# SCSS-ST-22
# PCB

**Date** : 20/03/2022    **Time** : 2.30 Hrs.    **Marks** : Section-A = 30 + Section-B = 320 = 350

**Important Instructions :**

1. Immediately fill the particulars on this page of the Test Booklet as well as Answersheet with Black or Blue Ball Pen. *Use of pencil is strictly prohibited.*

2. Do not open this Test Booklet unitl you are asked to do so.

3. This Test Booklet contains of **110** questions.

4. There are two sections in the question paper i.e. **Section–A** and **Section–B**.

5. The **Section–A** contains three parts i.e. Part-I, Part–II and Part-III.

6. The **Part-I** contains **10** questions of **English**.

7. The **Part-II** contains **10** questions of **Mental Ability**.

8. The **Part-III** contains **10** questions of **Basic Mathematics**.

9. In **Section–A**, each question carries **ONE** mark. There is no negative marking system.

10. The **Section–B** contains **THREE** parts i.e. Part–I, Part–II and Part-III.

11. The **Part-I** contains **20** questions of **Physics**.

12. The **Part-II** contains **20** questions of **Chemistry**.

13. The **Part-III** contains **40** questions of **Biology**.

14. In the **Section–B**, each question carries **4** marks. There is negative marking system. For each wrong answer **1** mark will be deducted.

15. There are four choices for every question, out of which only one choice is most correc .

16. Filling up more than one responses in any question will be treated as wrong response ar marks for this will be deducted according to negative system.

17. No candidates is allowed to carry any printed or written textual material, bits of papers, cell phone and any other electronic devices.

18. Rough work is to be done on the space provided in the Test Booklet only.

19. On completion of the test, the candidate must hand over the Answer Sheet to the Invigilator on duty. *However, candidates are allowed to take away this Question Paper with them.*

20. **Do not fold or make any stray marks on the Answer Sheet.**

Name of the Candidate (in Capital letters) : _____

Seat No : In figures

**Instruction :**
   Select from the answer choices given under the sentence to form grammatically correct sentence :

01.   Neither the salesman nor the marketing manager ................. of the system.
   1)   is favouring                              2)   is in favour
   3)   are in favour                             4)   are for favour

**Instruction :**
   Idenitfy the part that contains an error.

02.   These days (A) / news are (B) / travelling (C) / faster than (D) / before.
   1)   A                                         2)   B
   3)   C                                         4)   D

**Instruction :**
   Choose the one which best replaces the underlined words.

03.   My father is suffering from diabetes, for the past three years.
   1)   is suffer                                 2)   has been suffering
   3)   has suffered                              4)   no change

**Instruction :**
   Find the word that conveys the same meaning.

04.   APPLAUD.
   1)   rebuke                                    2)   slam
   3)   praise                                    4)   condemn

**Instruction :**
   Select the word that is opposite in meaning.

05.   BENIGN.
   1)   sick                                      2)   poor
   3)   damaged                                   4)   evil

**Instruction :**
   Select the pair of words to replace the question mark.

06.   Sonnet : Line : : __?__ : __?__ .
   1)   Ballad : Poetry                           2)   Novel : Chapter
   3)   Epic : Ode                                4)   Game : Score

**Instruction :**
   Choose the one that can be substituted for the given phrase :

07.   A fool's Paradise means :
   1)   a foolish idea                            2)   an imaginary idea
   3)   an unexpected gain for foolish man        4)   false hopes

**Instruction :**
   Find out the correct meaning of the Idiomatic expression :

08.   Token strike :
   1)   total strike                              2)   carefully planned strike
   3)   short strike held as warning              4)   sudden call of strike

**Instruction :**
09.   Choose the correctly spelt word :
   1)   Humorrous                                 2)   Homoruos
   3)   Humourous                                 4)   Humorous

**Instruction :**
   Choose the correct alternative out of the four choices to complete the sentence.

10.   I wonder if they will change _____ plans.
   1)   there                                     2)   they're
   3)   their                                     4)   theirs

| (Part–II – Mental Ability) |

11. Find the missing term in following number series.

    1, 3, 3, 6, 7, 9 , ? , 12, 21

    1) 10                                    2) 11
    3) 12                                    4) 13

12. Which term comes next in the series : BMO, EOQ, HQS, ?.

    1) KSU                                   2) LMN
    3) SOV                                   4) SOW

13. Botany : Plants : : Entomology : ?

    1) Snakes                                2) Insects
    3) Birds                                 4) Germs

14. In a certain system of coding, the word STATEMENT is written as TNEMETATS. In the same system of coding, what should be the code for the word POLITICAL ?

