Jagran

Roll No.:

Maximum Marks: 300
Maximum Time: 90 (+30) minutes

CLASS
12
(Science Stream)

INDIAN INTELLIGENCE TEST ™

An Innovative Aptitude Test

SAMPLE PAPER

Confusion का Smart Solution

INSTRUCTIONS FOR CANDIDATE

1. The Question Paper comprises of two sections:

   Section I: Multiple Intelligence Test (40 questions)

   Section II: Scholastic Aptitude Test (100 questions)

   Questions in Section I do not carry any marks whereas questions in Section II carry 3 marks each.

2. Question number 76 to 100 are different for PCM and PCB stream sections. Students of PCM have to attempt Mathematics questions while the students of PCB stream have to attempt Biology questions.

3. Duration for Section II of this test shall be 90 minutes. You will get additional 30 minutes to fill up information about yourself on the Answer Sheet and answer questions of Section I before start of the exam.

4. Answering all questions is compulsory in Section I but not in Section II. Section I of the test contains questions that you need to answer truthfully based on your preference. Do not provide fake responses otherwise you will not receive accurate analysis of your intelligence type.

5. Rank will be provided on the basis of Section II. Multiple Intelligence Report shall be provided on the basis of Section I.

6. For incorrect answers (in Section II), 1 mark would be deducted. For unanswered questions, no mark would be awarded or deducted.

7. Use of calculator, mobile phones or log tables is not permitted.

8. Fill the required details clearly on the Answer Sheet and do not overwrite.

9. There is only ONE correct answer. Choose only ONE option for an answer.

10. To mark your choice of answers by darkening the circles in the Answer Sheet, use an HB Pencil only.

11. Rough work should be done in the blank space provided on the last page in the booklet.

12. Return the Answer Sheet to the invigilator at the end of the exam.

13. Write your Roll No. on the Question Paper too.

14. Any use of unfair means in the test will result in termination of the candidature.

1. Find the missing term(s) in the following questions:
   0, 3, 12, 30, ?, 105, 168
   (A) 63
   (B) 62
   (C) 61
   (D) 60

2. Find the missing term(s) in the following questions:
   11, 10, ?, 100, 1001, 1000, 10001
   (A) 101
   (B) 110
   (C) 111
   (D) None of these

3. Find the missing term(s) in the following questions:
   2, 7, 27, 107, 427, ?
   (A) 1262
   (B) 1707
   (C) 4027
   (D) 4207

4. In each of the following questions, four groups of letters are given. One of these groups is different from the other three. Find the odd one.
   (A) EMGIK
   (B) BHJFD
   (C) WUSQY
   (D) NOSUX

5. In each of the following questions, four groups of letters are given. One of these groups is different from the other three. Find the odd one.
   (A) ZGPKU
   (B) FRGSP
   (C) NEXFL
   (D) LANCP

6. Find the number in the position of "?"

 | 108 | | 39 | | 115 | |
   | 240—(2)—103 | | 309—(4)—203 | | 625—(?)—104 | |
   | 17 | | 25 | | 101 | |
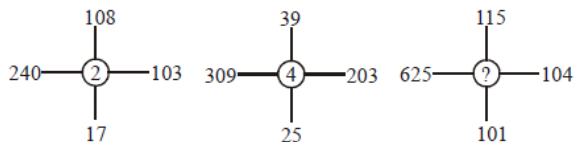
   (A) 3
   (B) 5
   (C) 7
   (D) 8

7. Given below are four possible membership schemes. In each case, mark the one you feel appropriate description of the three listed items.
   Triangles, Scalene-Triangles, Right-angled triangles

   (A)   (B)   (C)   (D)
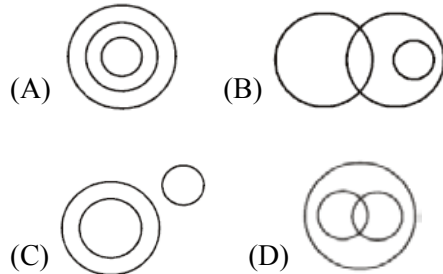
8. Satish remembers that his brother's birthday is after fifteenth but before eighteenth of February where as his sister Kajal remembers that her brother's birthday is after sixteenth but below nineteenth of February. On which day in February is Satish's brother's birthday?
   (A) 16th
   (B) 17th
   (C) 18th
   (D) 19th

9. If 30th January 2003 was Thursday, what was the day on 2nd March, 2003?
   (A) Tuesday
   (B) Thursday
   (C) Saturday
   (D) Sunday

10. In each of the following questions, you are given a combination of alphabets and/or numbers followed by four alternatives A, B, C and D. Choose the alternative which most closely resembles the water image of the given combination.

    (X)

    (A)   (B)   (C)   (D)
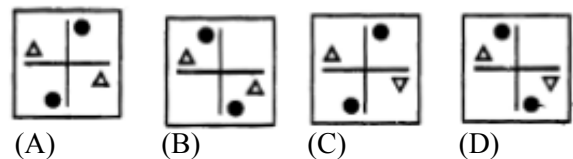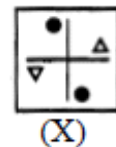
Direction (11-14) : Study the following information carefully and answer the questions given below it.

(1) P, Q, R, S,T and U are six members in a family in which there are two married couple.
(2) T, a teacher is married to the doctor who is mother of R and U.
(3) Q, the lawyer, is married to P.
(4) P has one son and one grandson.
(5) Of the two married ladies one is house-wife.
(6) There is one student and one male engineer in the family.

11. How is P related to R?
    (A) Grandfather
    (B) Mother
    (C) Sister
    (D) Grandmother

12. How is R related to U?
    (A) Brother
    (B) Sister
    (C) Brother or Sister
   (D) Data is insufficient

13. Which of the following represents the group of females in the family?
    (A) PSR   (B) PSU
    (C) QTR   (D) Data inadequate

14. Which of the following is true about the grand daughter in the family?
    (A) She is a lawyer
    (B) She is a student
    (C) She is an engineer
    (D) Data inadequate

15. The figure given below is the unfolded position of a cubical dice. In each of the following questions this unfolded figure is followed by four different figures of dice. You have to select the figure which is identical to the figure.

