Monthly Progressive Test

Class: X (G)

Subject: PCMB

Test Booklet No.: MPT04(G)

Test Date: | 2 | 4 | 0 | 7 | 2 | 0 | 2 | 4 |
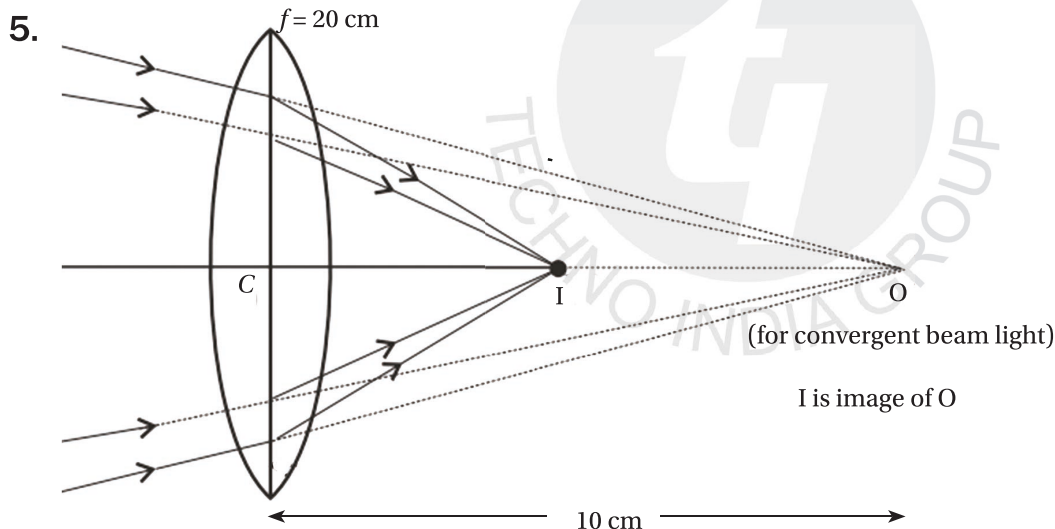
Time: 180 mins

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 MPT04(G)24072024.

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. The image of a distant window is formed at a distance of 20 cm from a convex lens, then the focal length of this convex lens will be

   Ⓐ 15 cm   Ⓑ 30 cm   Ⓒ 25 cm   Ⓓ 20 cm

2. A convex lens has a focal length of 30 cm. Where should an object be placed infront of this convex lens so as to obtain a real, inverted, same size (of object) image

   Ⓐ 40 cm   Ⓑ 60 cm   Ⓒ 30 cm   Ⓓ 50 cm

3. An object is placed infront of convex lens of focal length 15 cm. In order to obtain a virtual magnified image, the object distance $u =$

   Ⓐ 10 cm   Ⓑ 15 cm   Ⓒ 20 cm   Ⓓ 25 cm

4. A lens of focal length 12 cm forms an erect image three times the size of the object. The distance between object and image is

   Ⓐ 8 cm   Ⓑ 24 cm   Ⓒ 20 cm   Ⓓ 16 cm

5.

   $f = 20$ cm

   C   I   O

   (for convergent beam light)