    1) LACITILOP                             2) LCATILIOP
    3) OPILITACL                             4) None of these

15. A man pointing to a photograph says, "The lady in the photograph is my nephew's maternal grandmother." How is the lady in the photograph related to the man's sister who has no other sister ?

    1) Cousin                                2) Sister-in-law
    3) Mother                                4) Mother-in-law

16. Kunal walks 10 km towards North. From there he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point ?

    1) 5 km West                             2) 7 km West
    3) 7 km East                             4) 5 km North-east

17. It being given that : > denotes +, < denotes –, + denotes ÷, – denotes =, = denotes 'less than' and × denotes 'greater than', find which of the following is a correct statement.

    1) 3 + 2 > 4 = 9 + 3 < 2                  2) 3 > 2 > 4 = 18 + 3 < 1
    3) 3 > 2 < 4 × 8 + 4 < 2                  4) 3 + 2 < 4 × 9 + 3 < 3

**Space for Rough Work**

18. Figures A and B are related in a particular manner. Establish the same relationship between figures C and D by choosing a figure from amongst the four alternatives, which would replace the question mark in fig. (D).



1) 

2) 

3) 

4) 

19. How many parallelograms are there in the following figure ?



1) 20
2) 24
3) 28
4) 30

20. In following question group the given figures into three classes using each figure only once.



1) 1, 5, 9 ; 2, 7, 8 ; 3, 4, 6
2) 1, 5, 6 ; 4, 7, 8; 2, 3, 9
3) 2, 4, 9 ; 6, 7, 8 ; 1, 3, 5
4) 3, 7, 8 ; 4, 5, 9 ; 1, 2, 6

**Space for Rough Work**

## (Part–III – Basic Mathematics)

21. The distance travelled by the tip of the minute hand in 10 minutes when the length of it is 20 cm is

    1) 20.95 m                2) 20.95 cm

    3) 2.095 cm               4) 209.5 cm

22. The two numbers M and N are such that 60% of M is equal to 20% of N, then N = x% of M then x is

    1) 300                    2) 350

    3) 400                    4) 100

23. If x + y = 18, y + z = 24, z + x = 22 then the value of $(x^2 + y^2 + z^2 + 2xy + 2yz + 2zx)$ is

    1) 1024                   2) 289

    3) 144                    4) 256

24. If A (–2, –1), B(a, 0), C(4, b) and D (1, 2) are vertices of the parellelogram ABCD then values of a + b is

    1) 2                      2) – 4

    3) – 3                    4) 4

25. If $10^{x+y} = 6$ and $6^{a+b} = 10$ then the values of $(x+y)^{100}.(a+b)^{100}$ is

    1) 1                      2) 100

    3) $10^{100}$             4) $6^{100}$

26. If a cricket bowler throws a ball with a speed of 324 km/hr, then find the time taken by the ball to reach the wicket at the other end of the pitch. If the length of the pitch is 45 meter from one end to other.

    1) 0·5 sec                2) 0·7 sec

    3) 0·7 set                4) 0·9 sec

Space for Rough Work

27. A shot–putt is a mettalic sphere of radius 4.9 cm. If the density of the metal is 7.8 g per cm$^3$, then the mass of the shot–putt is

1) 3.85 kg 2) 2.85 kg

3) 1.85 kg 4) 0.85 kg

28. If $\sin\theta = \dfrac{1}{\sqrt{2}}$ then the value of $\dfrac{2\sin^2\theta + 3\cot^2\theta}{4\tan^2\theta - \cos^2\theta}$ is equal to

1) $\dfrac{9}{8}$ 2) $\dfrac{8}{9}$

3) $\dfrac{7}{8}$ 4) $\dfrac{8}{7}$

29. $\triangle ABC$ is right angle triangle where AB = 3, BC = 4 and AC = 5 than radius of circum-circle of the $\triangle ABC$ is

1) 4 2) 3/2

3) 5/2 4) None of these

30. The abscissa of ends of diameter of the circle is root of the equation
$x^2 - 4x + p = 0$ and the ordinates of the ends of the diameter of the circle is root of the equation $y^2 + 6y + q = 0$ then centre of the circle is

