KCS Educate Team Avnish
for JEE | Aptitude Test
...revives internal teacher | NTSE | KVPY | Olympiad
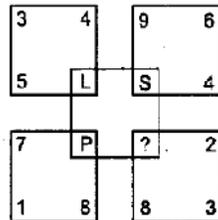Knowledge Centre for Success Educate Pvt. Ltd.

NTSE 2014-15
(STAGE-I, C.G.)

MENTAL ABILITY

1. Find the next number in the sequence 0, 2, 24, 252, _____.
   (A) 620 (B) 1040 (C) 3120 (D) 5430

2. Find the next number in the sequence 0, 6, 24, 60, 120, _____.
   (A) 180 (B) 210 (C) 240 (D) 360

3. Find the letter to be placed in place of '?' in the given figure.

   (A) M (B) N (C) Q (D) R

4. Find the appropriate number for the blank space 2, 10, 26, _____, 242
   (A) 80 (B) 81 (C) 82 (D) 84

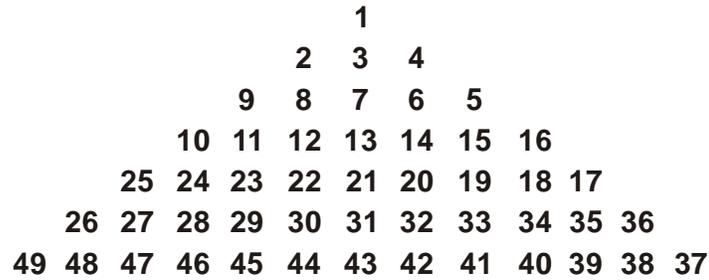**Directions (Q. No 5 to 7):** Find the missing term in each of the following questions.

5.

6. $\dfrac{E}{I} : \dfrac{8}{4} :: \dfrac{J}{N} : ?$

   (A) $\dfrac{13}{9}$ (B) $\dfrac{14}{9}$ (C) $\dfrac{13}{7}$ (D) $\dfrac{17}{9}$

7. A, D, I, P, ?
   (A) W (B) X (C) V (D) Y

Directions (Q. No. 8 to 9): If A = 1, B = 2, C = 3, ……, Z = 26 then

8. Find the group of letters which makes the least total among the altermative.
   (A) DKA (B) FHY (C) ODX (D) VTM

9. Find the group of letters which make the highest total among alternatives.
   (A) PLOT (B) PLAN (C) PLAY (D) PLUS

10. If A = 26, SUN = 27 then CAT = ?
    (A) 24 (B) 27 (C) 57 (D) 58

Directions (Q. No. 11 to 15): The following questions are based on arrangement of numbers in the form of pyramid. In each question there is some relationship between the two numbers on the left of the (: :). The same relationship exists between the two terms in the right, of which one is missing. Find the missing term from the given alternatives.

```
                    1
                 2  3  4
              9  8  7  6  5
          10 11 12 13 14 15 16
       25 24 23 22 21 20 19 18 17
       26 27 28 29 30 31 32 33 34 35 36
    49 48 47 46 45 44 43 42 41 40 39 38 37
```

11. 132220 : 211412 : : 222931 : (?)

(A) 304345   (B) 302123   (C) 442931   (D) 312022

12. 2 8 7 3 : 13 21 20 14 : : 10 24 23 11 : (?)

(A) 29 28 24 23   (B) 28 27 47 46   (C) 25 27 28 24   (D) 29 45 44 30

13. 241214 : 752119 : : 14163234 : (?)

(A) 19174139   (B) 20184240   (C) 21194341   (D) 20224244

14. 25 22 44 47 : 23 20 42 45 : : 11 14 32 29 : (?)

(A) 13 16 34 31   (B) 24 21 43 41   (C) 24 21 43 46   (D) 13 10 24 21

15. 82224 : 133133 : : 62022 : (?)