(A)   (B)

(C)   (D)

(a)
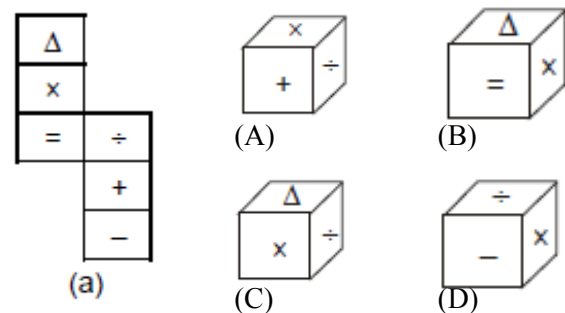
QUESTIONS 16 TO 25: GENERAL KNOWLEDGE

16. Which of the following states has become the first Indian state to launch Rotavirus vaccination project?
    (A) Mizoram
    (B) Himachal Pradesh
    (C) Karnataka
    (D) Rajasthan

17. Which of the following cities is the host for the first International Bird Festival?
    (A) Agra
    (B) Kota
    (C) Indore
    (D) Kolkata

18. Which of the following committees has submitted its report on 'Possible Tax rates under GST'?
    (A) Jayati Ghosh committee
    (B) Abhijit Banerjee committee
    (C) Arvind Subramanian committee
    (D) Kaushik Basu committee

19. Who has won the Abu Dhabi F1 Grand Prix 2015?
    (A) Kimi Raikkonen
    (B) Lewis Hamilton
    (C) Jenson Button
    (D) Nico Rosberg

20. Who of the following is honoured with 2015 Asian Business Leadership Forum (ABLF) Outstanding Business Achiever award?
    (A) G M Rao
    (B) Hinduja Brothers
    (C) Kiran Mazumdar-Shaw
    (D) Cyrus Mistry

21. The headquarters of Zoological Survey of India (ZSI) are located in which city?
    (A) Bangalore
    (B) Dehradun
    (C) Kolkata
    (D) Bhuvaneshwar

22. Which of the following defence forces of India has conducted the exercise 'Drad Sankalp'?
(A) Indian Army
(B) Indian Navy
(C) Indian Airforce
(D) None of the above

23. Which of the following vaccines is used in injectable inactivated polio vaccine (IPV) programme of India?
(A) BharatIPV vaccine
(B) ShanIPV vaccine
(C) NirmIPV vaccine
(D) SanofiIPV vaccine

24. On which date, the Armed Forces Flag Day is observed?
(A) December 2
(B) December 5
(C) December 7
(D) December 10

25. Which of the following railway zones of India has introduced biodiesel for trains, operating under its zone?
(A) Central Railways
(B) East Coast Railways
(C) East Central Railways
(D) South Western Railways

QUESTIONS 26 TO 50: PHYSICS

26. If energy(E), velocity(V) and time (T) are chosen as the fundamental quantities, then the dimensions of surface tension will be :- (Surface tension =force / length)
(A) $E\ V^{-2}T^{-1}$
(B) $E\ V^{-1}T^{-2}$
(C) $E^{-2}\ V^{-1}T^{-3}$
(D) $E\ V^{-2}T^{-2}$

27. A tiger chases a deer 30m ahead of it and gains 3metre in 5 second after the chase began. The distance gained by the tiger in 10 second is :
(A) 6m
(B) 12m
(C) 18m
(D) 20m

28. A projectile can have the same range R for two angles of projection. If t1 and t2 be the times of flight in two cases then,
(A) $t_1t_2 \propto R^2$
(B) $t_1t_2 \propto R$
(C) $t_1t_2 \propto 1/R$
(D) $t_1t_2 \propto 1/R^2$

29. A body of mass 4 kg weighs 4.8 kg when suspended in a moving lift. The acceleration of the lift is
(A) $9.80ms^{-2}$ downwards
(B) $9.80ms^{-2}$ upwards
(C) $1.96ms^{-2}$ downwards
(D) $1.96ms^{-2}$ upwards

30. A ball rebounds after colliding with the floor, then in case of inelastic collision:
(A) the momentum of the ball before and after collision is same
(B) the mechanical energy of the ball is conserved
(C) the total momentum of the earth-ball system is conserved
(D) the total kinetic energy of earth and ball is conserved

31. Which of the following statement is correct?
(A) centre of mass of an object always lie inside the object.
(B) centre of mass of an object always lie outside the object.
(C) centre of mass of an object may lie outside the object.
(D) centre of mass of an object always lie on boundary.

32. Which of the following parameters of a particle executing uniform Circular motion remains constant?
(P) speed (Q) radial acceleration (R) angular velocity
(A) P, Q
(B) Q, R
(C) P, R
(D) None of the above

33. If the radius of earth shrinks by 1.5% (mass remaining same), then the value of gravitational acceleration changes by
(A) –2%
(B) 2%
(C) –3%
(D) 3%

34. The reading of spring balance when a block is suspended from it in air, is 60N. This reading is changed to 40N when the block is immersed in water. The specific gravity of the block is
(A) 3   (B) 2   (C) 6   (D) 3/2

35. Which of the pV, diagrams best represents an isothermal process?

    (A)   (B)   (C)
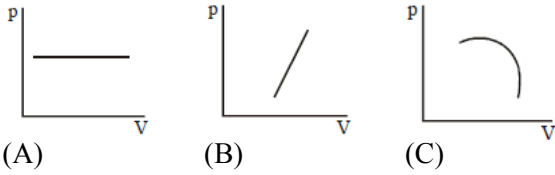
36. An elongation of 0.1% in a wire of cross-sectional area $10{-}6m2$ causes a tension of 100N. The Young's modulus is:
    (A) 10^{12} N/m^2
    (B) 10^{11} N/m^2
    (C) 10^{10} N/m^2
    (D) 10^2 N/m^2

37. Two rods are of same material and have same length and area. Heat DQ flows through them in 12minutes, when they are joined side by side. If now both the rods are joined in parallel, then the same amount of heat DQ will flow in:
    (A) 24min
    (B) 12min
    (C) 6min
    (D) 3min

38. Four wires of identical length, diameters and of the same material are stretched on a sonometer wire. If the ratio of their tensions is 1 : 4 : 9 : 16, then the ratio of their fundamental frequency
    (A) 16 : 9 : 4 : 1
    (B) 4 : 3 : 2 : 1
    (C) 1 : 4 : 2 : 16
    (D) 1 : 2 : 3 : 4

39. During SHM, the graph between acceleration and displacement from mean position is a :
    (A) straight line with positive slope
    (B) straight line with negative slope
    (C) parabola
    (D) hyperbola

40. Mark the correct options.
    (A) If the incident rays are converging, we have a real object.
    (B) If the final rays are converging, we have a real image.
    (C) The image of a virtual object is called a virtual image.
    (D) If the image is virtual, the corresponding object is called a virtual object.