1) (–2, 3) 2) (2, – 3)

3) (–4, –3) 4) (2, 3)

**Space for Rough Work**

| Section - B : (Part –I – Physics) |
| --- |

31. A ray of light strikes a surface of a plane mirror as shown, then the angle of deviation is



  1)  0°                                                  2)  90°
  3)  180°                                                4)  none of these

32. When light rays from the sun fall on a convex lens along a direction parallel to its axis
  1)  focal length of all colours is same
  2)  focal length for violet colour is the shortest
  3)  focal length for yellow colour is the longest
  4)  focal length for red colour is the shortest

33. The wide field of view can be attained using the following optical instrument is
  1)  plane mirror                                        2)  concave mirror
  3)  convex mirror                                       4)  all the above

34. Identify the property of a magnet
  1)  Attractive property                                 2)  Directive property
  3)  Inductive property                                  4)  all the above

35. Choose the wrong one about the electromagnet
  1)  it is a temporary magnet
  2)  it can produce strong magnetic field
  3)  its polarity can be changed by changing the direction of current in the coil
  4)  its strength cannot be changed

36. The strength of an electromagnet depends on
  1)  the number of turns in the coil       2)  the current in the solenoid
  3)  the nature of the coil material        4)  all the above

37. A charge of 0.01 coulomb is crossing a cross-section within a time interval of 10 second. The current strength in ampere can be
  1)  $10^{-1}$ A                                         2)  $10^{-2}$ A
  3)  $10^{-3}$ A                                         4)  $10^{-4}$ A

38. A current of 2.25 A is passing in a conductor of cross-section 0.25 $cm^{-2}$, the amount of charge that passes through the cross-section in 12 second can be
  1)  $(3^{0})$ coulomb                                   2)  $(3^{1})$ coulomb
  3)  $(3^{2})$ coulomb                                   4)  $(3^{3})$ coulomb

Space for Rough Work

39. The electromotive force of a cell is 24 V, if its negative plate is of –24 volt, the voltage of the positive plate can be
    1) zero
    2) 24 volt
    3) 12 volt
    4) can't say

40. In an electric circuit with a cell of emf 'ε' and resistance 'r', the current strength is 'I', then, at any cross-section of the conductor, in unit time.
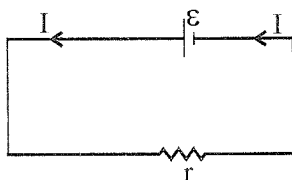


1) $\dfrac{\varepsilon}{r}$ amount of positive charge goes in the direction of current

2) $\dfrac{\varepsilon}{r}$ amount of charge goes in all directions at a given cross-section

3) $\dfrac{\varepsilon}{r}$ amount of negative charge goes opposite to the direction of current

4) all the above

41. Gravitational force is
    1) Real force
    2) Pseudo force
    3) Imaginary force
    4) None of these

42. The minimum velocity with which an object of mass 1 kg must be projected so that it will escapes from the influence of earth's gravittional field is
    1) 11.2 m/s
    2) 11.2 km/h
    3) 11.2 km/min
    4) 11.2 km/s

43. A 100 W electric bulb is used for 5 hours every day. How much electricity does it consume in a week ?
    1) 0.35 kwh
    2) 3.5 kwh
    3) 35 kwh
    4) 3500 kwh

44. Swara takes 10 s to carry a bag weighing 10 kg to a height of 10 m. How much power has she used
    1) 98 watt
    2) 100 watt
    3) 10 watt
    4) none of these

45. The working of a rocket depends on Newton's ....... law of motion
    1) First
    2) Second
    3) Third
    4) None of these

Space for Rough Work

46. 2 balls have masses of 25 gm and 100 gm respectively & they are moving along the same straight line before and after the collision, in the same direction. The initial velocities of the balls are of 12 ms$^{-1}$ and 6 ms$^{-1}$ respectively. They collide with each other, then after the collision, the first ball moves with a velocity of 10 ms$^{-1}$. Calculate the velocity of the other ball after the collision

1) 16 m/s
2) 12 m/s
3) 11 m/s
4) 6.5 m/s

47. Which of the following is a contact force

1) electrostatic force
2) gravitational force
3) frictional force
4) magnetic force

48. A man travels a distance of 1 m towards east, then 3m towards south and finally 3m towards east. Find the distance and displacement of the man.