   I is image of O

   10 cm

   Then CI =

   Ⓐ 5 cm   Ⓑ 6.67 cm   Ⓒ 8 cm   Ⓓ 5.5 cm

6. For a convex lens of focal length 20 cm, if the image is formed at 20 cm, then u =

   Ⓐ infinity   Ⓑ 10 cm   Ⓒ 20 cm   Ⓓ 40 cm

7. If $V_A = 10$ volt and $V_B = 6$ volt, then $V_A - V_B =$

   Ⓐ 2 volt   Ⓑ 4 volt   Ⓒ 3 volt   Ⓓ 1 volt

8. The material of lens is

   Ⓐ Transparent   Ⓑ Non transparent   Ⓒ Opaque   Ⓓ None of these

9. Lens is bounded by

Ⓐ 3 surfaces   Ⓑ 2 surfaces

Ⓒ Difficult to say   Ⓓ None of these

10. Double convex lens has

Ⓐ Two convex surfaces   Ⓑ Two concave surfaces

Ⓒ Two plane surfaces   Ⓓ None of these

11. A plano-convex lens has

Ⓐ Two concave surfaces   Ⓑ One concave-one convex

Ⓒ One plane-one convex   Ⓓ Two plane surfaces

12. Convex lens is also known as

Ⓐ Converging lens Ⓑ Diverging lens   Ⓒ Scattering lens   Ⓓ Astigmatic lens

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) Assertion (A) is false and reason (R) is false.

13. **Assertion:** A concave lens is also called a diverging lens.

    Reason: A parallel beam of light incident on a concave lens diverges on the other side.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

14. **Assertion:** The power of a convex lens is positive.

    Reason: The power of a concave lens is negative.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

Case based Questions (Q. 15)

Take a convex lens (reading glasses use convex lenses). We can also use a magnifying glass. Face the lens towards sun. Take a small block of wood and place it close to the lens such that the lens is between the sun and the block. At one stage, a very small, bright image will be formed on the block. The distance between the lens and the block in this position is the focal length of the convex lens.

This method doesn't work for concave lens. A concave lens forms a virtual image which cannot be captured on a screen such as our wooden block.

Other methods are used to find its focal length.

15. The nature of image formed by concave lens

    Ⓐ Real   Ⓑ Virtual   Ⓒ May be Real   Ⓓ None of these

16. The incident ray and the reflected ray from a mirror (plane) are mutually perpendicular to each other. The angle of incidence be $x°$; then $x° - 30° =$

    Ⓐ 20°   Ⓑ 15°   Ⓒ 35°   Ⓓ 25°

17. A man standing infront of a plane mirror finds his image at a distance 4 m from himself. Then the distance of the man from plane mirror is

    Ⓐ 1 m   Ⓑ 2 m   Ⓒ 2.5 m   Ⓓ 1.5 m

18. If R is the radius of curvature of a spherical mirror and f is its focal length, then:

    Ⓐ $R = f$ Ⓑ $R = \dfrac{f}{2}$ Ⓒ $R = 3f$ Ⓓ $R = 2f$

19. A ray of light passes from glass into air. The angle of refraction will be

    Ⓐ Equal to the angle of incidence   Ⓑ Greater than the angle of incidence

    Ⓒ Smaller than the angle of incidence   Ⓓ 45°

20. When a ray of light traveling in water enters into glass obliquely:

    Ⓐ Is refracted towards the normal   Ⓑ Is refracted away from the normal

    Ⓒ Does not get refracted   Ⓓ Is reflected along the same path

21. If potential difference across a resistor 2 ohm is 10 volt, then current is

    Ⓐ 5A   Ⓑ 3A   Ⓒ 2A   Ⓓ 6A

22. The unit of resistance is

    Ⓐ Mho   Ⓑ Siemens   Ⓒ Ohm   Ⓓ Ampere

23. The unit of power of lens is

    Ⓐ m   Ⓑ Dioptre   Ⓒ mm   Ⓓ cm

24. Power of concave lens is

    Ⓐ Negative   Ⓑ Positive   Ⓒ May be negative   Ⓓ None of these

25. For power of combination of two lenses

    Ⓐ $P = P_1 - P_2$ Ⓑ $P = P_1 + P_2$ Ⓒ $P = \dfrac{P_1^2}{P_2}$ Ⓓ None of these

Chemistry

26. A solution turns red litmus blue, its pH is likely to be-

    Ⓐ 1   Ⓑ 4   Ⓒ 5   Ⓓ 10

27. Which one of the following types of medicines is used for treatment indigestion-

    Ⓐ Antibiotic   Ⓑ Analgesic   Ⓒ Antacid   Ⓓ Antiseptic

28. Which of the following is not a strong acid?

    Ⓐ H_2SO_4 Ⓑ CH_3COOH Ⓒ HNO_3 Ⓓ HCl

29. $NaHCO_3$ represent the formula of which one of the following ?

