Monthly Progressive Test

Class: IX

Subject: PCMB

Academic Excellence Programme TECHNO ACE

Test Booklet No.: MPT-02 **Test Date:** 07082025

Time: 120 mins **Full Marks: 200**

Important Instructions :

1. The Test is of 120 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 MPT02 07082025.
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.

Space For Rough Works

Physics

1. Which of the following is a contact force?
   Ⓐ Gravitational force Ⓑ Magnetic force Ⓒ Frictional force Ⓓ Electrostatic force
2. If two equal force act in opposite direction, the net force is
   Ⓐ Doubled Ⓑ Zero Ⓒ Halved Ⓓ Infinite
3. Which force acts perpendicular to the surface of contact?
   Ⓐ Tension Ⓑ Spring force Ⓒ Normal force Ⓓ Magnetic force
4. A stretched string exerts which force?
   Ⓐ Friction Ⓑ Tension Ⓒ Normal Ⓓ Magnetic
5. When the resultant force on an object is zero, the forces are
   Ⓐ Unbalanced Ⓑ Balanced Ⓒ Accelerated Ⓓ Opposite
6. SI unit of momentum is
   Ⓐ Newton Ⓑ $kg \cdot m^2/s$ Ⓒ $kg \cdot m/s$ Ⓓ m/s^2
7. If mass = 2 kg and velocity = 5 m/s, momentum = ?
   Ⓐ 10 N Ⓑ $10\ m/s^2$ Ⓒ $10\ kg \cdot m/s$ Ⓓ 5 kg
8. If same force is applied to a heavy and light object which will accelerated more?
   Ⓐ Heavier object Ⓑ Lighter object Ⓒ Both same Ⓓ None
9. Newton's 3rd law states :
   Ⓐ $F = ma$ Ⓑ Action = Reaction
   Ⓒ Momentum is conserved Ⓓ Acceleration is constant
10. When a gun is fired, it recoils backward due to
    Ⓐ Newton's 1st law Ⓑ Newton's 3rd law
    Ⓒ Conservation of energy Ⓓ Gravitational force

■ Assertion-Reason type Questions

Directions: Read the following questions and choose any one of the following four responses.

Ⓐ If both Assertion and Reason are true and Reason is the correct explanation of the Assertion.
Ⓑ If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.
Ⓒ Assertion is true but the Reason is false.
Ⓓ Assertion is False and Reason is true.

11. **Assertion:** A body continues to remain at rest unless acted upon by an external force.
    Reason: This is explained by Newton's second law.
12. **Assertion:** Momentum is conserved in the absence of external force.
    Reason: Newton's 3rd law leads to momentum conservation.
13. **Assertion:** Momentum is conserved in the absence of external force.
    Reason: Newton's Third Law leads to momentum conservation.

14. **Assertion:** A gun recoils backward when fired.
Reason: Action and reaction forces act on different objects.

■ **Case Based Questions**

(A) A 5 kg object is acted upon by a forces of 20 N

15. What is its acceleration?
Ⓐ $4\ m/s^2$ Ⓑ $25\ m/s^2$ Ⓒ $100\ m/s^2$ Ⓓ $0.25\ m/s^2$

16. Which law applies?
Ⓐ 1^{st} law Ⓑ 2^{nd} law Ⓒ 3^{rd} law Ⓓ law of gravitation

17. If force becomes double the mass of the object becomes
Ⓐ Half Ⓑ Double Ⓒ Remain same Ⓓ 4 times

(B) A person jumps from a boat and the boat moves backward.

18. Which law is illustrated
Ⓐ 1^{st} law Ⓑ 2^{nd} law Ⓒ 3^{rd} law Ⓓ law of gravitation

19. Why does the boat moves back?
Ⓐ Wind pushes it Ⓑ Water resists
Ⓒ Reaction to jumping force Ⓓ No friction

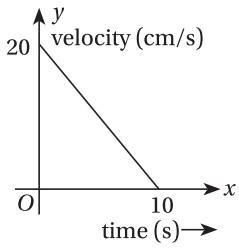
20. Action and Reaction forces can't balance each other , because
Ⓐ Action is slightly greater Ⓑ Reaction is slightly greater
Ⓒ Action and Reaction acts on different bodies Ⓓ None of the above

