1}$

8. A ball is dropped from a height of 1 m. What is its speed just before it hits the ground?

    Ⓐ $\sqrt{2}$ m/s   Ⓑ $\sqrt{5}$ m/s   Ⓒ $\sqrt{10}$ m/s   Ⓓ $\sqrt{20}$ m/s

9. A ball is dropped from a height of 1m. How much time does it need to cover this 1 m? ($g = 10$ m/s²)

    Ⓐ $\sqrt{2}$ s   Ⓑ $\sqrt{0.2}$ s   Ⓒ $\sqrt{5}$ s   Ⓓ $\sqrt{0.5}$ s

10. If v–t graph is straight line parallel to x axis, then what is the acceleration?

    Ⓐ positive   Ⓑ negative

    Ⓒ zero   Ⓓ none of these

11. If v–t graph is straight line passing through origin and making acute angle with time axis, then what is acceleration?

    Ⓐ positive   Ⓑ negative   Ⓒ zero   Ⓓ none of these

12. A freely falling body is an example of

    Ⓐ uniform motion   Ⓑ uniformly accelerated motion

    Ⓒ both Ⓐ and Ⓑ are correct   Ⓓ none of these

■ **Assertion Reason based Questions (13–14):**

Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

(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) Both Assertion (A) and Reason (R) are false.

13. **Assertion :** In uniform motion velocity remains constant with time.

    Reason : Acceleration is zero.

    Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

14. **Assertion :** Distance can be measured from v (velocity)–t (time) graph

    Reason : Change in velocity can be given from area under acceleration–t (time) graph.

    Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

■ **Case Study Based Questions (Q.No. 15) :**

Read the passage given below and answer the following questions.

In 1-D motion, when object is at rest, distance versus time graph is line parallel to t-axis. If initial velocity is zero, with uniform accelerated motion along x-axis, the graph of position versus time graph will be parabolic passing through origin.

15. When the object is at rest how distance versus time graph look?

Ⓐ a straight line passing through the origin

Ⓑ a curve passing through the origin

Ⓒ a straight line parallel to x axis

Ⓓ none of these

16. If 8 minute and 20 s = x second. Then x =

Ⓐ 500   Ⓑ 820   Ⓒ 300   Ⓓ 400
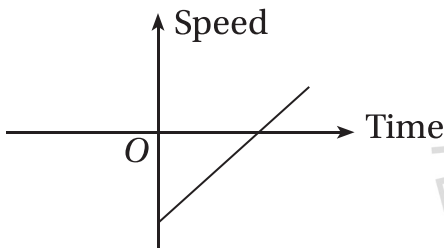
17. What is the SI unit of acceleration due to gravity?

Ⓐ $m\,s^{-2}$ Ⓑ $m^{-1}s^{-1}$ Ⓒ $m\,s^{2}$ Ⓓ $m^{2}s$

18. The dimension of momentum is the same as that of

Ⓐ Force   Ⓑ Impulse
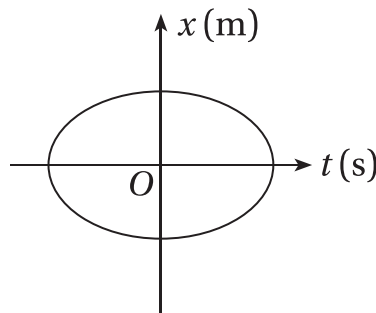
Ⓒ Work   Ⓓ Energy

19.

The above graph is

Ⓐ Correct   Ⓑ May be correct   Ⓒ Wrong   Ⓓ None of these

20. In one dimension motion, the position vs. time graph is shown below.

The graph is

Ⓐ Correct   Ⓑ Wrong   Ⓒ May be correct   Ⓓ None of these

21. A particle is projected upward vertically with a velocity 5 m/s from the ground, then striking velocity on the ground is

Ⓐ 10 m/s   Ⓑ 5 m/s   Ⓒ 2 m/s   Ⓓ 4 m/s

22. A particle is projected upward, then the distance (height) covered in last one second is ($g = 10 \text{ m/s}^2$)

    Ⓐ l0 m   Ⓑ 5 m   Ⓒ 6 m   Ⓓ 4 m

23. The magnitude of velocity at the highest point of vertical motion under gravity

    Ⓐ 2 m/s   Ⓑ 1 m/s   Ⓒ 0 m/s   Ⓓ 10 m/s

24. What is the magnitude of velocity in vertical motion under gravity just before 1 s of maximum height ($g = 10 \text{ m/s}^2$)