1) 7 m, $3\sqrt{2}$ m
2) $3\sqrt{2}$ m, 7 m
3) 7m, 5 m
4) 5m, 7m

49. Which of the quantity decides the direction of motion of the body ?

1) speed
2) velocity
3) acceleration
4) displacement

50. Particle moving with initial velocity of 20 m/s is subjected to uniform retardation as shown in figure. Find the following i) displacement of the particle in five seconds & ii) Retardation of the particle



1) 5 cm, −4 m/s$^2$
2) 25 m, 4 m/s$^2$
3) 50 m, 4 m/s$^2$
4) 100 m, −4 m/s$^2$

(P.T.O.)

## Part II – Chemistry

51. What is the harmful effect of the depletion of Earth's ozone layer?
    1) Average temperature of earth's surface will decrease gradually.
    2) The oxygen content of atmosphere will increase.
    3) Increased amount of ultraviolet radiation will reach on earth's surface.
    4) None of these

52. Who discovered electrons?
    1) E. Goldestin
    2) J. J. Thomson
    3) Rutherford
    4) James Chadwick

53. The density of nitrogen gas is maximum at
    1) STP
    2) 273K and 1 atm
    3) 546 K and 2 atm
    4) 546 K and 4 atm

54. Which one of the following is the poorest conductor of electricity?
    1) Copper
    2) Aluminium
    3) Lead
    4) Silver

55. How many sigma ($\sigma$) and pi ($\pi$) bonds are present in salicylic acid ?
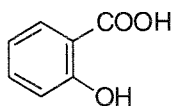


    1) $10\sigma, 4\pi$
    2) $16\sigma, 4\pi$
    3) $16\sigma, 16\pi$
    4) $18\sigma, 2\pi$

56. Which of the following molecule contains all ionic, covalent and coordinate bonds ?
    1) $H_2O$
    2) $Cl_2$
    3) $H_2SO_4$
    4) $NH_4Cl$

57. Which of the following is Boyle's law ?
    1) Temperature is constant, Volume –Number of moles relationship
    2) Pressure is constant, Volume –Temperature relationship
    3) Volume is constant, Temperature – Pressure relationship
    4) Temperature is constant , Pressure – Volume relationship

58. The average molecular mass of a sample containing 5 moles of $O_2$ and 5 moles of $N_2$ is
    1) 32
    2) 28
    3) 30
    4) 7.5

59. A solution which gives pink colour with phenolphthalein. It's $p^H$ is likely to be
    1) 2
    2) 5
    3) 12
    4) 7

**Space for Rough Work**

60. The general formula of alkynes is

   1) $C_nH_{2n+2}$  2) $C_nH_{2n+1}$

   3) $C_nH_{2n-2}$  4) $C_nH_{2n-1}$

61. Which of the following is the ionic part of soap?

   1) $COO^-Na^+$  2) $SO_3^-Na^+$

   3) $OSO_3^-Na^+$  4) None of these

62. The ionic radius (in $\overset{\circ}{A}$) of $N^{-3}$, $O^{-2}$ and $F^-$ are respectively
   1) 1.71, 1.40 and 1.36  2) 1.71, 1.36 and 1.40
   3) 1.36, 1.40 and 1.71  4) 1.36, 1.71 and 1.40

63. Anhydrous ferrous sulphate salt on heating gives
   1) $SO_2$ and $SO_3$  2) $SO_2$ only
   3) $SO_3$ only  4) S only

64. In the extraction of Aluminium, the function of cryolite is to
   1) lower the melting point of alumina
   2) increase the melting point of alumina
   3) remove the impurities from alumina
   4) decreases the conductivity of alumina

65. 2 ml of acetic acid was taken in each of test tubes A,B and C and 2 ml, 4 ml, 6 ml of water was added respectively to them. A clear solution is obtained in
   1) test tube A  2) test tube B
   3) test tube C  4) all the test tubes

66. Which of the following metal reacts fastest with ethanol ?
   1) Aluminium  2) Sodium
   3) Magnesium  4) Calcium

67. IUPAC name of higher homologue of $CH_3(CH_2)_2$ OH is
   1) Propan -1-ol  2) Hexan-1-ol
   3) Butan-1-ol  4) Pentan-1-ol