41. When the whole Biprism experiment apparatus is immersed in water, the separation between coherent sources –

(A) Decreases
(B) Increases
(C) Remains constant
(D) Nothing can be said

42. Which of the following statement is true?
    (A) In insulators the conduction band is completely empty
    (B) In conductor the conduction band is completely empty
    (C) In semiconductor the conduction band is partially empty at 0 K
    (D) In insulators the conduction band is completely filled with electrons

43. Modern communication systems use –
    (A) analog circuits
    (B) digital circuits
    (C) combination of analog and digital circuits
    (D) none of the above

44. An electron at a potential of – 10 kV moves to a point where its potential is – 1 kV. Its potential energy has
    (A) decreased
    (B) increased
    (C) not changed
    (D) one needs to know the distance between the points to say

45. If voltage across a bulb rated 220 volts – 100watt drops by 2.5%its rated value the percentage of the rated value by which the power would decrease is
    (A) 5%
    (B) 10 %
    (C) 20 %
    (D) 2.5 %

46. Two long parallel wires separated by a distance r have equal currents I flowing in each. Either wire experiences a magnetic force F N/m. If the distance r is increased to 3r and current in each wire is reduced to I/3, the force between them will now be -
    (A) 3 F N/m
    (B) 9 F N/m
    (C) (F/9)N/m
    (D) (F/B7)N/m

47. The emf and the current in a circuit are – E = 12 sin $(100\pi t)$; I= 4 sin $(100\pi t + \pi/ 3)$ then
    (A) The current leads the emf by 60º
    (B) The current lags the emf by 60º
    (C) The emf leads the current by 60º
    (D) The phase difference between the current and the emf is zero

48. Three capacitors each of capacity 4μF are to be connected in such a way that the effective capacitance is 6 μF. This can be done by :
(A) Connecting them in parallel
(B) Connecting two in series and one in parallel
(C) Connecting two in parallel and one in series
(D) Connecting all of them is series

49. Which of the following electromagnetic waves has a frequency greater than that of visible light?
(A) Ultraviolet
(B) Radio
(C) Microwaves
(D) Infrared

50. The elevator is moving upwards. What cannot be a possible acceleration of the elevator.
(A) 5 m/s^2 ↑
(B) 10 m/s^2 ↓
(C) 14 m/s^2 ↓
(D) 8 m/s^2 ↓

QUESTIONS 51 TO 75: CHEMISTRY

51. Which one of the following electronic configuration of an atom has the lowest ionisation energy?
(A) $1s^2 2s^2 2p^3$
(B) $1s^2 2s^2 2p6 3s^1$
(C) $1s^2 2s^2 2p^6$
(D) $1s^2 2s^2 2p^5$

52. Which has maximum volume at S.T.P.?
(A) 1.5×10^{23} molecules of CO_2
(B) 4 g O_2
(C) 1 g H_2
(D) 16 g SO_3

53. Hybridization state of chlorine in ClF3 is :
(A) sp^3
(B) $sp^3 d^3$
(C) $sp^3 d^2$
(D) $sp^3 d$

54. The ratio of rates of diffusion of helium and methane under same conditions of temperature and pressure will be:
(A) 4 : 1
(B) 2 : 1
(C) 1 : 1
(D) 1 : 2

55. An e^- has magnetic quantum number as –3, what is its principal quantum number?
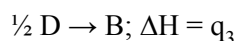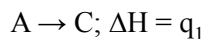(A) 3
(B) 2
(C) 1
(D) 4

56. The equilibrium constant K_C for the decomposition of PCl_5 is 0.0625 mole l^{-1} at 300ºC. What will be the value of KP –
(A) 2.936 atm
(B) 3.567 atm
(C) 3.856 atm
(D) 0.0625

57. In any chemical reaction, equilibrium is supposed to be establish when :
(A) Mutual opposite reaction undergo
(B) Concentration of reactants and resulting products are equal.
(C) Velocity of mutual reactions becomes equal.
(D) The temperature of mutual opposite reactions becomes equal.

58. A hypothetical reaction, A→2B, proceed through following sequence of steps -
$A \rightarrow C$; $\Delta H = q_1$
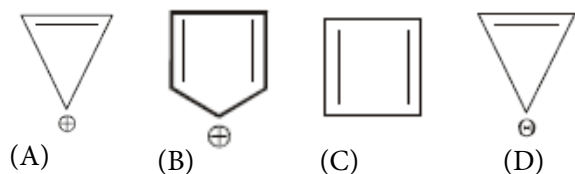$C \rightarrow D$; $\Delta H = q_2$
½ $D \rightarrow B$; $\Delta H = q_3$
The heat of reaction is:
(A) $q_1 - q_2 + 2q_3$
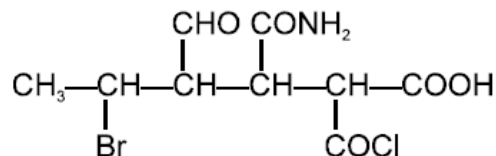(B) $q_1 + q_2 - 2q_3$
(C) $q_1 + q_2 + 2q_3$
(D) $q_1 + 2q_2 - 2q_3$

59. A standard hydrogen electrode has zero electrode potential because
(A) hydrogen is easier to oxidise
(B) this electrode potential is assumed to be zero
(C) hydrogen atom has only one electron
(D) hydrogen is the lighest element

60. Which of the following is an aromatic compound?

(A)   (B)   (C)   (D)

61. The IUPAC name of the given compound.

is -
(A) 2-Bromo-4-carbamoyl-5-chloroformyl-3-formylhexanoic acid
(B) 5-Bromo-3-carbamoyl-2-chloroformyl-4-formylhexanoic acid
(C) 4-Formyl-2-chloroformyl-5-carbamoyl-5-bromohexanoic acid
(D) 2-Chloroformyl-3-carbamoyl-4-formyl-5-bromohexanoic acid

62. On electrolysis of sodium acetate H_2 gas is evolved at cathode, C_2H_6 is at anode. Then reaction is known as -
    (A) Frankland
    (B) Kolbe
    (C) Clemenson
    (D) wolf-keishner

63. In the reaction $Na(s) + 1/2\ H_2 \rightarrow NaH$
    (A) 'Na' is oxidized & 'H' is reduced
    (B) 'Na' as well as 'H' both undergo reduction
    (C) 'Na' as well as 'H' both undergo oxidation
    (D) 'Na' is reduced & 'H' is oxidised.

64. Boron compounds behave as Lewis acids because of their
    (A) Acidic nature
    (B) Covalent nature
    (C) Electron deficient character
    (D) Ionization property

65. Which of the following will not show aldol condensation?
    (A) acetaldehyde
    (B) propanaldehyde
    (C) benzaldehyde
    (D) trideuteroacetaldehyde

66. Which of the following is the strongest acid?
    (A) HCOOH   (B) CH_3COOH
    (C) $(CH_3)_2 CHCOOH$ (D) $(CH_3)_3 C\ COOH$

67. 214.2 gram of sugar syrup contains 34.2 gram of sugar. Calculate (i) molality of the solution and (ii) mole fraction of the sugar in the syrup –
    (A) 0.355m, 0.0199
    (B) 0.455m, 0.0110
    (C) 0.555m, 0.0099
    (D) None of these

68. Calamine is concentrated by :
    (A) Magnetic Separation
    (B) Froath floatation
    (C) Cynide process
    (D) Gravity separation

69. Tertiary butyl amine is a-
    (A) 1°Amine
    (B) 2°Amine
    (C) 3°Amine
    (D) Quaternary salt

70. Which one of the following alcohol has highest boiling point -
    (A) Methanol
    (B) Ethanol
    (C) Propanol
    (D) Isopropanol