    Ⓐ Sodium carbonate   Ⓑ Baking soda

    Ⓒ Sodium acetate   Ⓓ Washing soda

30. When water is added in a vessel containing lumps of quick lime, it is observed that

    Ⓐ The vessel becomes hot

    Ⓑ A hissing sound is produced

    Ⓒ Lump of quick lime breaks and dissolves partially in water

    Ⓓ All the above

31. A student while heating some ferrous sulphate crystals in a dry boiling tube will observe:

    Ⓐ Water droplets near the mouth of boiling tube

    Ⓑ Colour change of the crystals

    Ⓒ Smell of burning sulphur

    Ⓓ All of the above

32. Reaction of iron nails with copper sulphate solution is an example of

    Ⓐ Combination reaction   Ⓑ Decomposition reaction

    Ⓒ Displacement reaction   Ⓓ Double displacement reaction

33. When Fe reacts with water the correct statement is

    Ⓐ Iron is oxidised by steam

    Ⓑ Iron is reduced by steam

    Ⓒ FeO is formed

    Ⓓ liquid water is used for this reaction at room temperature

34. CuO reacts with H_2 gas the correct statement is

   Ⓐ CuO is reduced to Cu and H_2 is oxidise to H_2O_2

   Ⓑ CuO is reduced to Cu and H_2 is oxidise to H_2O

   Ⓒ CuO is oxidised to Cu and H_2 is reduced to H_2O

   Ⓓ None of CuO or H_2 suffer oxidation or reduction

35. The correct products when lead nitrate is strongly heated ?

   Ⓐ $PbNO_2 + NO_2 + O_2$ Ⓑ $PbO_2 + N_2 + O_2$

   Ⓒ $Pb + NO_2 + O_2$ Ⓓ $PbO + NO_2 + O_2$

36. What happens when silver chloride is exposed to sunlight ?

   Ⓐ Black coloured silver is produced along with Cl_2 gas

   Ⓑ Black coloured silver oxide is produced along with Cl_2 gas

   Ⓒ Grey coloured silver oxide is produced along with Cl_2 gas

   Ⓓ Grey coloured silver is produced along with Cl_2 gas

37. Which salt is formed by the reaction between strong acid and weak base ?

   Ⓐ CH_3COONa Ⓑ K_2SO_4 Ⓒ $(NH_4)_2SO_4$ Ⓓ CH_3COONH_4

38. Curd is not placed inside copper containers because

   Ⓐ Curd becomes solid   Ⓑ Water present in curd starts vapourizing

   Ⓒ Curd startes to react with oxygen   Ⓓ Curd starts to react with the metal

39. Which is the correct product when metal oxide reacts with acids ?

   Ⓐ Salt + water   Ⓑ metal + O_2 gas + water

   Ⓒ salt + H_2 gas + H_2O Ⓓ metal + O_2 gas + water

40. Which of the following cannot change the blue colour of litmus into red ?

   Ⓐ Tomato juice   Ⓑ $NaHCO_3$ solution

   Ⓒ Tamarind juice   Ⓓ Oxalic acid solution

41. Chemical formula of Glauber salt is

   Ⓐ $Na_2CO_3.10H_2O$ Ⓑ $Na_2SO_4.5H_2O$ Ⓒ $Na_2SO_4.10H_2O$ Ⓓ $MgSO_4.7H_2O$

42. $Pb(OH)Cl$ is a / an

   Ⓐ Acidic salt   Ⓑ Basic salt   Ⓒ Normal salt   Ⓓ Double salt

43. Which of the following is the main constituent of natural gas that burns with oxygen gas readily ?

   Ⓐ SO_2 Ⓑ CH_4 Ⓒ NO_2 Ⓓ Cl_2

44. Respiration is considered as an exothermic reaction because

Ⓐ Mass of product decreases   Ⓑ Mass of product increases

Ⓒ Energy is absorbed   Ⓓ Energy is released

45. Rancidity can be prevented by adding

Ⓐ Anti-oxidants to foods   Ⓑ Acids to foods

Ⓒ Water to foods   Ⓓ Oxygen gas to food

Case Based Questions (Q. 46-48):