(A) 91221   (B) 81312   (C) 153335   (D) 51921

16. Which of the given alternative is the mirror image of REASON if the mirror is placed below the word.

(A) ᴚEƆSON   (B) ᴚEASON   (C) ᴚEASON   (D) ᴚEASON

17. What is the mirror image of **b3k4S** ?

(A) SᔭᴋƐd   (B) Sᔭᴋ3d   (C) Sᔭᴋ3d   (D) Sᔭᴋ3b

18. If 27 * 3 = 243

  5 * 4 = 80

Then what is the value of 3 * 7

(A) 84   (B) 147   (C) 63   (D) 23

Directions (Q. No. 19 to 20): Arrange the following words in the alphabetical order of English dictionary and identify the one that comes in the middle.

19. (1) Dialogue   (2) Diabetic   (3) Diagonal   (4) Diaphragm   (5) Dialect

(A) 2   (B) 3   (C) 4   (D) 6

20. (1) General   (2) Gesture   (3) Gental   (4) Genuine   (5) Generous

(A) 2   (B) 3   (C) 4   (D) 5

Directions (Q. No. 21 to 23): The following questions are based on the given matrix. The value of each letter is the product of its row and column number. Eg. the value of M is 2 × 3 = 6.

	0	1	2	3	4
0	B	O	J	C	P
1	E	N	H	I	D
2	G	R	A	M	V
3	F	S	T	L	Z
4	W	X	Y	U	K

21. Find the group of letters which make the least total among the alternatives.
    (A) DKA   (B) FHY   (C) ODX   (D) VTM
22. What is the total of GREAT?
    (A) 8   (B) 10   (C) 12   (D) 14
23. Find the group of letters which make the highest total among the alternatives given.
    (A) PLOT   (B) PLAN   (C) PLAY   (D) PLUS
24. In a certain code language BOARD is written as EQBNC. How will the word CLIMB be written in that language?
    (A) CLJKD   (B) DKJLF   (C) DNHMB   (D) FNJRO
25. A person earns three rupees on the first day. If he earns double every next day, what will be his earning at 10th day.
    (A) Rs. 768   (B) Rs. 1536   (C) Rs. 3072   (D) Rs. 30

Directions (Q. No. 26 to 30): In the following questions the letters in column – I are coded in the form of numbers which are written in column – II, but the order of numerals is different. Study the code of letters and find out the correct answer for each question from given alternatives

Column – I	Column – II
LEG	432
MNG	358
ENL	248
LGS	734

26. What is the code of LSG?
    (A) 743   (B) 438   (C) 473   (D) 347
27. What is the code of the word NLEM?
    (A) 4832   (B) 8425   (C) 8437   (D) 2534
28. What is the code of word MSN?
    (A) 578   (B) 634   (C) 583   (D) 235
29. What is the code of the word LEM ?
    (A) 328   (B) 625   (C) 524   (D) 425
30. Code for word GEN will be?
    (A) 435   (B) 642   (C) 328   (D) 825
31. There are deers and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there?
    (A) 20   (B) 30   (C) 60   (D) 50

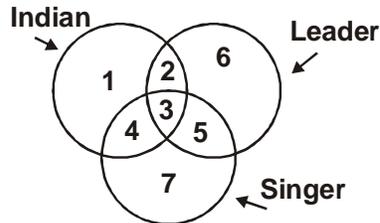**Directions (Q. No. 32 to 35):** The questions are based on the following information.
Five students P, Q, R, S and T study in a class. Of these
(i) P and Q study physics and chemistry
(ii) R and Q study physics and mathematics
(iii) S and P study biology and chemistry
(iv) T and Q study anthropology and civics
(v) T and S study chemistry and mathematics

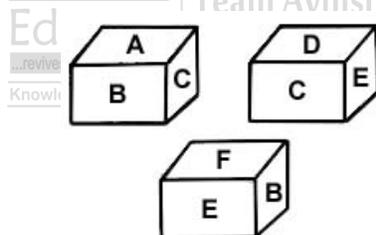32. Who among the students studies maximum number of subjects?
    (A) T   (B) S   (C) Q   (D) P

33. Who among the students studies minimum number of subjects?

(A) T (B) S (C) P (D) R

34. Who among the students studies only four subjects?

(A) R (B) T (C) S (D) P

35. Which of the following pair studies chemistry and civics?

(A) P and S (B) Q and R (C) Q and T (D) R and S

Directions (Q. No. 36 to 40): Study the following figure carefully and answer the given questions