71. Alkyl halide with alcoholic KOH gives –
    (A) Alkane
    (B) Acoholic salt
    (C) Alkene
    (D) Alcohol

72. Which of the following is a disaccharide?
    (A) Lactose
    (B) Starch
    (C) Cellulose
    (D) Glucose

73. Fraction of total volume occupied by atoms in a simple cube is -
    (A) $\pi/2$
    (B) $\sqrt{3}\pi/2$
    (C) $\sqrt{2}\pi/6$
    (D) $\pi/6$

74. Transition metals and their oxides are used in industrial processes as–
    (A) Detergents   (B) Insecticides
    (C) Catalysts   (D) None

75. Which of the following hydrides is not saline hydride?
    (A) CaH_2 (B) BaH_2
    (C) SrH_2 (D) BeH_2

(only the students of PCM stream have to attempt)

76. Find centre of circle $x^2 + y^2 + 4x - 6y - 3 = 0$
    (A) (2, 3)
    (B) (–2, 3)
    (C) (2, 3)
    (D) (–2, 3)

77. In a group of 65 people, 40 like cricket, 10 like both cricket and tennis. How many like tennis only and not cricket? How many like tennis?
    (A) 25
    (B) 55
    (C) 35
    (D) None

78. Find the coordinates of the focus of parabola: $y^2 = 10x$
    (A) (0, 5/2)
    (B) (−5/2, 0)
    (C) (0, −5/2)
    (D) (5/2, 0)

79. What is period of Sin function :
    (A) 2π
    (B) π
    (C) 2π
    (D) π

80. The inequality n! > 2(n-1) is true
    (A) for no n €N
    (B) for all n € N
    (C) for all n > 1
    (D) for all n > 2

81. Find the real numbers x and y if (x – iy) (3 + 5i) is the conjugate of –6 – 24i.
    (A) X=3, y=3
    (B) X=3, y=2
    (C) X=2, y=3
    (D) X=3, y=3

82. If a, b are roots of the equation $2x^2 - 35x + 2 = 0$, then the value of $(2a – 35)^3 \cdot (2b – 35)^3$ is equal to
    (A) 1   (B) 8
    (C) 64   (D) None of these

83. The marks scored by Gajraj in two tests were 65 and 70. Find the minimum marks he should score in the third test to have an average of atleast 65 marks.
    (A) 75   (B) 70
    (C) 65   (D) 60

84. A person wants to leave station B. There are three routes from station B to A and four routes from B to C. In how many ways he can leave the station B.
    (A) 7
    (B) 11
    (C) 1
    (D) 12

85. The two consecutive terms in the expansion of $(3+2x)^{74}$ whose coefficients are equal is
    (A) 31th and 32st term terms
    (B) 29th and 30th terms
    (C) 30st and 31nd terms
    (D) 28th and 29th terms

86. Let the positive numbers a, b, c, d be in A.P. Then abc, abd, acd, bcd are in
    (A) A.P.
    (B) G.P.
    (C) H.P.
    (D) None of these

87. Find the distance between the points (–3, 7, 2) and (2, 4, –1)
    (A) $\sqrt{42}$
    (B) $\sqrt{19}$
    (C) $\sqrt{34}$
    (D) $\sqrt{43}$

88. Find a point on the x-axis, which is equidistant from the points (7, 6) and (3, 4).
    (A) (0,7/2)
    (B) (0,15/2)
    (C) (7/2,0)
    (D) (15/2,0)

89. Calculate the derivative of : 3cot x + 5cosec x, at x = $3\pi/2$
    (A) 0
    (B) −3
    (C) 1
    (D) −1

90. A batsman scores runs in 10 innings 38, 70, 48, 34, 42, 55, 63, 46, 54, 44, then the mean deviation from median
    (A) 8.6
    (B) 6.4
    (C) 10.6
    (D) 9.6

91. Two balls are drawn at random with replacement from a box containing 10 black and 8 red balls. Find the probability that both balls are red
    (A) 1/81
    (B) 16/19
    (C) 16/81
    (D) 16/91

92. The rate of change of the area of a circle with respect to its radius r at r = 6 cm is
    (A) 6π
    (B) 21π
    (C) 12π
    (D) π

93. The area of the region bounded by y = |x − 1| and y = 1 is
    (A) 1/2
    (B) 1
    (C) 2
    (D) None of these

94. If x, y, z are positive and none of them is 1, then the value of the following determinant is

$$\begin{vmatrix} 1 & \log_x y & \log_x z \\ \log_y x & 1 & \log_y z \\ \log_z x & \log_z y & 1 \end{vmatrix}$$

is

(A) 1   (B) 0   (C) 2   (D) –2

95. General solution of the differential equation: y logy dx − xdy=0
    (A) $y=e^{Cx}$
    (B) $y=2e^{Cx}$
    (C) $2y=e^{Cx}$
    (D) none of these

96.
$$\int \frac{\sin x}{\sin(x-a)}\, dx$$

    (A) x sin a + cos a ln | sin (x − a) | + C
    (B) x cos a + cos a ln | sin (x − a) | + C
    (C) x sin a + cos a ln | cos (x − a) | + C
    (D) x cos a + sin a ln | sin (x − a) | + C

97. Evaluate
$$\int_0^3 |5x - 9|\, dx$$

    (A) 9/2   (B) 7/2
    (C) 15/2   (D) 3/2

98. The length of the major axis of the ellipse $\dfrac{x^2}{a^2}+\dfrac{y^2}{b^2}=1$ is three times the length of minor axis, it eccentricity is
    (A) $1/\sqrt{3}$
    (B) $1/\sqrt{2}$
    (C) $2\sqrt{2}/3$
    (D) $2\sqrt{2}/5$

99. The focal length of the hyperbola $x^2 - 3y^2 - 4x - 6y - 11 = 0$, is
    (A) 4
    (B) 5
    (C) 7
    (D) 8

100. Which of the following is not a statement?
    (A) Every set is a finite set
    (B) 8 is less than 6
    (C) Where are you going?
    (D) The sum of interior angles of a triangle is 180 degrees

(only the students of PCB stream have to attempt)

76. Difference between dicot and monocot root can be marked on the basis of
    (A) Root hair   (B) Epidermis
    (C) Pith   (D) Protoxylem

77. Which of the following animal is cold blooded and has four chambered beart?
    (A) Salamandra   (B) Ornithorhynchus
    (C) Calotes   (D) Crocodile

78. Which of the following group of fungi belong to single class?
    (A) Cup fungi, rust fungi and smut fungi
    (B) Colletotrichum, Alternaria and Trichoderma
    (C) Ustilago, Agaricus, Claviceps
    (D) Phytophthora, Albugo, Neurospora

79. If recombinant DNA is inserted within the doding sequence of enzyme galactosidase, which of the following will occur in case of non-recombinants?
    (A) Insertional inactivation
    (B) Colonies do not produce any colour
    (C) Chromogenic substrate gives blue colour
    (D) Inactivation of enzyme galactosidase