Acids are the compounds which can change the blue colour of litmus into red and p^H of the solution is always less than 7. Lower p^H value of the solution indicates that the acid is strong. Phenolphthalein indicator remains colourless in acidic solution. Acids produce carbon dioxide gas after reacting with carbonate and bicarbonate salts.

46. Which gas is produced when nitric acid reacts with sodium bicarbonate ?

Ⓐ Carbon monoxide   Ⓑ Carbon dioxide

Ⓒ Nitric oxide   Ⓓ Nitrogen dioxide

47. Which data indicates the weakest acid ?

Ⓐ $p^H = 5.4$ Ⓑ $p^H = 4.23$ Ⓒ $p^H = 3.89$ Ⓓ $p^H = 2.67$

48. When a small amount of phenolphthalein is added to dilute sulphuric solution then the colour of the solution becomes

Ⓐ Colourless to blue   Ⓑ Colourless to pink

Ⓒ Solution remains colourless   Ⓓ Colourless to green

Assertion-Reason Type Questions (Q. 49):

49. Assertion : Copper powder receives a black coating when it is heated strongly in open air

Reason : Copper (II) oxide is formed when copper powder is heated in open air

OPTION A : Both assertion and reason is correct and reason is the correct explanation of assertion

OPTION B : Both assertion and reason is correct and reason is not the correct explanation of assertion

OPTION C : Assertion is correct statement but reason is wrong statement

OPTION D : Assertion is wrong statement but reason is correct statement

50. Electrolysis is an example of

Ⓐ Displacement reaction   Ⓑ Double displacement reaction

Ⓒ Decomposition reaction   Ⓓ Physical change

Mathematics

51. Which term of A.P. is 21, 42, 63, 84, ... is 210?

Ⓐ 9th Ⓑ 10th Ⓒ 11th Ⓓ 12th

52. What is the nth term in the arithmetic series given below?

3 + 7 + 11 + 15 + 19 + ...

Ⓐ $4n$ Ⓑ $3 + 4n$ Ⓒ $2n + 1$ Ⓓ $4n - 1$

53. Triangle ABC is such that AB = 3 cm, BC = 2 cm and CA = 2.5 cm. Triangle DEF is similar to ΔABC. If EF = 4 cm, then the perimeter of ΔDEF is

Ⓐ 7.5 cm   Ⓑ 15 cm   Ⓒ 22.5 cm   Ⓓ 30 cm

54. In ΔABC and ΔDEF, ∠A = 50°, ∠B = 70°, ∠C = 60°, ∠D = 60°, ∠E = 70°, ∠F = 50°, then ΔABC is similar to

Ⓐ ΔDEF   Ⓑ ΔEDF   Ⓒ ΔDFE   Ⓓ ΔFED

55. The distance between points A(1, 3) and B(x, 7) is 5. The value of $x > 0$ is

Ⓐ 4   Ⓑ 2   Ⓒ 1   Ⓓ 3

56. Mid-point of the line-segment joining the points (-5, 4) and (9, - 8) is

Ⓐ (–7, 6)   Ⓑ (2, – 2)   Ⓒ (7, – 6)   Ⓓ (–2, 2)

57. The distance between the points (a, b) and ($- a, - b$) is

Ⓐ $a^2 + b^2$ Ⓑ $\sqrt{a^2 + b^2}$ Ⓒ 0   Ⓓ $2\sqrt{a^2 + b^2}$

58. The distance of the origin from the point P (3, – 2) is

Ⓐ $\sqrt{2}$ units   Ⓑ $\sqrt{15}$ units   Ⓒ $\sqrt{13}$ units   Ⓓ $\sqrt{11}$ units

59. Which of the following are not similar figures?

Ⓐ Circles   Ⓑ Squares

Ⓒ Equilateral triangles   Ⓓ Isosceles triangles

60. 8th term of the series $2\sqrt{2}, \sqrt{2}, 0$........ will be

Ⓐ $-5\sqrt{2}$ Ⓑ $5\sqrt{2}$ Ⓒ $10\sqrt{2}$ Ⓓ $-10\sqrt{2}$

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) :** If the nth term of an A.P. is 7- 4n, then its common differences is-4.