68. Which of the following will undergo addition reaction ?
   1) Ethane  2) Ethene
   3) Propane  4) Butane

Space for Rough Work

69. Propane + $Cl_2$ —$\xrightarrow{\text{sunlight}}$ (A) + (B); (A) and (B) are

    1) chloroethane and chloromethane
    2) 1-chloropropane and chloroethane
    3) 2-chloropropane and chloromethane
    4) 2-chloropropane and 1-chloropropane

70. Total number of sigma (σ) and pi (π) bonds are present in the given compound



    1) $9\sigma, 9\pi$                2) $6\sigma, 9\pi$
    3) $9\sigma, 6\pi$                4) $6\sigma, 6\pi$

Part III – Biology
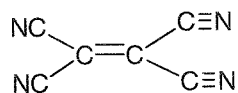
71. Following are the characters of monocot plants
   a) Seeds contain only one cotyledon in the embryo
   b) Leaves are isobilateral, with parallel venation
   c) Fibrous root system is present
   d) Presence of trimerous flowers
   1) a and b are correct
   2) b , c and d are correct
   3) a, b, c and d are correct
   4) a, b, c and d are incorrect

72. From the following list how many organisms are belongs to kingdom Monera ?

   | *Euglena, Volvox, Amoeba, Paramecium, Staphylococcus, Clostridium, Salmonella, Aspergillus, Penicillium* |
   | --- |

   1) Nine
   2) Five
   3) Three
   4) Two

73. Translocation of food in the plant body takes place by phloem is
   1) Upward direction only
   2) Downward direction only
   3) Bidirectional
   4) Either upward or downward direction

74. Match the column–I with column–II

   | | Column–I | | Column–II |
   | --- | --- | --- | --- |
   | A) | Stomata | a) | Impervious to gases |
   | B) | Root hair | b) | Exchange of gases |
   | C) | Suberin layer | c) | Transportation of food |
   | D) | Phloem | d) | Water absorption |

   1) A – b, B – d, C – c, D – a
   2) A – b, B – a, C – d, D – c
   3) A – b, B – d, C – a, D – c
   4) A – c, B – d, C – b, D – a

75. If a bacterial cell divides every 20 min. Then how much time required to formation 8 bacterial cells
   1) 20 min.
   2) 40 min.
   3) 1 hr.
   4) 2 hr.

76. Find out the **True** or **False** statement from the following.
   **A** – Environmental triggers such as light or gravity will change the directions of that plant parts.
   **B** – In plant, stem grows towards the light while roots grows away from the light.
   1) A – True, B – True
   2) A – True, B – False
   3) A – False, B – True
   4) A – False, B – False

77. If 12 molecules of $NADH_2$ enter into electron transfer chain then number of ATP molecules generated through ETS of mitochondira is/are
   1) 3 ATP
   2) 24 ATP
   3) 36 ATP
   4) 48 ATP

78. Labelled A and B in the following diagram of funaria.
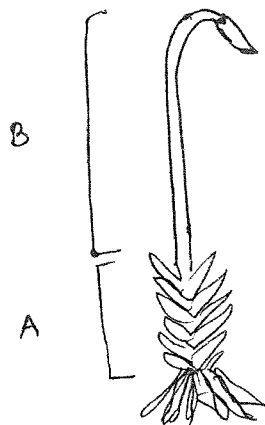


   1) A – Gametophyte, B – Gametophte
   2) A – Sporophyte , B – Sporophyte
   3) A – Gametophyte, B – Sporophyte
   4) A – Sporophyte, B – Gametophyte

79. **Assertion** : Cytokinesis in animal cells takes place by the formation of clean furrow.
   **Reason** : Cytokinesis in plant cells takes place by the formation of cells plate.
   1) Both assertion and reason are correct statement, reason is correct explanation of assertion
   2) Both assertion and reason are correct statement, reason is not correct explanation of assertion
   3) Assertion is incorrect but reason is correct
   4) Both are incorrect statement

80. Respiration takes place in absence of molecular oxygen is _____
   1) Aerobic
   2) Anaerobic
   3) Aerobic and Anaerobic
   4) Fermentation and aerobic

81. Colour blindness is example of
   1) Dominant Y – linked disease
   2) Recessive X – linked disease
   3) Dominant X – linked disease
   4) Recessive Y – linked disease