80. Today, transgenic models exist for many human diseases which includes
    A. Cancer
    B. Cystic fibrosis
    C. Rheumatoid arthritis
    D. Alzheimer's disease
    (A) A and B only
    (B) A, B and C only
    (C) A and C only
    (D) All of these

81. Emphysema is characterised by destruction of alveolar area leading to reduction in respiratory surface and one reason for this is
    (A) Cigarette smoking
    (B) Heavy exercise
    (C) Wine consumption
    (D) Drug addiction

82. Select the incorrect match w.r.t. function
    (A) Tonoplast –   Transport of ions
    (B) Mitochondria – Generation of adenosine triphosphate
    (C) Golgi apparatus–Storage of starch and glycoproteins
    (D) Plasma membrane – Secretion

83. During cytokinesis in plant cells
    (A) Organelles get distributed between the two daughter cells
    (B) Wall formation starts near mother cell wall
    (C) Appearance of furrow in the plasma membrane
    (D) Both (B) & (C)

84. Which of the following is an age related disorder characterized by decreased bone mass and increased chances of fractures. Decreased levels of estrogen is a common cause for this disorder
    (A) Myasthenia gravis
    (B) Muscular dystrophy
    (C) Osteoporosis
    (D) Osteoarthrits

85. Epiglottis is a cartilaginous flap which prevents the entry of food into
    (A) Internal nostrils/nares
    (B) Gullet
    (C) Glottis
    (D) Gastro-oesophageal sphincter

86. Which one is not a characteristic of artificial ecosystem?
    (A) Self regulatory mechanism
    (B) Have little diversity
    (C) Simple food chain
    (D) High productivity

87. When a quick immune response is required due to infection of a deadly microbe, the patient is injected with
    (A) Protein of pathogen
    (B) Inactivated or weakened pathogen
    (C) Vaccine
    (D) Performed antibodies

88. Tasmanian wolf is marsupial while wolf is a placental mammal. This shows
    (A) Convergent evolution
    (B) Divergent evolution
    (C) Speciation
    (D) Inheritance of acquired characters

89. Electrical excitation in a muscle fibre directly causes
    (A) Movement of tropomyosin
    (B) Attachement of the cross bridges to actin
    (C) Release of Ca^{+2} from sarcoplasmic reticulum
    (D) Splitting of ATP

90. Enzyme which is not involved in the process of central dogma
    (A) DNA polymerage
    (B) RNA polymerase
    (C) Peptidyltransferase
    (D) Reverse transcriptase

91. Epipetalous condition is a characteristic of
    (A) China rose family
    (B) Brinjal family
    (C) Lily family
    (D) Mustard family

92. Non-flagellated male gametes are present in all the three of which one of the following sets?
    (A) Pinus, Cycas, Ficus
    (B) Pinus, Ficus, Mango
    (C) Dryopteris, Adiantum, Selaginella
    (D) Funaria, Ulothrix, Spirogyra

93. Commonest free ion in cell
    (A) Potassium
    (B) Calcium
    (C) Magnesium
    (D) Iron

94. Male heterogamety is found in
    (A) Birds
    (B) Drosophila
    (C) Reptiles
    (D) More than one option is correct

95. Which of the following statements are correct w.r.t. ideal contraceptives?
    A. It should be user friendly.
    B. It should be easily available.
    C. It should be effective and reversible with least side effects
    D. It should interfere with the sexual act of the user
    (A) A and B only
    (B) A and C only
    (C) A, B and C only
    (D) All of these

96. Endosperm is completely consumed by the developing embryo in
    (A) Pea, beans and castor
    (B) Beans, maize and rice
    (C) Coconut, castor and wheat
    (D) Groundnut, pea and beans

97. Medicinal use of root of Rauwolfila serpentina
    (A) Against high blood pressure
    (B) Schizophrenia
    (C) Painful bowels
    (D) All of these

98. The body symmetry and coelom are similar in
    (A) Annelids and Arthropods
    (B) Annelids and Platyhelminthes
    (C) Molluscs and Echinoderms
    (D) Annelids and Poriferans

99. In cockroach, wings are absent in –
    (A) Prothorax
    (B) Mesothorax
    (C) Metathorax
    (D) None of these

100. To get quick energy one should use-
    (A) Proteins
    (B) Fats
    (C) Vitamins
    (D) Carbohydrate

Jagran

Roll No.:

Maximum Marks: 180
Maximum Time: 90 (+30) minutes

CLASS
12
SCIENCE

INDIAN INTELLIGENCE TEST

An Innovative Aptitude Test

SEASON 10

Knowledge Partner

AMRITA
VISHWA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT, 1956

Amaravati I Amritapuri I Bengaluru I Chennai
Coimbatore I Faridabad

IDENTIFYING
THE RIGHT CAREER

INSTRUCTIONS FOR CANDIDATE

General Instructions for Candidates
1. Read all instructions carefully. This Question Paper comprises of two sections:
   Section I: Multiple Intelligence Test (40 questions) [20 minutes]
   Section II: Scholastic Aptitude Test (60 questions) [90 minutes]
2. Write Your Roll Number on the box provided above and in OMR Sheet.
3. 10 Min will be provided to fill the OMR Sheet before the start of Exam.
4. Students must fill all the personal details carefully in the OMR Sheet
5. Read all the instruction on OMR sheet as well before start of exam.

Instructions for Section I
1. Students will be allocated maximum of 20 min to complete this section.
2. Questions in Section I do not carry any marks.
3. Answering all questions in Section I is compulsory.
4. You need to answer all the question in this section, truthfully based on your preference. fake responses will lead to misinterpretation of your intelligence type.
5. Multiple Intelligence Report shall be provided on the basis of Section I.

Instructions for Section II
1. Students will be allocated maximum of 90 min to complete this section.
2. Question in Section II carry 3 Marks Each.
3. Answering all questions is not compulsory in Section II.
4. For each correct answer student will be awarded 3 marks and for each incorrect answers, 1 mark would be deducted.
5. For unanswered questions, no mark would be awarded or deducted.
6. Rank will be provided on the basis of Section II.
7. Use of calculator, mobile phones or log tables is not permitted.
8. There is only ONE correct answer. Choose only ONE option for an answer.
9. Fill the required details clearly on Answer (OMR) Sheet & do not overwrite.
10. Rough work should be done in the blank space provided on the last page.
11. Return both Answer & Question sheet to the invigilator at the end of the exam.
12. Any use of unfair means in the test will result in termination of the candidate.

Instructions for filling OMR Sheet
1. Fill the OMR sheet using HB Pencil only.
2. To mark your choice of answers, Darken the circles completely in the Answer (OMR) Sheet corresponding to the question you are answering.
3. Darken only one circle, and keep rest of the sheet clean.
4. In case if wrong circle is darkened, completely erase the markings.
5. Ensure all personal details are filled in OMR Sheet before starting the exam.

| SECTION-II | Que.- 60 |

APTITUDE TEST

▸ **LOGICAL REASONING**   ▸ **GENERAL KNOWLEDGE**   ▸ **PHYSICS**

▸ **CHEMISTRY**   ▸ **MATHEMATICS/ BIOLOGY**

MULTIPLE INTELLIGENCE TEST

Section-I: Multiple Intelligence Test

Directions : (1 to 35) These are general statements. You have to mark options A, B, C or D in the OMR sheet as per your preference.