21. The force required to impart a car, a velocity of 30 m/s in 10 s. The mass of the car is 1500 kg.
Ⓐ 4500 N Ⓑ 4000 N Ⓒ 3500 N Ⓓ 4200 N

22. A motorcycle is moving with a velocity of 90 km/h and it takes 5 second to stop after the brakes are applied. The force exerted by the brakes on the motorcycle if its mass along with rider is 400 kg.
Ⓐ –1000 N Ⓑ –2000 N Ⓒ –3000 N Ⓓ –4000 N

23. A force of 10 N gives a mass m_1, an acceleration $10\ m/s^2$ and a mass m_2, an acceleration of $20\ m/s^2$. The acceleration is when both the masses are tied together
Ⓐ $6.67\ m/s^2$ Ⓑ $5\ m/s^2$ Ⓒ $4\ m/s^2$ Ⓓ $5.57\ m/s^2$

24. The velocity-time graph of a ball of mass 20 g moving along a straight line on a long table is shown in figure. The amount of force does the table exert on the ball to bring it to rest?



Ⓐ -10^{-4} N Ⓑ -2×10^{-4} N
Ⓒ -3×10^{-4} N Ⓓ -4×10^{-4} N

25. For how long should a force of 100 N act on a body of mass 20 kg so that it acquires a velocity of 100 m/s.
Ⓐ 10 s Ⓑ 15 s Ⓒ 20 s Ⓓ 25 s

Chemistry

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

Ⓐ It is a solid at room temperature
Ⓑ It is directly changes to vapours on heating
Ⓒ It is soluble in water
Ⓓ It melts at room temperature and changes to liquid.

27. A student by mistake mixed up iron fillings 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. 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 transpeant was that hat of

Ⓐ starch and water
Ⓑ chalk powder and water
Ⓒ sand and water
Ⓓ sodium chloride and water

29. 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
Ⓓ Disolving in water, filtration, distillation and sublimation.

30. How much heat is needed to convert 12 grams of ice at 0°c to 12 gram of water at 0°c?

Ⓐ 840 cal Ⓑ 840 joule Ⓒ 960 cal Ⓓ 800 joule

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

Ⓐ surface area Ⓑ Material of the vessel Ⓒ Temperature Ⓓ Humidity

32. Scattering of light occurs when a beam of light is passed through

Ⓐ Copper sulphate Ⓑ Water Ⓒ Brine Ⓓ Blood

33. The best method to separate the components of an ink is :

Ⓐ Chromatography Ⓑ Evaporation Ⓒ Filtration Ⓓ Sublimation

34. Which of the following mixtures can not be separated by fractional distillation?

Ⓐ Acetone and methyl alcohol
Ⓑ Chloroform and benzene
Ⓒ Water (5%) and ethyl alcohol (95%)
Ⓓ Benzene and toluene

35. Brownian movement is due to

Ⓐ Convection currents
Ⓑ Altractive forces between the particles of disposed phase and the dispersion medium
Ⓒ Impact of particles of dispersion medium on the particles of the disperse phase
Ⓓ Heat change in liquid state

36. Grease spots from garments can be separated by a method of :

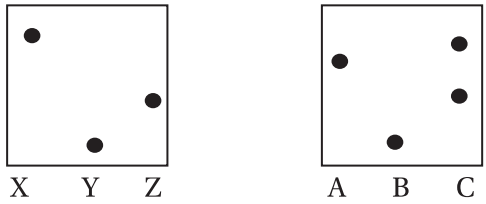
Ⓐ Chromatography
Ⓑ Solvent extraction
Ⓒ Sublimation
Ⓓ Distillation

37. A gaseous mixture of A, B and C is passed through water. The gaseous mixture B & C remains. If this gaseous mixture of B and C is subjected to sudden expansion followed by application of high pressure, B liquefies leaving behind C. Identify the set of gases.