82. Find out the numbers of correct statement from the following.
   A) Production of various useful aquatic organisms with the help of water is called as green revolution
   B) Grasses like alfalfa, clover and rye are used in phytoremediation
   C) Organic manure and chemical fertilizer are types of fertilizer
   1) One
   2) Two
   3) Three
   4) All

83. Important method used in animal husbandary is/are
   1) Artificial insemination
   2) Embryo transfer
   3) Both '1' and '2'
   4) Neither '1' nor '2'

84. Match the column–I with column–II

| Column–I (Phenotype) | | Column–II (Genotype) | |
|---|---|---|---|
| A) | Round and Yellow | a) | YYrr |
| B) | Wrinkled and yellow | b) | yyrr |
| C) | Round and green | c) | YYRR |
| D) | Wrinkled and green | d) | Yyrr |
| | | e) | YyRr |
| | | f) | RRyy |
| | | g) | YyRR |

| | A | B | C | D |
|---|---|---|---|---|
| 1) | c, e, f | a, d | f | b, a |
| 2) | g | c, e | a, d | f, b |
| 3) | c, e, g | a, d | f | b |
| 4) | e, f, a | d, g | f, a | b, e |

85. Yoghurt has a specific sour taste due to
   1) *Rhizobium*　　　　　　　　2) Lactic acid
   3) Yeast　　　　　　　　　　　4) Penicillin

86. The details double helical structure of DNA was given by
   1) G. Mendel　　　　　　　　　2) Watson and Crick
   3) Carl Linnaeus　　　　　　　4) Kopland

87. Find out the name of A, B, C and D in the given diagram of embryo sac of angiospermic plant



   1) A – Synergid, B – Antipodals, C – Polar nuclei, D – Egg cell
   2) A – Polar nuclei, B – Egg cell, C – Synergid, D – Antipodal
   3) A – Antipodals, B – Synergid, C – Egg cell, D – Polar nuclei
   4) A – Egg cell, B – Antipodals, C – Polar nuclei, D – Synergid

88. Match the column–I with column–II

| Column–I (Name of disease) | | Column–II (Pathogen) | |
|---|---|---|---|
| A) | AIDS | a) | Virus |
| B) | Cholera | b) | Bacteria |
| C) | Dandruff | c) | Protozoa |
| D) | Dengue | d) | Fungi |

   1) A – a, B – c, C – b, D – d　　　　2) A – b, B – a, C – c, D – d
   3) A – a, B – b, C – d, D – a　　　　4) A – d, B – b, C – b, D – c

89. Important process of the nitrogen cycle is
    1) Nitrogen fixation
    2) Ammonification
    3) Nitrification
    4) More than one option is correct

90. Identify A, B, C and D. In the given trophic levels
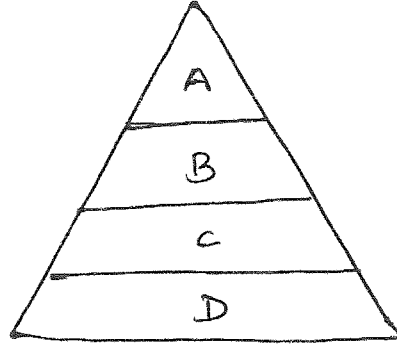


|  | A | B | C | D |
|---|---|---|---|---|
| 1) | Producers | Herbivores | Carnivores | Omnivores |
| 2) | Carnivores | Omnivores | Producers | Herbivores |
| 3) | Herbivores | Producers | Omnivores | Carnivores |
| 4) | Omnivores | Carnivores | Herbivores | Producers |

91. Peripates is connecting link between phylum Annelida and arthropoda. The characters related to phylum are given below. Find out the correct match of phylum and characters.

| Phylum | Characters |
|---|---|
| A) Annelida | I) Segmented body |
| B) Arthropoda | II) Parapodia |
|  | III) Tracheal respiration |
|  | IV) Open circultory system |
|  | V) Chitinous exoskeleton |

    1) A – I, II, V , B – III, IV
    2) A – I, II, B – III, V
    3) A – II, IV , B – I, III
    4) A – I, III , B – II, IV

92. **Assertion** : Tendon is white fibrous connective tissue and connect muscles to bone.