  A = Mostly Disagree

    B = Slightly Disagree

    C = Slightly Agree

    D = Mostly Agree

1. I enjoy word games like Scrabble and crossword puzzles.
2. I can easily add numbers in my head.
3. People say I have a good singing voice.
4. I like to listen to someone read a story aloud.
5. I like to spend time alone.
6. I use my hands a lot when talking or describing something.
7. I prefer books that have lots of pictures.
8. The best thing about school is getting to be with my friends all day.
9. I know a song after hearing it only once or twice.
10. I enjoy doing experiments.
11. It's easy for me to write 150 words or more for an essay.
12. I enjoy board games such as chess or checkers.
13. I study better if music is playing.
14. I like to act things out.
15. I enjoy making things with clay or play dough.
16. I have more than one favorite teacher.
17. I like school activities to follow the same order each day.
18. I listen to music on radio, cassettes, or CD's often.
19. I doodle or draw often during class.

20. Reading charts, maps, and graphs is easy.
21. I know what I want to be when I grow up and what I need to do to become it.
22. I have a secret place.
23. English and Social Studies are my best subjects.
24. I automatically tap my feet or hands along with music.
25. It's easy for me to remember names.
26. My friends ask me to help them with their prob lems.
27. I like to watch TV or movies.
28. I love to run, jump, or dance.
29. Math and Science are my best subjects.
30. I like to play games with other people.
31. I like art activities.
32. I have 2 or more "best" friends.
33. Adults say I'm stubborn or strong-willed.
34. It's hard to sit still for long periods of time.
35. I like to do my work alone.

Directions : (36 to 40) These are general statements. You have to mark options A, B, C or D in the OMR sheet as per your preference.

    A = Very Frequently

    B = Occasionally

    C = Rarely

    D = Very Rarely

36. I use computer.
37. I use internet for studies.
38. I play games on computer.
39. I watch movies on computer.
40. I wish to use computers for overall knowledge enhancement.

1. Direction: Study the following arrangement carefully and answer the question given below:

H B 8 $ W E 7 * 5 C © Z 2 Q A @ 6 T # 3 J 1 F K 9 I % D 4 P

Which of the following will be 8th to the right of the 15th element from the left end?

(A) *

(B) F

(C) A

(D) J

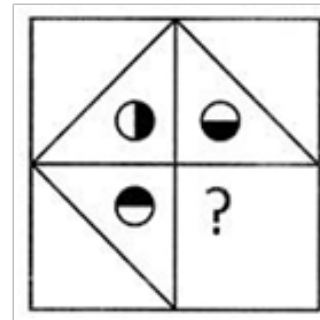2. In the following question find out the alternative which will replace the question mark.

Urge : Disgust :: Exterminate : ?

(A) Trickery

(B) Help

(C) Create

(D) Similarity

3. A 260 metres long train runs at a speed of 55 km / h. How much time will it take to cross a platform to 90 metres long?

(A) 30 Seconds

(B) 36 Seconds

(C) 33 Seconds

(D) 40 Seconds

4. Directions: In each of the following questions, one problem figure is given. This is followed by four answer figures, in problem some blank is left which is shown by question mark in answer figures there is only one figure which is placed in lace of question mark, it will complete pattern. Find the figure which completes the pattern. Which one of the alternative figures will complete the figure pattern?
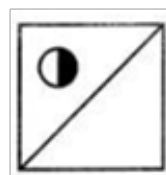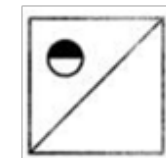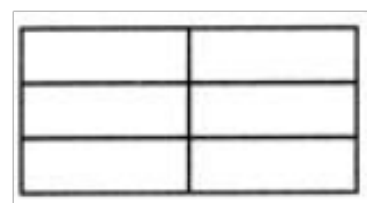

(A)
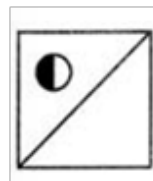
(B)
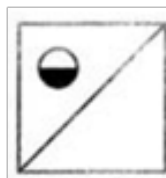
(C)

(D)

5. What is the number of rectangles in the figure given below?

(A) 12

(B) 11

(C) 13

(D) 14

6. Directions: In each of the following questions below, a statement is given followed by two conclusions numbered I and II. You have to decide which alternative among the given options follow from the given statement.

Statements: Domestic demand has been increasing faster than the production of indigenous crude oil.

Conclusions: I. Crude oil must be imported.

II. Domestic demand should be reduced.

A) Only conclusion I follows

B) Only conclusion II follows

C) Either I or II follows

D) Neither I nor II follows

7. In the following diagram, parallelogram represents women, triangle represents sub-inspectors of police and circle represents graduate. Which numbered area represents women graduate sub-inspectors of police

(A) 5

(B) 3

(C) 8

(D) 13
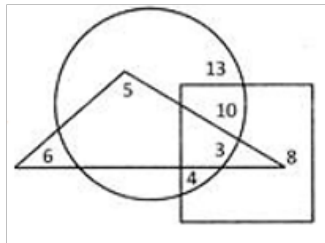
8. Statements:Some digits are vowels.

Some seeds are vowels.

All elements are digits.

Conclusions: I Some elements are vowels.

II All digits are elements.

IIISome elements are seeds.

IV Some seeds are digits.

(A)Only III and IV follow

(B)Only either I or IV follow

(C)Only II follow

(D)None follows

9. I am facing South, I turn right and walk 20 m. Then I turn right again and walk 10 m. Then I turn left and walk 10 m and then turning right walk 20 m. Then I turn right again and walk 60 m. In which direction am I from the starting point?

(A) North

(B) North-west

(C) East

(D) North-west

10. Pointing to a woman, Naman said, She is the daughter of the only child of my grandmother.? How is the woman related to Naman?

(A) Sister

(B) Niece

(C) Cousin

(D) Data inadequate

11. Direction: Read the formation carefully and answer the questions based on it. Six persons are sitting in a circle. A is facing B. B is to the right of E and left of C. C is to the left of D. F is to the right of A. Now, D exchanges his seat with F and E with B. Who will be sitting to the left of C?

(A) E

(B) F

(C) A

(D) B

12. Direction: Read the following statements carefully and answer the question based on it. In a group of five persons A, B, C, D and E.

(i) A and C are intelligent in English and Reasoning.

(ii) B and C are intelligent in English and General Awareness.

(iii) E and D are intelligent in Arithmetic and interview.

(iv) E is intelligent in interview. Reasoning and Arithmetic.

(v) B and D are intelligent in arithmetic and General Awareness?