Ⓐ SO_3, NO_2, O_2 Ⓑ Cl_2, SO_2, H_2 Ⓒ CO_2, CO, N_2 Ⓓ NH_3, N_2, H_2

38. A chromatogram of pure samples of food colours X, Y and Z is given in the following illustration

1. Three samples of same food materials A, B and C are analysed for purity, with the help of the chromatogram in illustration 2. Identify the impure sample

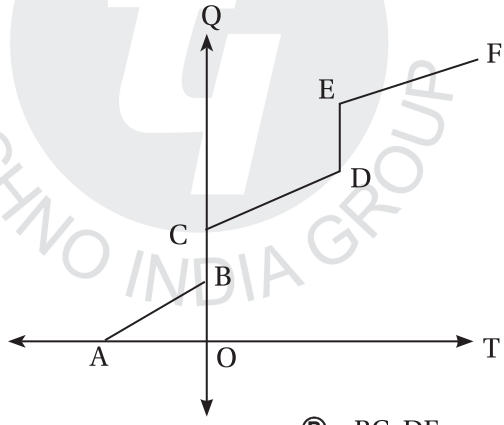


Ⓐ A Ⓑ B Ⓒ C Ⓓ A & C

39. The order of vapour pressures of four solids is P << R < Q < S. Which of the following has he maximum tendency to sublime?

Ⓐ P Ⓑ Q Ⓒ R Ⓓ S

40. During a phase transition of a substance the temperature (T) Versus heat energy (Q) graph is shown below. Identify the regions of the graph which show an increase in only PE (potential energy)



Ⓐ AB, BC Ⓑ BC, DE

Ⓒ CD, EF Ⓓ All the region in the given graph

Assertion and Reason Based Questions (Q. 41-44) :

Directions: Read the following questions and choose any one of the following four responses.

a. Assertion and Reason both are correct and Reason is the correct explanation of Assertion.
b. Assertion and Reason both are correct and Reason is not the correct explanation of Assertion.
c. Assertion is correct but Reason is wrong.
d. Assertion is wrong but Reason is correct.

41. **Assertion (A) :** True solution exhibits tyndall effect.

Reason (R) : Particles are very small in size.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

42. **Assertion (A) :** When helium gas is released from a metal tank maintained at a constant temperature, the pressure of the gas decreases.

Reason (R) : The average distance between the gas molecules decreases.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

43. **Assertion (A) :** Burning a match stick is a chemical change

Reason (R) : Chemical changes are irreversible change because when we burn it produces smoke and turns into ash.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

44. **Assertion (A) :** Sky appears blue

Reason (R) : Tyndall effect is caused by scattering of light by colloidal particles.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

Case Based Question (Q.45 to Q.47)

Pure substances are classified as elements or compounds. An element is a substance that contains only one type of atom. 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 physical method. But can be broken down into separate elements by chemical methods. Mixtures that are different from pure substance, they are called impure substance. They have different characteristics from elements and compounds. When mixture forms there is a only a little or no energy change. Mixtures are further classified into homogeneous and hetereogeneous mixture.

45. The organic material wood is :

Ⓐ an element Ⓑ a compound Ⓒ a mixture Ⓓ a solution

46. The substance formed by mixture crushing and heating iron fillings and sulphur powder is :

Ⓐ an element Ⓑ a compound Ⓒ a mixture Ⓓ a solution

47. Blood is considered as :

Ⓐ an element Ⓑ a compound Ⓒ a mixture Ⓓ a solution

Case Based Question (Q.48 to Q.50)

Matter undergoes a change. The changes are of two types : physical and Chemical Change. A physical change is a change that involves only a change in the physical state of matter.
Its chemical properties remain the same. Usually increasing the temperature or applying pressure or both brings about a physical change. On reversing the condition, i.e. reducing the temperaure of reducing the pressure or both, the original state of matter is restored. In other words, physical changes are reversible. A chemical change is a change that involves a change in the chemical composition of matter. A new substance is formed. In a chemical change the chemical and physical properties of the substance formed will be different from the original substance.