36. Which region represents Indian leaders who are not singers?

(A) 2 (B) 3 (C) 4 (D) 5

37. Which region represents leaders who are neither singers nor Indian?

(A) 2 (B) 3 (C) 6 (D) 7

38. Which region represents Indian singers who are not leaders?

(A) 1 (B) 2 (C) 3 (D) 4

39. Which region represents Indian leaders who are singer?

(A) 2 (B) 3 (C) 4 (D) 5

40. Which region represents Singers who are neither Indian nor leaders?

(A) 2 (B) 4 (C) 6 (D) 7

41. The six faces of a dice have been marked with A, B, C, D, E and F respectively. The three positions of it are shown below-

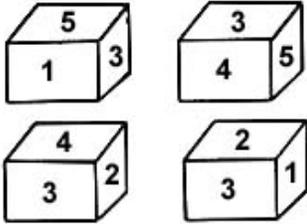Find the alphabet opposite to A?

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

Directions (Q. No. 42 to 43): Four positions of a dice are given below.

42.

What number is opposite to 3?

(A) 2 (B) 3 (C) 4 (D) 6

43.

Which number is opposite to 4?

(A) 6   (B) 5   (C) 2   (D) 1

Directions (Q. No. 44 to 45): Five books are placed on the table. Hindi book is placed above the English book and the Mathematics book is placed below the Science book. English book is above the Science book and Drawing book is below the Mathematics book.

44. The book between Hindi and Science book is

(A) Drawing   (B) Mathematics   (C) English   (D) None of these

45. Which book is at the bottom?

(A) Hindi   (B) Drawing   (C) Mathematics   (D) Science
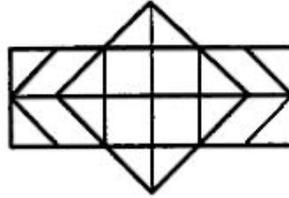
46. At 12 o'clock minute hand points east. At 4:30, in which direction the hour hand will point?

(A) North – East   (B) South – East   (C) South   (D) South – West

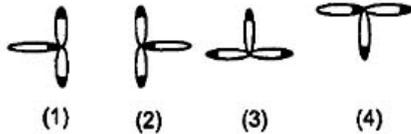**47.** What will be the number of hexagons in the given figure?

(A) 2   (B) 4   (C) 5   (D) 6

Directions (Q. No. 48 to 50): In each of the following questions four figures are given. One of these figures does not fit with the rest of the figures. Find out the serial number of that figure.
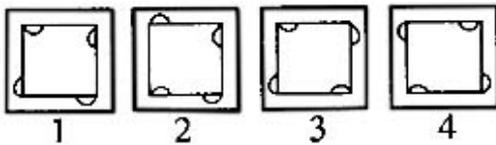
48. Find the odd one out in the pictures given below.

(A) 1   (B) 2   (C) 3   (D) 4
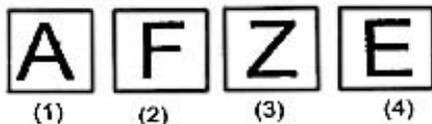
49. Find the odd one out in the pictures given below.

(A) 1   (B) 2   (C) 3   (D) 4

50. Find odd one out in the pictures given below.

(A) 1   (B) 2   (C) 3   (D) 4

LANGUAGE COMPREHENSIVE (LCT)

Instructions for (Q. No. 51-52):

The following five sentences come from a paragraph. The first and last sentence are given. Choose the order in which the three sentences (PQR) should appear to complete the paragraph.

51. S1. Jawaharlal Nehru was born in Allahabad on 14 Nov 1889.

S2. …………………………………………………………………………………………

S3. …………………………………………………………………………………………

S4. …………………………………………………………………………………………

S5. He died on 27 may 1964.

P. Nehru met Mahatma Gandhi in February 1920.

Q. In 1905 he was sent to London to study at a school called Haroow.

R. He became the first Prime Minister of Independent India on 15 August 1947.

Choose from the options below

(A) POR   (B) QPR   (C) PRQ   (D) RQP

52. S1. My tooth began to hurt yesterday.

S2. …………………………………………………………………………………………

S3. …………………………………………………………………………………………

S4. …………………………………………………………………………………………

S5. My tooth felt a lot better.