    Ⓐ 5 m/s   Ⓑ 2 m/s   Ⓒ 4 m/s   Ⓓ l0 m/s

25. What is the magnitude of acceleration of a particle under vertical motion under gravity at the highest point?

    Ⓐ 9.8 m/s^2 Ⓑ 4.9 m/s^2 Ⓒ 2 m/s^2 Ⓓ 1 m/s^2

Chemistry

---

26. Four students prepared mixtures in water by taking sodium chloride, sand, chalk powder and starch respectively, in four different test tubes. After stirring, the mixture that appeared clear and transparent was that of

    Ⓐ starch and water   Ⓑ chalk powder and water

    Ⓒ sand and water   Ⓓ sodium chloride and water

27. A student by mistake mixed up iron filings and sulphur powder. He wanted to separate them from one another. The method he should use is to dissolve the mixture in :

    Ⓐ boiling water   Ⓑ cold water   Ⓒ carbon disulphide   Ⓓ kerosene.

28. Which of the following statement is incorrect about ammonium chloride ?

    Ⓐ It is a solid at room temperature

    Ⓑ It directly changes to vapours on heating

    Ⓒ It is soluble in water

    Ⓓ It melts at room temperature and changes to liquid

29. When a mixture of common salt and ammonium chloride is heated, it is observed that

    Ⓐ solid common salt gets deposited on the cooler parts of the funnel while solid ammonium chloride remains in the china dish.

Ⓑ mixture of common salt and ammonium chloride turns into greenish crystals when allowed to cool

Ⓒ ammonium chloride gets deposited on the cooler parts of the funnel and solid common salt remains in the china dish

Ⓓ droplets containing both common salt and ammonium chloride appear on the upper part of the funnel while some molten mixture of common salt and ammonium chloride remains in the china dish.

30. The order of steps used to separate the components of a mixture of sand, camphor and common salt is :

Ⓐ moving a magnet, dissolving in water and sublimation

Ⓑ dissolving in water, evaporation and sublimation

Ⓒ sublimation, dissolving in water, filtration and evaporation

Ⓓ dissolving in water, filtration, distillation and sublimation

■ **Assertion Reason based Questions (31–34) :**

Directions: This section contains certain number of questions. Each question contains Statement—I (Assertion) and Statement—II (Reason). Each question has 4 choices (a), (b), (c) and (d) out of which ONLY ONE is correct Choose the correct option.

(a) Statement–I is True, Statement–II is True; Statement–II is a correct explanation for Statement–I.

(b) Statement–I is True, Statement–II is True; Statement–II is not a correct explanation for Statement–I.

(c) Statement–I is True, Statement–II is False.

(d) Statement–I is False, Statement–II is True.

31. **Statement-I :** Plasma state can exists everywhere.
   Statement-II : Plasma state of matter is a fused ionic state.

32. **Statement-I :** Molecules can exist independently.
   Statement-II : Molecule are made up of atoms.

33. **Statement-I :** A mixture is not a pure substance.
   Statement-II : The simple components of a mixture taken separately are impure.

34. **Statement-I :** A compound will have the properties of the elements present in it
   **Statement-II :** The elements in a compound are combined chemically.

■ **Case Study Based Questions (35–37) :**

Read the following and answer.

A child wanted to separate the mixture of dyes constituting a sample of ink. He marked a line by the ink on the filter paper and placed the filter paper in a glass containing water as shown in figure. The filter paper was removed when the water moved near the top of the filter paper.
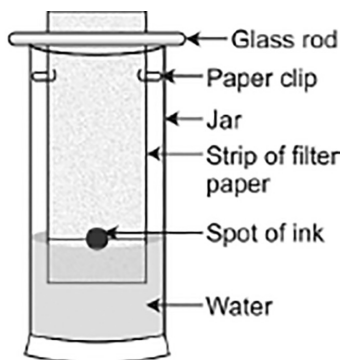
35. Identify the technique used by the child.
    Ⓐ Sedimentation   Ⓑ Filtration   Ⓒ Chromatography Ⓓ Distillation

36. What would you expect to see, if the ink contains three different coloured components?
    Ⓐ We will not see any band on the filter paper.
    Ⓑ We would see three bands on the filter paper at various lengths.
    Ⓒ We would see infinite bands on the filter paper.
    Ⓓ We would see single band on the filter paper.