Who is intelligent in Arithmetic, General Awareness and interview?

(A) A

(B) B

(C) C

(D) D

13. Directions: The two expression on either side of the sign (=) will have the same value if two terms on either side or on the same side are interchanged. The correct terms to be inter-changed have been given as one of the four alternatives under each expressions. Find the correct alternative. Which one of the four interchanges in signs and numbers would make the following equation correct? 6×4+2=16.

(A) + and×, 2 and 4

(B) + and×, 4 and 6

(C) + and×, 2 and 6

(D) None of these

14. In a certain code MATTER is written as TAMRET and FOREST is written as ROFTSE. What will be the code for DOCTOR?

(A) DOCROT

(B) ROTCOD

(C) CODROT

(D) CODTOR

15. If GIVE is coded as 5137 and BAT is coded as 924 how is GATE coded?

(A) 5427   (B) 2547

(C) 5247   (D) 5724

QUESTIONS 16 TO 25: GENERAL KNOWLEDGE

16. What is the name of the bilateral exercise conducted with the UAE Navy?

(A) 'Maritime Synergy'

(B) 'Naval Friendship'

(C) 'Zayed Talwar'

(D) 'Oceanic Unity'

17. Which of the following statements is true about Bharat Net?

(A) Bharat Net is one of the world's largest urban broadband connectivity programs.

(B) Bharat Net is one of the world's largest rural broadband connectivity programs.

(C) Bharat Net is one of the world's largest satellite communication initiatives.

(D) Bharat Net is one of the world's largest social welfare schemes.

18. Who has been honored with the LokmanyaTilak National Award 2023?

(A) Amit Shah

(B) Narendra Modi

(C) Nitin Gadkari

(D) Medha Patkar

19. Which sport did Naorem Roshibina Devi win a silver medal in at the Asian Games 2023?

(A) Shooting

(B) Equestrian

(C) Wushu

(D) Hockey

20. What is the official UNESCO designation for Hoysala temples in Belur, Halebidu, and Somanathapur, Karnataka?

(A) Hoysala Heritage Temples

(B) Temples of Karnataka Excellence

(C) Sacred Ensembles of the Hoysalas in Karnataka

(D) Karnataka's Ancient Temples

21. The old Parliament building in New Delhi officially renamed as……………?

(A) Rajya Sabha Bhavan

(B) Lok Sabha Sadan

(C) Samvidhan Sadan

(D) Old Sansad Sadan

22. When is ' International Ozone Day' celebrated?

(A) 2 October

(B) 31 October

(C) 9 August

(D) 16 September

23. 'Sattriya' is a traditional Hindu classical dance form of which state ?

(A) Manipur

(B) Assam

(C) Goa

(D) Odisha

24. The book ' Delhi is not far' is written by which of the following authors ?

(A) Khushwant Singh

(B) Anita Desai

(C) Arundhati Roy

(D) Ruskin Bond

25. In the context of NITI Aayog, what does ' T' stand for in NITI ?

(A) Travelling   (B) Training

(C) Transforming   (A) Transferring

QUESTIONS 26 TO 35: PHYSICS

26 If the sizes of charged bodies are very small compared to the distances between them, we treat them as _____.

(A) Zero charges

(B) Point charges

(C) Single charge

(D) No charges

27. Choose the correct answer.

This is given by which law?:

(A) Faraday's law

(B) Newton's law

(C) Coulomb's law

(D) Fleming's law

$$F = \frac{k \cdot (q_1 * q_2)}{r^2}$$

28. A surface that has the same electrostatic potential at every point on it is known as _____.

(A) Equal-potential surface

(B) Same potential surface

(C) Equi-magnitude surface

(D) Equipotential surface

29. The resistivity of certain metals or alloys drops to zero when they are cooled below a certain temperature, this phenomenon is known as _____.

(A) Conductivity

(B) Partial conductivity

(C) Superconductivity

(D) Non-conductivity

30. When the charged particles move in a combined magnetic and electric field, then the force acting is known as _____.

(A) Centripetal force

(B) Centrifugal force

(C) Lorentz force

(D) Orbital force

31. The magnetic dipole moment of a magnetic dipole is given by the formula _____.

(A) M = m × 2I   (B) M = m + 2I

(C) M = m – 2I   (D) M = m / 2I

32. The significant result deduced from Rutherford's scattering experiment is that

(A) the whole of the positive charge is concentrated at the centre of an atom

(B) there are neutrons inside the nucleus

(C) α-particles are hydrogen nuclei

(D) electrons are embedded in the atom

33. A convex lens is dipped in a liquid whose refractive index is equal to the refractive index of the lens. Then what is its focal length?

(A) Focal Length will become zero

(B) Focal Length will become infinite

(C) Focal length will reduce, but not become zero

(D) Remains unchanged

34. When is the current in a circuit wattless?

(A) When the inductance of the circuit is zero.

(B) When the resistance of the circuit is zero.

(C) When the current is alternating.

(D) When both resistance and inductance are zero.

35.What happens to the satellite speed when the height of the satellite orbit gets lower?

(A) Increases

(B) Decreases

(C) Remains same

(D) Both (a) and (b)

QUESTIONS 36 TO 45: CHEMISTRY

36. _____ _ obeys Raoult's law in all stages of concentration.

(A) Ideal Solution

(B) Non-Ideal solution

(C) Real Solution

(D) None of the mentioned

37. While heating one end of a metal plate, the other end gets hot because of

(A) The resistance of the metal

(B) Mobility of atoms in the metal

(C) Energized electrons moving to the other end

(D) Minor perturbation in the energy of atoms.

38. A first order reaction has a rate constant $1.15 \times 10^{-3} s^{-1}$. Time taken for 5 g of this reactant to reduce to 3 g is

(A) 444 s   (B) 400 s

(C) 528 s   (D) 669 s

39. 8.A plot is shown below between concentration and time t. Which of the given orders is indicated by the graph-?

(A) Zero Order

(B) Second Order

(C) First Order

(D) Fractional Order
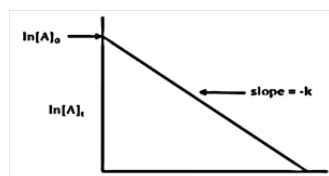
40. Lanthanoid contraction is due to an increase in

(A) Atomic number

(B) Effective nuclear charge

(C) Atomic radius

(D) Valence electrons

41. The diamagnetic species is

(A) $[Ni(CN)4]2-$

(B) $[NiCl4]2-$

(C) $[CuCl4]2-$

(D) $[CoF6]3-$

42. The conversion of benzene diazonium chloride to bromobenzene can be accomplished by

(A) Reimer-Tiemann reaction

(B) Friedel-Crafts reaction

(C) Gattermann reaction

(D) Azo-Coupling reaction

43. Nucleotides are joined together by

(A) Glycosidic linkage

(B) Peptide linkage

(C) Hydrogen bonding

(D) Phosphodiester linkage

44. The main difference between C – X bond of a haloalkane and a haloarene is-

(A) C – X bond in haloalkanes is shorter than haloarenes

(B) In haloalkanes the C attached to halogen in C – X bond is sp3 hybridised while in haloarenes it is sp2 hybridised.