    **Reason** : Tendon is made up of elastic tough collagen protein fiber.
    1) Both assertion and reason are correct statement, reason is correct explanation of assertion
    2) Both assertion and reason are correct statement, reason is not correct explanation of assertion
    3) Assertion is correct but reason is not correct
    4) Both are incorrect statement

93. The correct sequence of human journey during evolution is
    1) Ramapithecus → Australopithecus → Homo habilus → Homo erectus → Neanderthal man → Cro–magnon man
    2) Australopithecus → Ramapithecus → Homo habilus → Cro–magnon man →Australopithecus
    3) Neanderthal man → Ramapithecus → Homo habilus → Cro–magnon man → Australopithecus
    4) Homo erectus → Homo habilus → Cro–magnon man → Neanderthal man → Ramapithecus → Australopithecus

94. Match column – I with column – II

| Column – I | | Column – II | |
|---|---|---|---|
| P) | Nucleus | i) | Photosynthesis |
| Q) | Chloroplast | ii) | Chromosome |
| R) | Lysosome | iii) | Power house of cell |
| S) | Golgibody | iv) | Suicidal bag |
| T) | Mitochondria | v) | Packaging of material |

1) P – i, Q – ii , R – iii, S – iv, T – v     2) P – ii, Q – i, R – iv, S – v, T – iii
3) P – iii, Q – ii, R – iv, S – i, T – v     4) P – v, Q – iv, R – iii, S – i, T – ii

95. **Assertion** : Acquired immunity is developed by an animals responce to a disease caused by infection of microbes

**Reason** : Animals own cells produce antibodies in responce to infection by active immunity
   1) Both assertion and reason are correct statement, reason is correct explanation of assertion.
   2) Both assertion and reason are correct statement, reason is not correct explanation of assertion.
   3) Assertion is correct but reason is not correct.
   4) Both are incorrect statement.

96. What is the causetive agent of AIDS disease ?
   1) DNA – adenovirus          2) Protein – prions
   3) RNA – retrovirus          4) Glycoprotein – glyco virus

97. The basic fundemtnal characters present in chordata are given below.
   a) Presence of a tubular, dorsal, hollow nerve cord
   b) Presence of a solid, rod - like notochord
   c) Paired pharyangeal gills slits
   d) Absence of post anal tail

Find out **incorrect** statement
   1) 'a' and 'b'          2) 'b' and 'c'
   3) 'c' and 'd'          4) only 'd'

98. Match column – I with column – II

| Column – I (Types of tissue) | | Column – II (Example) | |
|---|---|---|---|
| P) | Squamous epithelium | i) | Stomach |
| Q) | Columnar epithelium | ii) | PCT and DCT |
| R) | Cuboidal epithelium | iii) | Blood capillaries |
| S) | Ciliated epithelium | iv) | Trachea |

1) P – i, Q – ii , R – iii, S – iv     2) P – iii, Q – i , R – ii, S – iv
3) P – iv, Q – ii , R – iii, S – i     4) P – ii, Q – iii , R – i, S – iv

99. Find out the **wrong** matching statement
   a) Energy giving food – Carbohydrate and fat
   b) Body bulding food – Protein and fat
   c) Protective food – Vitamins and minerals
   1) 'a' and 'b'          2) 'b' and 'c'
   3) 'a' and 'c'          4) 'b' only

100. The given symptoms related to which disease ?

    i)    Stunted growth            ii)    Oedema

    iii)    Thin and curved legs        iv)    Scaly skin

    v)    Bulging eyes

**Code :**

    1)    Marasmus             2)    Goitre

    3)    Rickets               4)    Kwashiorkor

101. The correct combination of male reproductive system is

    1)    Tunica albugina, Epididymis, Prostate gland, Corpus leutium, Isthmus

    2)    Ampulla, Birtholian gland, Fundus, Vas difference, Cowper's gland, Ejacultory duct

    3)    Seminal vesicle, Epididymis, Cowper's gland, Vas efferentia, Testis

    4)    Seminal vesicle, Ampulla, Isthmus, Labia majora, Clitoris

102. Major part of $CO_2$ transported in the form of

    1)    Dissolved as gas in water of plasma

    2)    Carbamino – haemoglobin

    3)    Bicarbonate ions dissolved in plasma

    4)    Combin with proteins present in plasma

103. Find out the correct combination related to the part of brain.

| | **Forebrain** | **Midbrain** | **Hindbrain** |
|---|---|---|---|
| 1) | Optic lobe | Diencephalon | Medulla |
| 2) | Cerebrum | Optic lobe | Cerebellum |
| 3) | Medulla | Diencephalon | Cerebellum |
| 4) | Cerebrum | Medulla | Optic lobe |