48. Rain formation is a

Ⓐ Chemical change Ⓑ Physical change

Ⓒ no change takes place Ⓓ gravitational phenomenon

49. When zinc carbonate is heated and cooled, the change that is observed is

Ⓐ Physical Ⓑ nuclear change

Ⓒ first chemical and then physical Ⓓ first physical and then chemical

50. In a chemical change the properties that change are

Ⓐ chemical only
Ⓑ Physical only
Ⓒ both chemical and physical
Ⓓ neither chemical or physical

Mathematics

51. For what value of k, the given equations have unique solution?

$kx + 2y = 5; 3x + y = 1$

Ⓐ $k \neq 6$ Ⓑ $k = 6$ Ⓒ $k = -6$ Ⓓ $k = 3$

52. A man has certain number of chickens and goats. Their head count is 30. If the total number of their legs is 84, then what is the ratio of number of chickens to number of goats?

Ⓐ 1 : 2 Ⓑ 2 : 3 Ⓒ 3 : 2 Ⓓ 3 : 4

53. Consider the line segment obtain from the line represented by $y = -x$ where $x \in [-2, 2]$. Find the length of the line segment.

Ⓐ $2\sqrt{2}$ units Ⓑ $3\sqrt{2}$ units Ⓒ $4\sqrt{2}$ units Ⓓ $5\sqrt{2}$ units

54. If $x^3+3xy^2 = 14$ and $y^3 + 3x^2y = 13$, then (x, y) lies in

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

55. The sum of all angles of a triangle in a spherical geometry is

Ⓐ less than 180 ° Ⓑ equal to 180° Ⓒ more than 180° Ⓓ none of these

Case Study Based Question-I (Q.56 to Q.58)

Christmas is celebrated on 25th December every year to remember the birth of Jesus Christ, who Christians believe is the son of God. Santa Claus, also known as the Father of Christmas, is a legendary character originating in western Christian culture and he brings gifts for everyone on Christmas. Let Santa Claus brings 3 chocolates for each child and 2 chocolates for each adult present at the Christmas party at Michael's home along with a Christmas cake. He distributes total 90 chocolates among all.

On basis of this information given in passage answer following questions

56. Represent the above situation in a linear equation in two variables by taking the number of children as x and the number of adults as y.

Ⓐ $3x + 2y = 90$ Ⓑ $2x + 3y = 90$ Ⓒ $x+2y = 90$ Ⓓ $3x+y = 90$

57. Find the value of k, if x = 5, y = 1 is a solution of the equation 5x + 7y = k.

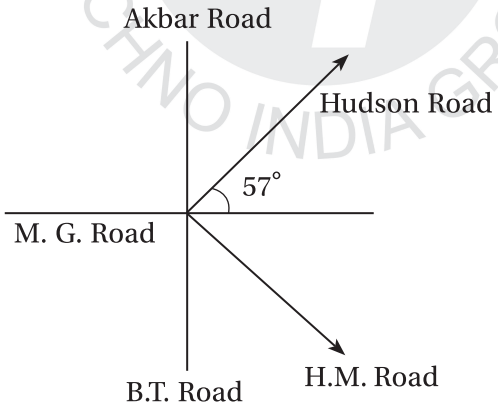
Ⓐ 30 Ⓑ 31 Ⓒ 32 Ⓓ 40

58. If 2x + 3y = 90 is expressed in the standard form ax+ by + c =0, then the value of (a + b + c) is equal to

Ⓐ 85 Ⓑ – 85 Ⓒ 80 Ⓓ – 80

Case Study Based Question-II (Q.59 to Q.61)

Ritesh and Sheetal are cousins and both went to visit Mughal Garden. Before going, they searched the location of their destination on a map. During searching, they found on map that Akbar Road and M.G. road form a right angle at their point of intersection and Hudson Lane forms 57° angle with M.G. road. The angle formed between M.G Road [in east direction] with H. M. Road is 37°.



On basis of this information given in passage answer following questions.

59. What is the measure of acute angle between Akbar Road and Hudson Lane?

Ⓐ 32° Ⓑ 35° Ⓒ 33° Ⓓ 123°

60. If Ritesh is standing on M.G Road in the west direction and Sheetal is on H.M road, what is the shortest angle they can cover in order to meet?