P. The dentist examined my hurting tooth.

Q. The dentist fixed my tooth.

R. My father took me to the dentist.

Choose from the options below

(A) PQR   (B) QPR   (C) RPQ   (D) PRQ

Instructions for (Q. No. 53-55):

The following questions have the second sentence missing. Choose the appropriate sentence from the given options to complete it:

53. 1. Mannu and his father climbed a boat and went to the other side of the lake.

2. ……………………………………………………………………………………..

3. "I've caught a fish", shouted mannu

(A) They went to the market and searched for good fish for their lunch.

(B) His dad went for fishing and Mannu went to his aunt's house.

(C) Mannu prepared the fishing pole and dropped the line in the water.

(D) Mannu and his father returned home in the evening.

54. 1. The race for which Singh is best remembered is his fourth-place finish in the 400 metres final at the 1960 Olympic Games.

2. ……………………………………………………………………………………………

3. Singh's fourth-place time of 45.73 became the Indian national record and held for almost 40 years.

(A) He was the only Indian male athlete to win an individual athletics gold medal at a Commonwealth Games until Vikas Gowda won the discus gold medal in the 2014.

(B) He was awarded the Padmashree, India's fourth-highesr cicilian honour, in recognition of his sporting achievements.

(C) He led the race till the 200 meters mark before easing off, allowing others to surpass him.

(D) He represented India in the 1956 Summer Olympics in Melbourne, the 1960 Summer Olympics in Rome and the 1964 Summer Olympics in Tokyo.

55. 1. Sage Yajnavalkya decided to divide his property amongst his two wives Maithreyi and Katyaayani as he wished to leave for the forest.

2. ……………………………………………………………………………………………

3. The sage replied that through wealth one can become one amongst the many wealthy but it was knowledge which made one immortal so she declined the property.

(A) Maitreyi took the property and went to the neighbouring country and lived their happily.

(B) Maitreyi and katyaayani declined the property and accompanied the sage to the forest.

(C) Maitreyi asked the sage if she could become immortal through this wealth.

(D) Katyaayani refused to take half of the property and demanded the complete property from the sage.

Instructions for (Q. No. 56-60):

Choose the word which best fills the blank from the four options given below:

56. They always ………… him for his south Indian accent.

(A) pull   (B) tease   (C) chase   (D) angry

57. The bus ……………… is quite high.

(A) fair   (B) charge   (C) fare   (D) cost

58. Our school gardener went to the …………….. to buy a few pots of flowering plants.

(A) orchard   (B) nursery   (C) estate   (D) plantation

59. Make sure you read all the ……………. Carefully before setting up the device.

(A) questions   (B) instructions   (C) bills   (D) orders

60. The students get a monthly …………. Which usually consists of writing a report.

(A) Assignment   (B) Report   (C) Grade   (D) Points

Instructions for (Q. No. 61-65):

Choose the correct meanings for the given idioms/phrases:

61. Lose heart:

(A) Be angry   (B) Be discouraged   (C) Be sad   (D) Be desperate

62. Backstair influence:

(A) Political influence   (B) Secret and unfair influence

(C) Fair and proper influence   (D) Religious influence

63. Blow one's own trumphet:

(A) Praise others   (B) Praise oneself   (C) Flatter   (D) Admonish others

64. Held over:

(A) Stopped   (B) Postponed   (C) Dropped   (D) Cancelled

65. A snake in the grass:

(A) An unexpected misfortune   (B) An unforeseen danger

(C) A treacherous persons   (D) A secret enemy

Instructions for (Q. No. 66-68):

Find out the alternatives which are most opposite in meanings to the words given.

66. Tentative:

(A) Definite   (B) Universal   (C) Preliminary   (D) Outdated

67. Lend:

(A) Pawn   (B) Hire   (C) Borrow   (D) Cheat

68. Shallow:

(A) Deep   (B) Definite   (C) Hollow   (D) Hidden

Instructions for (Q. No. 69-70):

Select most appropriate options to fill in the blank from the following alternatives given below:

69. If I has had enough money, I .... a laptop.

(A) Would buy   (B) Had bought   (C) Would buy   (D) Would have bought

70. .... an Indian ?