   Reason (R) : Common differences of an A.P. is given by $d = a_{n+1} - a_n$

   Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

62. **(A) :** D and E are points on the sides AB and AC respectively of a ΔABC such that DE‖BC then the value of x is 4, when AD = x cm, DB = (x –2) cm, AE = (x + 2) cm and EC = (x –1) cm

   (R) : If a line is parallel to one side of a triangle, then it divides the other two sides in the same ratio.

   Ⓐ a   Ⓑ b   Ⓒ c   Ⓓ d

Case study based Questions (63 – 65):

Read the paragraph given below and answer the following questions:
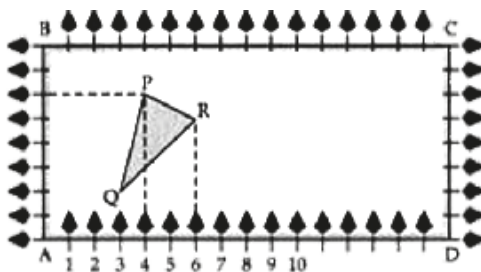

The class X students of Bidhannagar Govt. school have been allotted a rectangular plot of land for their gardening activity. Saplings of Gulmohar are planted on the boundary at a distance of 1 m from each other. There is triangular grassy lawn in the plot as shown in the figure. The students are to sow seeds of flowering plants on the remaining area of the plot.

63. Taking A as origin, find the coordinates of P

   Ⓐ (4, 6)   Ⓑ (6, 4)   Ⓒ (0, 6)   Ⓓ (4, 0)

64. What will be the coordinates of R, if C is the origin?

Ⓐ (8, 6)   Ⓑ (3, 10)   Ⓒ (10, 3)   Ⓓ (0, 6)

65. What will be the coordinates of Q, if C is the origin?

Ⓐ (6, 13)   Ⓑ (–6, 13)   Ⓒ (–3, 6)   Ⓓ (13, 6)

66. If $a = 2^3 \times 3$, $b = 2 \times 3 \times 5$, $c = 3^n \times 5$ and LCM $(a, b, c) = 2^3 \times 3^2 \times 5$, then $n =$

Ⓐ 4   Ⓑ 3   Ⓒ 1   Ⓓ 2

67. If one root of the polynomial $f(x) = 5x^2 + 13x + k$ is reciprocal of the other, then the value of k is

Ⓐ 0   Ⓑ 5   Ⓒ $\dfrac{1}{6}$ Ⓓ 6

68. For what value of k, do the equations $3x - y + 8 = 0$ and $6x - ky + 16 = 0$ represent coincident lines?

Ⓐ $\dfrac{1}{2}$ Ⓑ $-\dfrac{1}{2}$ Ⓒ 2   Ⓓ –2

69. The sum of the digits of a two digit number is 9. If 27 is added to it, the digits of the number get reversed. The number is