Ⓐ 143° Ⓑ 144° Ⓒ 145° Ⓓ 217°

61. Find the measure of reflex angle formed between M.G Road [in east direction] with Hudson Lane.

Ⓐ 304° Ⓑ 305° Ⓒ 57° Ⓓ 303°

ASSERTION-REASON BASED QUESTIONS (Q.62- Q.65):

Directions: In each of the questions given below, there are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided 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.

62. **Assertion (A) :** There are infinite number of lines which passes through (3, 2)

Reason (R) : A linear equation in two variables has infinitely many solutions.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

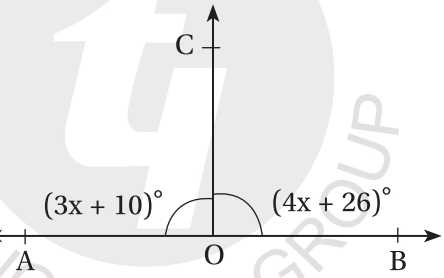
63. **Assertion (A) :** $x + y = 3$ is the equation of a line passing through the origin.

Reason (R) : $y = 2x$ is the equation of a line passing through the origin.

Ⓐ a Ⓑ b Ⓒ c Ⓓ d

64. **Assertion (A) :** In the given figure, AOB is a straight line. If $\angle AOC = (3x + 10)°$ and $\angle BOC = (4x - 26)°$, then $\angle BOC = 86°$

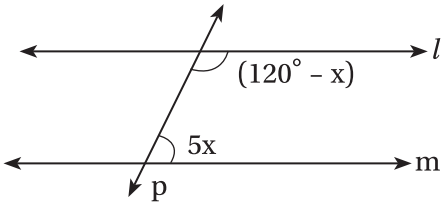
Reason (R) : The sum of angles that are formed on a straight line is equal to 180°.



Ⓐ a Ⓑ b Ⓒ c Ⓓ d

65. **Assertion (A) :** The value of x from the adjoining figure, if $\ell \parallel m$ is 15°.

Reason (R) : If two parallel lines are intersected by a transversal, then each pair of corresponding angles so formed is equal.



Ⓐ a Ⓑ b Ⓒ c Ⓓ d

66. The value of $\sqrt{6+2\sqrt{3}+2\sqrt{2}+2\sqrt{6}} - \frac{1}{\sqrt{5-2\sqrt{6}}}$ is

Ⓐ 2 Ⓑ – 1 Ⓒ $\sqrt{3}+\sqrt{2}$ Ⓓ 1

67. If $(x + 2)$ and $(2x - 1)$ are factors of $(2x^3 + ax^2 + bx + 10)$, then value of $(a^2 + b^2)$ is

Ⓐ 338 Ⓑ 218 Ⓒ 210 Ⓓ 330

68. Let $f(x)$ be a quadratic polynomial with $f(2) = 10$ and $f(-2) = -2$. Then the coefficient of x in $f(x)$ is

Ⓐ 1 Ⓑ 2 Ⓒ 3 Ⓓ 4

69. Let x, y, z be non-zero real numbers such that $\frac{x}{y}+\frac{y}{z}+\frac{z}{x}=7$ and $\frac{y}{x}+\frac{z}{y}+\frac{x}{z}=9$, then $\frac{x^3}{y^3}+\frac{y^3}{z^3}+\frac{z^3}{x^3}-3$ is equal to

Ⓐ 152 Ⓑ 153 Ⓒ 154 Ⓓ 155

70. What will be the area of the rhombus formed by $ax \pm by \pm c = 0$?

Ⓐ $\frac{4c^2}{ab}$ sq. units Ⓑ $\frac{3c^2}{ab}$ sq. units Ⓒ $\frac{c^2}{ab}$ sq. units Ⓓ $\frac{2c^2}{ab}$ sq. units

71. Which of the following is a false statement?

Ⓐ An infinite number of lines can pass through a given point.

Ⓑ A unique line can be drawn to pass through two given points.

Ⓒ Ray $\underset{AB}{\rightarrow}$ = ray $\underset{BA}{\rightarrow}$

Ⓓ A ray has one end point.