(A) Is you   (B) You are   (C) Are you   (D) Do you be

Instructions for (Q. No. 71-72):

Choose the alternative which can be substituted for :

71. Sound of apes:

(A) Moan   (B) Bray   (C) Gibber   (D) Clan

72. Words inscribed on a tomb:

(A) Epilogue   (B) Epitaph   (C) Epitome   (D) Episode

Instructions for (Q. No. 73-80):

In the following passage there are some numbered blanks. Fill in the blanks by selecting the most appropriate word from the options:

Today, fountain pens are often treated as luxury goods .... 73 ...... sometimes as status symbols. Fountain pens may serve as ...... 74 ..... everyday writing instrument, much like the common ballpoint pen. ...... 75 ...... quality steel and gold pens are even available inexpensively today. .... 76 ...... France, in particular, the use of fountain pens is .... 77 ..... spread.

Many users often state that once they start using ...... 78 .... pens, it becomes uncomfortable to use ball point pen due to the ....79....... motor effort needed. In some countries, fountain pens are .... 80 ...... in lower school grades and are believed to teach children better control over writing.

73.	(A) and	(B) by	(C) on	(D) to
74.	(A) an	(B) in	(C) a	(D) and
75.	(A) big	(B) small	(C) good	(D) large
76.	(A) of	(B) at	(C) when	(D) in
77.	(A) well	(B) slow	(C) good	(D) fast
78.	(A) ball point	(B) imported	(C) local	(D) fountain
79.	(A) extra	(B) little	(C) most	(D) few
80.	(A) easily	(B) compulsory	(C) provide	(D) compulsorily

Instructions for (Q. No. 73-80):

Read the passage carefully and choose the most appropriate options from the alternatives given:

William Henry Gateslll (Bill) was born on October 28, 1955, Seattle, Washington. Bill was the second of the three children in an upper-middle class family. He enjoyed playing games and loved to read, Bill became bored in public school so his family sent to Lakeside School, where he excelled in math and science and did well in drama and English.

Gates became interested in computer programming when he was 13. At Lakeside, Bill met Paul Allen, who shared his interest in computers. At age 17, Gates and Allen were paid $ 20,000 for a programme called Traf-O-Data that was used to count traffic.

Bill Gates scored 1590 out 1600 on the SAT and was accepted by Harvard University. Meanwhile, Paul Allen dropped out of Washington College to work on computers at Honeywell Corporation and convinced Gates to drop out of Harvard and join him in starting a new softwere company in Albuquerque, New Mexico. They called it Micro-soft initially and soon changed it to Microsoft, and moved it to Bellevue, Washington.

Microsoft grew quickly from 25 employees in 1978 to over 90,000 today. Over the years, Microsoft developed many new technologies and some of the world's most popular software and products such as Word and Power Point.

Bill Gates was one of the richest men in the world. In 2012, his $ 61 billion dollars in assets made him the world's Second richest man according to Forbes magazine.

81. Which of the sentences is not about Bill Gates?

(A) He was born is Seattle, Washington.　　(B) He was the second of three children.

(C) He enjoyed public school.　　(D) He excelled in math and Science.

82. In what ways were Bill Gates and Paul Allen not alike?

(A) They both went to the same college

(B) They both likes computers

(C) They both went to the same school

(D) They dropped out of the college

83. What is Traf-O-Data?

(A) Programme to count people

(B) Programme for counting traffic

(C) Programme for MS word

(D) Programme for counting money

84. What was the percentage obtained by Gates to get admission in Harvard University?

(A) 98.39   (B) 99.83

(C) 99.38   (D) 93.89

85. The answer to the question, "How rich is Bill Gates?" is given in:

(A) Second paragraph   (B) Third Paragraph

(C) Fourth Paragraph   (D) Fifth Paragraph

Instructions for (Q. No. 86-90):

Read the passage carefully and choose the most appropriate options from the alternatives given:

Potatoes are the fourth on the list of the world's food staples after wheat, com and rice. Americans consume about 140 pounds of potatoes per person every year while Europeans eat twice as many.