37. What is chromatography?
    Ⓐ It is an agricultural method to separate grains
    Ⓑ A method to separate magnetic impurities from non-magnetic impurities
    Ⓒ The process of separating the suspended particles of an insoluble substance
    Ⓓ Method of separating and identifying various components in a mixture, which are present in small trace quantities.

38. Identify X and Y in the given figure
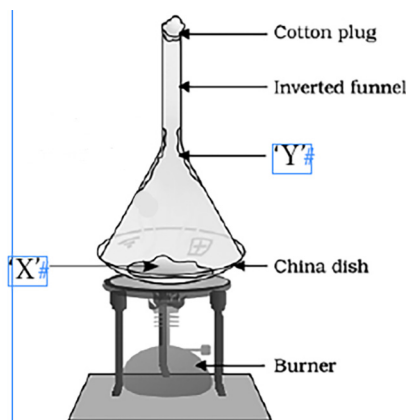
	X	Y
Ⓐ	Mixture of naphthalene and anthracene	Solid naphthalene
Ⓑ	Mixture of NaCl and water	Solid NaCl
Ⓒ	Mixture of NaCl and anthracene	Solid anthracene
Ⓓ	Mixture of sugar and NaCl	Solid NH_4Cl

39. When two liquids do not mix, they form two separate layers and are known as

Ⓐ Miscible liquids   Ⓑ Immiscible liquids

Ⓒ Saturated liquids   Ⓓ Super saturated liquids

40. **Statement – I :** Evaporation causes cooling.

Statement – II : Particles of liquid absorb energy from the surrounding to regain the energy lost during evaporation.

Ⓐ Both statement – I and Statement – II is the correct explanation for statement – I

Ⓑ Both statement – I and statement – II are true but statement – II is not the correct explanation for statement – I

Ⓒ Statement – I is true and statement – II is false

Ⓓ Statement – I is false and statement – II is true.

41. The formula of chloride of metal is MCl_3. What is the formula of metal oxide

Ⓐ MO   Ⓑ MO_2 Ⓒ M_2O Ⓓ M_2O_3

42. How much heat is needed to convert 12 gram of ice at 0°C to 12 gram of water at 0°C.

Ⓐ 840 cal   Ⓑ 840 Joule   Ⓒ 960 Cal   Ⓓ 800 Joule

43. A student takes some water in a beaker and heats it over a flame for determining its boiling point. He keeps on taking its temperature readings. He would observe that the temperature of water

Ⓐ Keeps on increasing regularly

Ⓑ Keeps on increasing irregularly

Ⓒ First increases slowly, then decreases rapidly

Ⓓ First increases regularly and then becomes constant

44. On which factor the rate of evaporation does not depend

Ⓐ Surface area   Ⓑ Material of the vessel

Ⓒ Temperature   Ⓓ Humidity

45. The number of neutrons present in $^{39}K_{19}$ is?

Ⓐ 39   Ⓑ 19   Ⓒ 58   Ⓓ 20

■ **Case Based Questions (46–48):**

Answer the questions on the basis of your understanding of the following passage and related studied concept.

Pure substances are classified as elements or compounds. An element is a substance that contains only one type of atom. Also, an element cannot be broken down or transformed into a new substance even by using some physical or chemical methods. A compound is a substance composed of two or more different types of elements, chemically combined in a fixed proportion. The constituents can not be separated by simple physical methods. However, these substances can be broken down into separate elements by chemical methods

On the other hand, mixtures are different from pure substances. They are called impure substances. They have different characteristics than elements and compounds. They are composed of different elements or compounds mixed together or more than one pure substance that combined together in any composition. When, mixture forms, there is only a little or no energy change. Mixtures are further classified into homogeneous and heterogeneous mixture.

46. The organic material wood is:

Ⓒ an element   Ⓑ a compound   Ⓔ a mixture   Ⓕ a solution

47. The substance formed by mixing, crushing and heating iron filings and sulphur powder is:

Ⓒ an element   Ⓑ a compound   Ⓔ a mixture   Ⓕ a solution

48. Blood is considered as:

Ⓒ an element   Ⓑ a compound   Ⓔ a mixture   Ⓕ a solution

■ **Assertion Reason based Question (49):**

Directions: This section contains certain number of questions. Each question contains Statement—1 (Assertion) and Statement—2 (Reason). Each question has 4 choices (a), (b), (c) and (d) out of which ONLY ONE is correct Choose the correct option.

(a) Statement-1 is True, Statement-2 is True; Statement-2 is a correct explanation for Statement-1.

(b) Statement-1 is True, Statement-2 is True; Statement-2 is not a correct explanation for Statement-1.