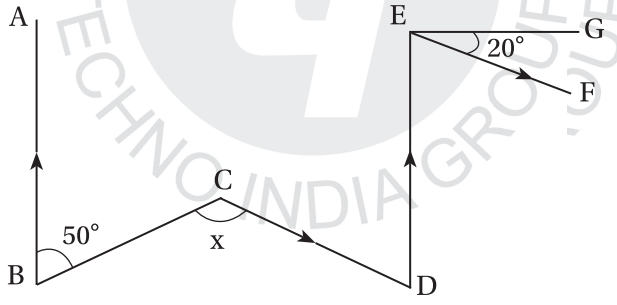
72. What is the name of the quadrilateral that is formed by joining the points (1,1), (2,4), (8,4) and (10,1)?

Ⓐ Square Ⓑ Rhombus Ⓒ Rectangle Ⓓ Trapezium

73. If (a + b, a – b) is the solution of the equations 3x + 2y = 20 and 4x – 5y = 42, then find the value of b.

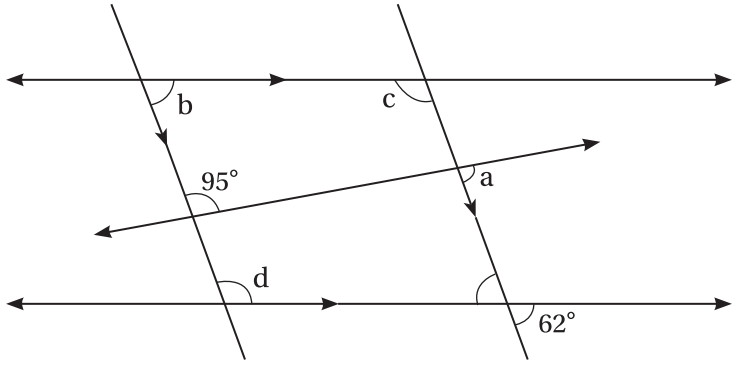
Ⓐ 8 Ⓑ 5 Ⓒ 3 Ⓓ 4

74. In the given figure $EG \perp ED$, $AB \| ED$ & $EF \| CD$, then the value of x is



Ⓐ 20° Ⓑ 50° Ⓒ 70° Ⓓ 120°

75. Calculate the size of each lettered angle.



Ⓐ a = 85°, b = 108°, c = 62°, d = 62°

Ⓑ a = 62°, b = 85°, c = 118°, d = 85°

Ⓒ a = 85°, b = 62°, c = 118°, d = 118°

Ⓓ a = 85°, b = 85°, c = 62°, d = 118°

76. Which of the following consists of living cells without vacuoles?

Ⓐ Sclerenchyma Ⓑ Parenchyma Ⓒ Collenchyma Ⓓ None of the above

77. Which of the following has no protoplasm?

Ⓐ Apical meristem Ⓑ Chlorenchyma Ⓒ Sclerenchyma Ⓓ All of the above

78. Aerenchyma is a type of :

Ⓐ Parenchyma Ⓑ Collenchyma Ⓒ Sclerenchyma Ⓓ None of the above

79. Which tissue is present in aquatic plants?

Ⓐ Aerenchyma Ⓑ Chlorenchyma Ⓒ Sclerenchyma Ⓓ None of the above

80. Choose the incorrect statement:

Ⓐ Meristematic cells have a high power of division Ⓑ Collenchyma is found in petioles and leaf stalks

Ⓒ Parenchyma cells have thin cell walls Ⓓ Jute fibres are obtained from the lateral meristems

81. Where is chlorenchyma found?

Ⓐ Leaves Ⓑ Stem Ⓒ Root Ⓓ All of the above

82. The cell wall of meristematic tissue is:

Ⓐ Thin and made up of cellulose Ⓑ Thin and made up of pectin

Ⓒ Thick and made up of guard cells Ⓓ Thick and made up of suberin

83. Large intercellular space is found between cells of

Ⓐ Collenchyma Ⓑ Sclerenchyma Ⓒ Apical meristem Ⓓ None of the above

84. Which is the most abundant plant tissue?

Ⓐ Parenchyma Ⓑ Collenchyma Ⓒ Aerenchyma Ⓓ Sclerenchyma

85. Which of the following permanent tissues can transform into other tissues?

Ⓐ Collenchyma Ⓑ Sclerenchyma Ⓒ Both Ⓐ and Ⓑ Ⓓ Neither Ⓐ nor Ⓑ

86. The study of tissues is called:

Ⓐ Cytology Ⓑ Histology Ⓒ Neurology Ⓓ None of the above

87. The cells observed by Robert Hooke under his microscope, which he termed 'cellula' were cells of which of the following plant tissues?