Ⓐ 25   Ⓑ 72   Ⓒ 63   Ⓓ 36

70. What are the roots of the equation whose graphed below?
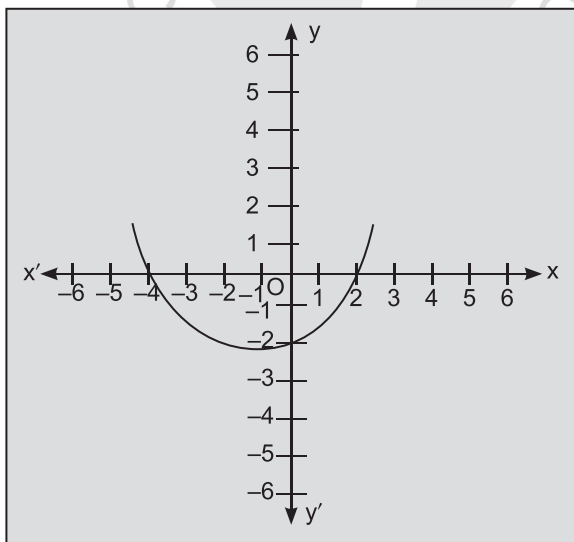
Ⓐ 1 and 0   Ⓑ 0 and 2   Ⓒ –4 and 2   Ⓓ 0 and 0

Case study based Questions (71 – 73):

A construction company is working on a new sky scraper project. The buildings blue print includes several crucial points that need precise placement.

Coordinates of points: Point A (2, 3); Point B (8, 15).

On the basis of the above information answer the following questions.

71. The architects need to place a support column at M which is exactly half way between the points A and B. Find the coordinates of this point M.

Ⓐ (5, 10) Ⓑ (5, 9) Ⓒ (10, 5) Ⓓ (9, 5)

72. The electrical engineers need to run a conduit at C that will divide the path joining A and B internally in the ratio 2 : 3. Calculate the coordinates of C.

Ⓐ $\left(\dfrac{22}{5}, \dfrac{39}{5}\right)$ Ⓑ $\left(\dfrac{39}{5}, \dfrac{22}{5}\right)$ Ⓒ (8, 4) Ⓓ (4, 8)

73. Find the distance between A and M.

Ⓐ $\sqrt{65}$ Ⓑ $\sqrt{35}$ Ⓒ $\sqrt{55}$ Ⓓ $\sqrt{45}$

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. **(A) :** Distance between $P(-1, 0)$ and $Q(1, 0)$ is 2 units

   (R) : Distance between $A(x_1, y_1)$, and $B(x_2, y_2)$ is

   $$AB = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

   Ⓐ a Ⓑ b Ⓒ c Ⓓ d

75. **(A) :** D and E are points on the sides AB and AC respectively of a ΔABC such that AD = 5.7cm, DB = 9.5cm, AE = 4.8cm and EC = 8cm then DE is not parallel to BC.

   (R) : If a line divides any two sides of a triangle in the same ratio, then it is parallel to the third side.

   Ⓐ a Ⓑ b Ⓒ c Ⓓ d

Biology

76. Which one is uricotelic ?

Ⓐ Frog and toad   Ⓑ Lizard and bird

Ⓒ Cattle, monkey and man   Ⓓ Mollusc

77. The hormone that promotes reabsorption of water from glomerular filtrate is :-

Ⓐ Oxytocin   Ⓑ Vasopressin   Ⓒ Relaxin   Ⓓ Calcitonin

78. Which one of the endocrine glands is known as 'master gland' ?

Ⓐ Pituitary   Ⓑ Adrenal   Ⓒ Thyroid   Ⓓ Parathyroid

79. Cerebrum is a part of—

Ⓐ Forebrain   Ⓑ Hindbrain   Ⓒ Midbrain   Ⓓ Neurons

80. Which excretory material is least toxic :-

Ⓐ Ammonia   Ⓑ Urea

Ⓒ Uric acid   Ⓓ All are equally toxic

81. A condition of failure of kidneys to from urine is called _____

Ⓐ Deamination   Ⓑ Entropy   Ⓒ Anuria   Ⓓ None of these

82. Corpus callosum connects—

Ⓐ Two cerebral hemispheres   Ⓑ Two optic lobes

Ⓒ Two olfactory lobes   Ⓓ Optic chiasma

83. Which of the following is not natural occurring plant hormone—

Ⓐ 2, 4-D   Ⓑ Cytokinin   Ⓒ Gibberellin   Ⓓ IAA

Assertion Reason Based Questions (84 – 85):

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.