(c) Statement-1 is True, Statement-2 is False.

(d) Statement-1 is False, Statement-2 is True.

49. **Statement-I :** True solution exhibits Tyndall effect.

Statement-II : Particles are very small in size.

Ⓒ a   Ⓑ b   Ⓔ c   Ⓕ d

50. Which of the following will not show Tyndall effect?

Ⓒ Smoke   Ⓑ Foam   Ⓔ Jelly   Ⓕ Salt solution

Mathematics

51. If $x = y$, then which of the following is correct?

Ⓐ $x + y = y - z$ Ⓑ $x - y = y + z$ Ⓒ $x - z = y - z$ Ⓓ All of these

52. If the supplement of an angle is three times its complement, then the angle is

Ⓐ 40°   Ⓑ 35°   Ⓒ 50°   Ⓓ 45°

53. What is the value of x for the figure given below?
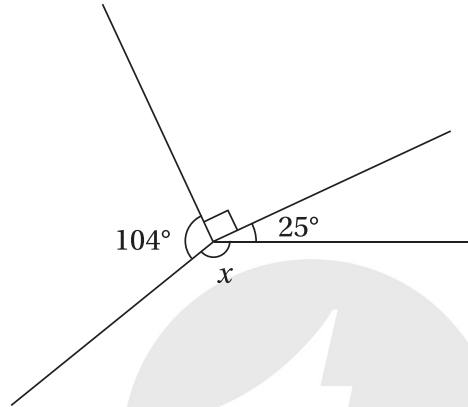
Ⓐ 141°   Ⓑ 70°   Ⓒ 105°   Ⓓ 45°

54. The sum of two angles of a triangle is 116° and their difference is 24°. The measure of each angle of the triangle is

Ⓐ 40°, 60°, 80°   Ⓑ 70°, 46°, 64°   Ⓒ 70°, 50°, 60°   Ⓓ 60°, 90°, 30°

55. If one angle of a triangle is equal to the sum of other two angles, then the triangle is

Ⓐ a right triangle   Ⓑ an isosceles triangle

Ⓒ an equilateral triangle   Ⓓ an obtuse triangle

56. In $\triangle ABC$ and $\triangle DEF$, $AB = DF$ and $\angle A = \angle D$. The two triangles will be congruent by SAS axiom if

Ⓐ $BC = EF$ Ⓑ $AC = DE$ Ⓒ $BC = DE$ Ⓓ $AC = EF$

57. If all the altitudes from vertices to the opposite sides of a triangle are equal, then the triangle is

Ⓐ Equilateral   Ⓑ Isosceles   Ⓒ Scalene   Ⓓ Right-angled

58. Which of the following needs a proof?

Ⓐ an axiom   Ⓑ a definition   Ⓒ postulate   Ⓓ a theorem

59. The complement of $72°40'$ is

Ⓐ $107°20'$ Ⓑ $27°20'$ Ⓒ $17°20'$ Ⓓ $12°40'$

60. Which of the following is not a criterion of congruence of triangles?

Ⓐ SSA Ⓑ SAS Ⓒ ASA Ⓓ SSS

■ **Assertion Reason based Questions (61–62):**

Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

(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.

61. Assertion (A) : An infinite number of lines can be drawn to pass through a given point.

Reason (R) : A line segment has two end points.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

62. Assertion (A) : If the two angles of a triangle measure 50° and 70°, then its third angle is 60°.

**Reason (R) :** The sum of the angles of a triangle is 180°.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

■ **Case Study Based Questions (63–65):**

Read the passage given below and answer the following questions.

Maths teacher draws a straight line AB on the blackboard. Now he told Rahim to draw another line CD which cuts AB at O. He told Ajay to mark $\angle AOD$ as $2z$. Suraj was told to mark $\angle AOC$ as $4y$. Robert made an angle $\angle COE = 60°$. Reshma marked $\angle BOE$ and $\angle BOD$ as y and x respectively.
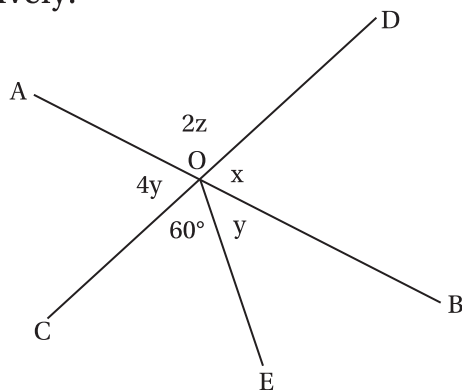
63. What is the value of x?