104. Select the correct meaning of symbols A to D in given chart of blood components.
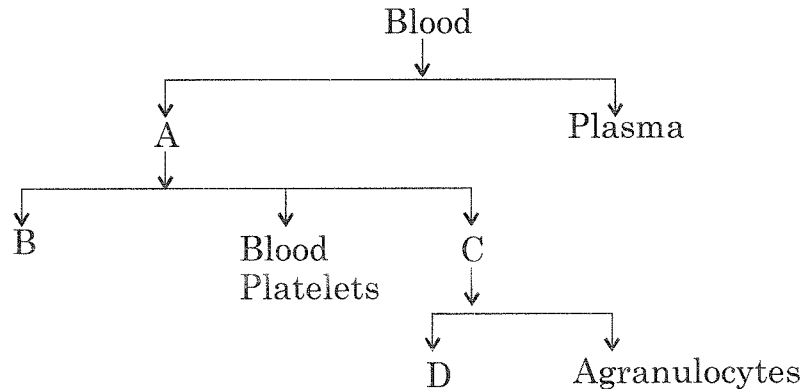


| | **A** | **B** | **C** | **D** |
|---|---|---|---|---|
| 1) | Granulocytes | WBC | RBC | Blood elements |
| 2) | Blood elements | RBC | WBC | Granulocytes |
| 3) | RBC | WBC | Blood elements | Granulocytes |
| 4) | WBC | Granulocytes | RBC | Blood elements |

105. Malpighian capsule is the association of

1) Bowman's capsule and proximal convoluted tubule

2) Proximal convoluted tubules and distal convoluted tubule

3) Bowman's capsule and loop of Henle's

4) Bowman's capsule and Glomerulus

106. The **incorrect** statement about endocrine gland is

1) These are duct less gland

2) These produces hormone, enzyme, mucus

3) It transport their secretion through blood

4) These abnormal secretion causes disease

107. The raising and care of silkworm for the production of raw silk is

1) Apiculture              2) Sericulture

3) Pisciculture            4) Poultry farming

108. The important characterstic of social health is changes one's own behavior according to changing

1) digital world           2) Environmental condition

3) Social condition        4) Technical condition

109. Dodo and passenger pigeons extinct due to

1) Air pollution           2) Human exploitation

3) Habitate loss           4) Water pollution

110. Match the column–I with column–II

| | Column–I | | Column–II |
|---|---|---|---|
| a) | Animal no longer in existence | i) | Wild life |
| b) | Organisms in danger of becoming extinct | ii) | Threatened |
| c) | Organisms facing a serious but not immidate danger of extinction | iii) | Extinct |
| d) | Wild animal and plants that lives in thier natural habitate | iv) | Endangered |

1) a – i, b – ii, c – iii, d – iv        2) a – ii, b – iii, c – i, d – iv

3) a – iii, b – iv, c – ii, d – i         4) a – iv, b – ii, c – i, d – iii

# IMPORTANT DATES

## Only For 10th CBSE, ICSE And Other Board Students
## (Except Maharashtra State Board Students)

| SCREENING TEST - 2022 (OFFLINE MODE ONLY) | 20 March 2022 |
|---|---|
| Copy of candidate responses to be available on the website | 23 Mar. 2022 (13:00 IST ) |
| Online display of provisional answer key | 23 Mar. 2022 (13:00 IST ) (On Candidate Indivisual Login) / Website |
| Feedback and comments on provisional answer key from the candidates ( Link given on website ) | 23 Mar. 2022 (13:00 IST ) 24 Mar. 2022 (17:00 IST ) |
| Online declaration of final answer key | 25 Mar. 2022 (13:00 IST) |
| Result of SCREENING TEST 2022 | 25 Mar. 2022 (13:00 IST) (On Candidate Indivisual Login) / Website |
| Parent's Meet | 27 Mar. 2022 (11:00 IST) (For Selected and Wait List Candidate) |
| Admissions : First List | 28 Mar. 2022 (11:00 IST) 31 Mar. 2022 (17:00 IST) |
| Admissions : Second List | 01 Apr. 2022 (11:00 IST) 04 Apr. 2022 (17:00 IST) |