(C) C – X bond in haloalkanes acquires a double bond character due to higher electronegativity of X than haloarenes.

(D) haloalkanes are less reactive than haloarenes due to difficulty in C – X cleavage in haloalkanes.

45. The IUPAC name of the given compoundis –
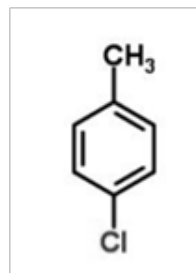
(A) Methylchlorobenzene

(B) Toluene

(C) 1-Chloro-4-methylbenzene

(D) 1-Methyl-4-chlorobenzene

QUESTIONS 46 TO 60 : MATHEMATICS

(only the students of PCM stream have to attempt)

46. If set A contains 5 elements and the set B contains 6 elements, then the number of one-one and onto mappings from A to B is-

(A) 720   (B) 120

(C) 0   (D) None of these

47. Let $f : [2, \infty) \rightarrow R$ be the function defined by $f(x) = x^2 - 4x + 5$, then the range of f is

(A) R   (B) $[1, \infty)$

(C) $[4, \infty)$ (D) $[5, \infty)$

48. The principal value of $\tan^{-1}(\tan 3\pi/5)$ is

(A) $2\pi/5$ (B) $-2\pi/5$

(C) $3\pi/5$ (D) $-3\pi/5$

49. If A = [aij] is a square matrix of order 2 such that $a_{ij} = 1$, when $i \neq j$ and $a_{ij} = 0$, when $i = j$, then A2 is-

(a) $\begin{bmatrix} 1 & 0 \\ 1 & 0 \end{bmatrix}$ (b) $\begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 1 & 1 \\ 1 & 0 \end{bmatrix}$ (d) $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

(A) a   (B) b

(C) c   (D) d

50. Value of k, for which $A = \begin{bmatrix} k & 8 \\ 4 & 2k \end{bmatrix}$ is a singular matrix is

(A) 4   (B) -4

(C) ±4   (D) 0

51. The value of c in Rolle's theorem for the function, $f(x) = \sin 2x$ in $[0, \pi/2]$ is

(A) $\pi/4$

(B) $\pi/6$

(C) $\pi/2$

(D) $\pi/3$

52. The equation of the normal to the curve $y = \sin x$ at (0, 0) is

(A) x = 0

(B) y = 0

(C) x+y =0

(D) x-y =0

53. Integrate $\int_0^2 (x^2+x+1) dx$-

(A) 15/2   (B) 20/5

(C) 20/3   (D) 3/20

54. If ∫ sec²(7 − 4x)dx = a tan (7 − 4x) + C, then value of a is.

(A) -4

(B) -1/4

(C) 3

(D) 7

55. The number of arbitrary constants in the particular solution of a differential equation of third order is:

(A) 3

(B) 2

(C) 1

(D) 0

56. Let the positive numbers a, b, c, d be in A.P. Then abc, abd, acd, bcd are in

(A) A.P.

(B) G.P.

(C) H.P.

(D) None of these

57. Solution of differential equation x.dy − y.dx = Q represents:

(A) A rectangular hyperbola

(B) Parabola whose vertex is at the origin

(C) Straight line passing through the origin

(D) A circle whose centre is at the origin

58. A point from a vector starts is called _____ and where it ends is called its _____.

(A) Terminal point, endpoint.

(B) Initial point, terminal point

(C) Origin, endpoint

(D) Initial point, endpoint

59. The scalar product of 5i + j − 3k and 3i − 4j + 7k is:

(A) 15

(B) −15

(C) 10

(D) −10

60. The direction ratios of the normal to the plane 7x + 4y − 2z + 5 = 0 are:

(A) 7, 4,-2

(B) 7, 4, 5

(C) 7, 4, 2

(D) 4, -2, 5

QUESTIONS 46 TO 60 : BIOLOGY

(only the students of PCB stream have to attempt)

46. _____ refers to an asexual reproduction process wherein genetically identical copies of individual plants are produced

(A) Layering

(B) Binary fission

(C) Clonal Propagation

(D) None of the above

47.The fusion of female reproductive nucleus with the male reproductive nucleus is known as-

(A) Adoption

(B) Excretion

(C) Fertilization

(D) Regeneration

48.The _____ is a temporary organ that connects a mammalian mother to its foetus.

(A) Placenta

(B) Chorion

(C) Endometrium

(D) None of the above

49. A man marries a woman and both do not show any apparent traits of inherited disease. Five sons and two daughters are born, and three of their sons suffer from a disease. However, none of the daughters is affected. The following mode of inheritance for the disease is

(A) Sex-linked recessive

(B) Sex-linked dominant

(C) Autosomal dominant

(D) None of the above

50. Select the incorrectly matched pairs-

(A) Purines – Nitrogenous bases cytosine, thymine and uracil

(B) Recombinant DNA – DNA formed by joining the DNA segments from two different sources

(C) rRNA – RNA found in ribosomes

(D) ATP – The energy-carrying compound in the cell

51. The experiment that simulated conditions thought to be present on the early earth

(A) Hershey–Chase experiment

(B) Geiger–Marsden experiment

(C) Miller–Urey experiment

(D) Schiehallion experiment

52. The _____ is at its largest in children, but with the onset of puberty, it eventually shrinks and gets replaced by fat.

(A) Thymus

(C) Hypothalamus

(C) Parathyroid gland

(D) None of the above

53. Elephantiasis is caused by _____.

(A) Filarial worms

(B) Flatworms

(C) Tapeworms

(D) None of the above

54. Which of the following are classified as a benthopelagic fish?

(A) Stargazer

(B) Tuna

(C) Great white shark

(D) None of the above

55. The process of protoplast isolation was first carried out by _____

(A) Henshel

(B) Bergman

(C) Klercker

(D) None of the above

56. Plasmids are used as cloning vectors for which of the following reasons?w

(A) Can be multiplied in culture

(B) Self-replication in bacterial cells

(C) Can be multiplied in laboratories with the help of enzymes

(D) Replicate freely outside bacterial cells

57. Which bacterium is used in the production of insulin by genetic engineering?

(A) Saccharomyces

(B) Rhizobium

(C) Escherichia

(D) Mycobacterium

58. _____ is an example of an ex-situ conservation.

(A) Sacred groves

(B) Wildlife sanctuary

(C) Seed bank

(D) National park

59. _____ occurs when the death of the last individual in a species occurs.

(A) Adaptation

(B) Phylogenic diversity

(C) Speciation

(D) Extinction

60. Eggshells of birds become unusually thin when exposed to the pesticides in their environment. The protein that gets affected is _____

(A) Calmodulin

(B) Cysteine

(C) Serine   (D) None of the above

ROUGH WORK