Ⓐ Meristematic tissue Ⓑ Simple permanent tissue

Ⓒ Complex permanent tissue Ⓓ Protective tissue

88. All tissues do not comprise of similar cells. In which of the following, would you find tissues made up of different cells.

Ⓐ Intercalary meristem Ⓑ Parenchyma

Ⓒ Collenchyma Ⓓ None of the above

89. Meristematic tissue is absent at the tips of

Ⓐ roots Ⓑ stem Ⓒ leaves Ⓓ branches

90. Permanent tissue in plants:

Ⓐ divide actively throughout life

Ⓑ are always external

Ⓒ are specialized in one function and lose the ability to divide

Ⓓ are only found in roots

The questions 91 to 94 have two statements – Assertion (A) and Reason (R). Of the two statements, mark the correct answer from the options given below:

A. Both A and R are true and R is the correct explanation of A.

B. Both A and R are true 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.

91. **Assertion :** Cells of sclerenchyma do not have cell walls.

Reason : Sclerenchyma is a dead tissue.

Ⓐ A Ⓑ B Ⓒ C Ⓓ D

92. **Assertion :** Collenchyma is made of living cells.

Reason : Leaves have collenchyma which helps in photosynthesis.

Ⓐ A Ⓑ B Ⓒ C Ⓓ D

93. **Assertion :** Xylem and phloem are not simple tissues.

Reason : Permanent tissues are made up of undifferentiated cells.

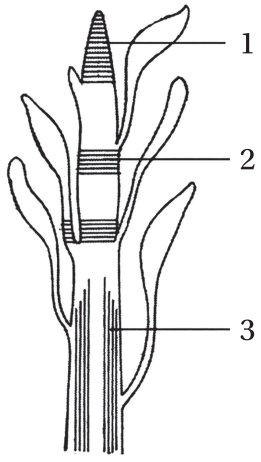
Ⓐ A Ⓑ B Ⓒ C Ⓓ D

94. **Assertion :** Parenchyma helps in food storage.

Reason : Food is stored in the intercellular spaces of parenchyma.

Ⓐ A Ⓑ B Ⓒ C Ⓓ D

Study the given diagram and answer the following questions (95-97):



95. The correct order of labelling is :

Ⓐ 1- Apical meristem; 2 – Lateral meristem; 3- Intercalary meristem

Ⓑ 1- Apical meristem; 2- Intercalary meristem ; 3- Lateral meristem

Ⓒ 1- Lateral meristem; 2- Intercalary meristem ; 3- Apical meristem

Ⓓ 1- Intercalary meristem; 2- Lateral meristem ; 3- Apical meristem

96. Which tissue helps in the elongation of internode?

Ⓐ 1 Ⓑ 2 Ⓒ 2 & 3 Ⓓ 3

97. Which is not a correct description of the above tissue?

Ⓐ Consists of young and undifferentiated cells

Ⓑ Helps in transport of substances

Ⓒ Helps in vertical growth of the plant

Ⓓ Cells are almost without any intercellular space

Read the given passage and answer the following questions (98-100):

Plant tissues can be broadly classified as meristematic and permanent. Each can be further categorised. Permanent tissues could be simple or complex. They may be living or dead.

98. Idioblasts are:

Ⓐ Parenchyma cells which store plant wastes like tannins

Ⓑ Parenchyma cells which store food

Ⓒ A type of collenchyma

Ⓓ A type of sclerenchyma

99. Which tissue is absent in roots?

Ⓐ Parenchyma Ⓑ Collenchyma Ⓒ Sclerenchyma Ⓓ None of the above

100. Grit or stone cells are actually:

Ⓐ Parenchyma Ⓑ Collenchyma Ⓒ Sclerenchyma Ⓓ Prosenchyma