84. **(A) :** Artificial kidney is a device to remove nitrogenous waste products from blood through dialysis.

    (R) : Reabsorption does not occur in artificial kidney.

85. **(A) :** Thyroxine is secreted by thyroid gland.

    (R) : Its deficiency leads to diabetes.

Case Based Questions (86 – 90):

Read the passage given below and answer the following questions:

Tropic movements are plant movements when the stimulus has a particular direction and movement of the plant occurs in the direction of the stimulus. There are various types of tropic movements based on environmental triggers like light, gravity, water and certain chemicals.

86. Stem is

    Ⓐ Positively geotropic and positively hydrotropic

    Ⓑ Negatively geotropic and positively phototropic

    Ⓒ Negatively phototropic and positively geotropic

    Ⓓ Negatively phototropic and negatively chemotropic

87. Drooping of leaflets of *Mimosa pudica* upon touching, is an example of _____

    Ⓐ Phototropism   Ⓑ Hydrotropism   Ⓒ Geotropism   Ⓓ None

88. Movement of pollen tube towards ovule is

    Ⓐ Phototropism   Ⓑ Hydrotropism   Ⓒ Chemotropism   Ⓓ None

89. Coiling of tendrils towards the support is called

    Ⓐ Negative phototropism   Ⓑ Positive hydrotropism

    Ⓒ Thigmotropism   Ⓓ Geotropism

90. Unequal distribution on the two sides of a stem of which hormone causes bending of a tendril around a support?

    Ⓐ Auxin   Ⓑ Gibberellin   Ⓒ Cytokinin   Ⓓ ABA

91. Gastric juice is—

    Ⓐ Acidic   Ⓑ Alkaline   Ⓒ Neutral   Ⓓ Slightly alkaline

92. Saliva converts—

    Ⓐ Proteins into amino acids   Ⓑ Glycogen into glucose

    Ⓒ Starch into maltose   Ⓓ Fats into vitamins

93. Respiration by lungs is called—

Ⓐ Pulmonary respiration   Ⓑ Cuticular respiration

Ⓒ Branchial respiration   Ⓓ Cutaneous respiration

94. Which among the following has the thickest wall?

Ⓐ Right atrium   Ⓑ Left atrium   Ⓒ Right ventricle   Ⓓ Left ventricle

95. If the cut end of a plant is put in eosin solution :

Ⓐ Leaves remain fresh but ascent of sap stops

Ⓑ Phloem gets coloured because of ascent of sap

Ⓒ Xylem elements get stained showing ascent of sap through them

Ⓓ Ascent of sap stops

Case Based Questions (96 – 98):

Read the passage given below and answer the following questions (96-98).

The main organ of the human excretory system is kidney. It is a bean shaped organ. There are two kidneys, located in the abdominal cavity, one on each side of the backbone. The left kidney is placed a little higher than the right kidney, due to positioning of the liver. Each kidney contains a large number of tiny filtration units, called nephrons.

96. The connection between Proximal Convoluted Tubule and Distal Convoluted Tubule is called_____

Ⓐ Bowman's capsule   Ⓑ Loop of Henle

Ⓒ Ureter   Ⓓ Peritubular capillaries

97. Urine is released when

Ⓐ Urinary bladder is full

Ⓑ Urinary bladder is half full

Ⓒ Urinary bladder is empty

Ⓓ As soon as urine comes into the urinary bladder from the ureters

98. The most toxic product excreted through urine is

Ⓐ Water   Ⓑ Hormones   Ⓒ Urea   Ⓓ Ammonia

Assertion Reason Based Questions (Q. 99-100):

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.

99. **(A) :** Hormones are products of endocrine glands.

(R) : Hormones usually act at a site remote from their origin.

100. Reflex arc ends in_____

Ⓐ Sensory neuron   Ⓑ Spinal cord   Ⓒ Effector organ   Ⓓ Motor neuron

Space For Rough Works

Space For Rough Works