Ⓐ 48° Ⓑ 96° Ⓒ 100° Ⓓ 120°

64. What is the value of y?

 Ⓐ 48°   Ⓑ 96°   Ⓒ 100°   Ⓓ 24°

65. What is the value of z?

 Ⓐ 48°   Ⓑ 96°   Ⓒ 42°   Ⓓ 120°

66. $3\sqrt{6} + 4\sqrt{6}$ is equal to

 Ⓐ $6\sqrt{6}$ Ⓑ $4\sqrt{12}$ Ⓒ $7\sqrt{12}$ Ⓓ $7\sqrt{6}$

67. Abscissa of all the points on x-axis is _____.

 Ⓐ 0   Ⓑ 1   Ⓒ 2   Ⓓ any number

68. If $p(x) = x + 4$, then $p(x) + p(-x) = ?$

 Ⓐ 0   Ⓑ 4   Ⓒ $2x$ Ⓓ 8

69. If $x + y = 2013$ and $\dfrac{1}{x} + \dfrac{1}{y} = 2013$, what is the value of xy?

 Ⓐ $\dfrac{1}{2013}$ Ⓑ 4026   Ⓒ 0   Ⓓ 1

70. The point $P(-5, 3)$ lies in

 Ⓐ quadrant I   Ⓑ quadrant II   Ⓒ quadrant III   Ⓓ quadrant IV

■ **Case Study Based Questions (71–73):**

An architect is desigining a triangular roof where the sides are in the ratio 5 : 12 : 13. The largest side of the triangle is 26 cm. On the basis of the above information answer the following questions.

71. Calculate the shortest side of the triangle.

 Ⓐ 10 cm   Ⓑ 24 cm   Ⓒ 26 cm   Ⓓ 8 cm

72. Calculate the largest angle of the triangle.

 Ⓐ 30°   Ⓑ 60°   Ⓒ 90°   Ⓓ 120°

73. Find the area of the triangle.

 Ⓐ 60 cm^2 Ⓑ 120 cm^2 Ⓒ 180 cm^2 Ⓓ 240 cm^2

■ **Assertion Reason based Questions (74–75):**

Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:

(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.

74. Assertion (A) :
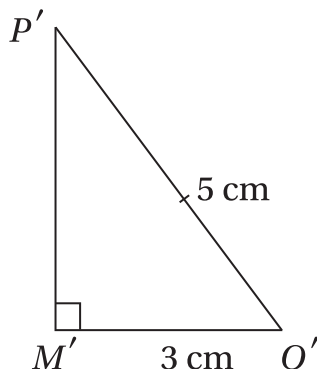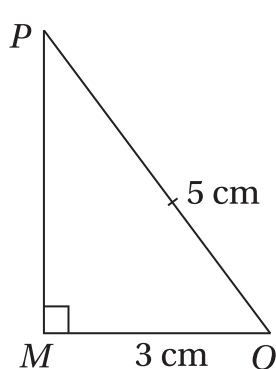
$$\Delta PMO \cong \Delta P'M'O'$$
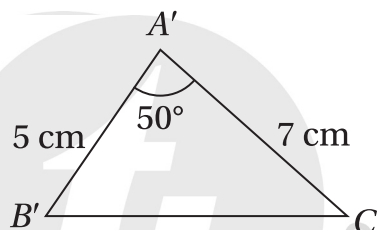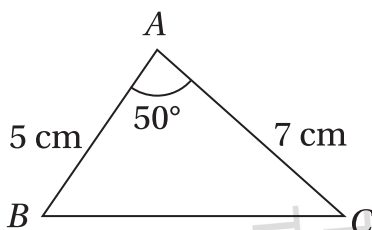
Reason (R) : RHS Congruence

Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

75. Assertion (A) :

$$\Delta ABC \cong \Delta A'B'C'$$

Reason (R) : ASA Congruence

Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

Biology

76. Which among these is not a type of parenchyma?

     Ⓐ Chlorenchyma   Ⓑ Collenchyma   Ⓒ Aerenchyma   Ⓓ Both Ⓐ and Ⓑ

77. Guard cell differ from other epidermal cells by :

     Ⓐ Presence of chloroplast   Ⓑ Absence of vacuole

     Ⓒ Presence of centriole   Ⓓ All of the above

78. Meristems helps in :

     Ⓐ Absorption of water   Ⓑ Absorption of minerals

     Ⓒ Transport of food   Ⓓ Growth of plants

79. Which tissue provides maximum mechanical strength to the plants?

     Ⓐ Parenchyma   Ⓑ Xylem   Ⓒ Phloem   Ⓓ Collenchyma

80. Xylem & phloem belong to the group of:

   Ⓐ Simple tissue   Ⓑ Latex tissue   Ⓒ Complex tissue   Ⓓ None of these

81. Which substance constitutes the thickening in collenchyma?

   Ⓐ Suberin   Ⓑ Cutin   Ⓒ Pectin   Ⓓ Lignin

82. Which one is not a plant fibre?

   Ⓐ Coir   Ⓑ Flex   Ⓒ Hemp   Ⓓ Silk

83. Aerenchyma is found in

   Ⓐ Mesophyte   Ⓑ Xerophyte   Ⓒ Hydrophyte   Ⓓ Sciophytes

■ **Assertion-Reason type Questions**

Directions: Each of the following questions (84, 85) consists of two statements, namely Assertion (A) and Reason (R).

   For selecting the correct answer, use the following code:

A. Both Assertion (A) and Reason (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, R is false.

D. A is false, R is true.

84. **Assertion:** Parenchyma, collenchyma and sclerenchyma are all types of simple tissue.

   Reason: Each one of these tissues are made up of different kinds of cells.

85. **Assertion:** Phloem is the only complex tissue in plants.

   Reason: Complex tissues are made up of more than one type of cells.

■ **Case Based Questions**

   Read the following passage and answer the question 86–90.

   Permanent tissues arise from meristematic tissue and have specific structural and functional properties. Permanent tissue can be made up of either living or dead cells. Permanent tissue are of two types. Vascular tissues are also a type of permanent tissue.

86. Which of the following is not a permanent tissue?

   Ⓐ Parenchyma   Ⓑ Xylem   Ⓒ Phloem   Ⓓ Apical meristem

87. Which of the following permanent tissue helps in transport of substances in plants?

   Ⓐ Xylem   Ⓑ Phloem   Ⓒ Parenchyma   Ⓓ Both Ⓐ and Ⓑ

88. Name the simple permanent tissue which is dead.

   Ⓐ Parenchyma   Ⓑ Collenchyma   Ⓒ Sclerenchyma   Ⓓ All

89. Which tissue has lignin deposition on the cell walls?

   Ⓐ Sclerenchyma   Ⓑ Parenchyma   Ⓒ Collenchyma   Ⓓ Phloem

90. How many elements of the phloem are dead?

   Ⓐ 1   Ⓑ 2   Ⓒ 3   Ⓓ 4

91. In plant cells, the cell wall is—

   Ⓐ Dynamic & living   Ⓑ Rigid & non living

   Ⓒ Dynamic & non living   Ⓓ Rigid & living

92. Identify the human cell which lacks a nucleus—

   Ⓐ WBC   Ⓑ RBC   Ⓒ Egg   Ⓓ Nerve cells

93. SER takes part in synthesis of :

   Ⓐ Lipids and steroids   Ⓑ Vitamins

   Ⓒ Carbohydrate   Ⓓ All of the above

94. The plastid that has no pigment is

   Ⓐ Chloroplast   Ⓑ Chromoplast   Ⓒ Leucoplast   Ⓓ All of the above

95. Grana & stroma occur in—

   Ⓐ Ribosome   Ⓑ Chloroplast   Ⓒ Mitochondria   Ⓓ Golgi body

■ **Case Based Questions**

Plant tissues can be simple or complex. Simple tissues are made up only one type of cell whereas, complex tissues are made up of more than one type of cells. These tissues serve various functions like support, flexibility, storage, transport, etc.

96. Which one of these is a permanent plant tissue?

   Ⓐ Collenchyma   Ⓑ Parenchyma   Ⓒ Sclerenchyma   Ⓓ All

97. Name the tissue that helps in transport?

   Ⓐ Collenchyma   Ⓑ Xylem   Ⓒ Apical meristem   Ⓓ Sclerenchyma

98. Cells of which of the following tissues has no protoplasm?

   Ⓐ Collenchyma   Ⓑ Xylem   Ⓒ Parenchyma   Ⓓ Sclerenchyma

99. Assertion : Cork is a protective tissue.

   Reason : Cork is a vascular tissue.

100. Which of the following is not a component of xylem?

   Ⓐ Tracheids   Ⓑ Vessels   Ⓒ Fibres   Ⓓ Companion cells