On August 24, 1853, at Moon Lake Lodge in Saratoga, New York, a native American chef George Crum created the first potato chips. Once when a diner complained that the French fries were too thick, he got angry and sliced the potatoes as thinly as possible making them too thin and crispy to eat with a fork, The diner loved them and thus potato chips were born. In the United Kingdom and Ireland crisps are what are called potato chips in United States. Chips refer to French fries in United Kingdom and Ireland. About 27 pounds of potato chips are produced from 100 pounds of potatoes. Americans consume 2-4 billion pounds of potato chips every year and spend more than $7 billion a year on them.

86. What are potato chips called in UK?

(A) French fries   (B) Chips

(C) Crisps   (D) Potatoes

87. When and where were potato chips born?

(A) August 14, 1853 in New York   (B) August 24, 1853 in France

(C) August 24, 1853 in New York   (D) August 24, 1883 in France

88. What does the word consume mean in the first paragraph?

(A) Play

(B) Grow

(C) Eat

(D) Store

89. According to the passage how many potatoes do the Europeans consume per person every year?

(A) About 180 pounds

(B) About 242 pounds

(C) About 240 pounds

(D) About 280 pounds

90. One of the phrases is not true about potato chips:

(A) Eaten with fork

(B) Made of potatoes

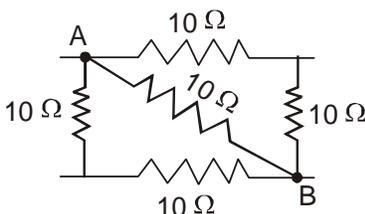(C) Thin and crispy

(D) Called crisps in United Kingdom

ANSWERS

1. (C)	2. (B)	3. (A)	4. (C)	5. (A)
6. (A)	7. (D)	8. (A)	9. (D)	10. (C)
11. (B)	12. (D)	13. (A)	14. (A)	15. (C)
16. (D)	*17. (A)	18. (B)	**19. Bonus	20. (B)
21. (C)	22. (C)	23. (D)	24. (A)	25. (B)
26. (C)	27. (B)	28. (A)	29. (D)	30. (C)
31. (C)	32. (C)	33. (D)	34. (B)	35. (C)
36. (A)	37. (C)	38. (D)	39. (B)	40. (D)
41. (C)	42. (C)	43. (D)	44. (C)	45. (B)
46. (D)	47. (C)	48. (C)	49. (B)	50. (D)
51. (B)	52. (C)	53. (C)	54. (C)	55. (C)
56. (B)	57. (C)	58. (B)	59. (B)	60. (A)
61. (B)	62. (B)	63. (B)	64. (B)	65. (B)
66. (A)	67. (C)	68. (A)	69. (D)	70. (C)
71. (B)	72. (A)	73. (A)	74. (A)	75. (C)
76. (D)	77. (A)	78. (D)	79. (A)	80. (B)
81. (C)	82. (A)	83. (B)	84. (C)	85. (D)
86. (C)	87. (C)	88. (C)	89. (D)	90. (A)

*NOTE – 'k' should be 'K'.

**NOTE – Options are wrong. The correct answer is (5) Dialect

SCHOLASTIC APTITUDE TEST (SAT)

1. Unit of pressure in S.I. system is

(A) Kelvin   (B) Pascal   (C) Newton   (D) Calorie

2. Temperature of an iron block is 140^0F. Its temperature in Celsius scale will be-

(A) 100^oC (B) 60^oC (C) 32^oC (D) 140^oC

3. A drop of water is always spherical due to-

(A) Viscosity   (B) Surface tension

(C) Atmospheric pressure   (D) Gravity

4. Speed of super-sonic Aircraft is-

(A) Below speed of sound   (B) Equal to speed of sound

(C) More than speed of sound   (D) Equal to speed of light

5. The escape velocity from earth is 11 km/sec. The escape velocity from a planet having equal density and double radius of earth is-

(A) 15.56 km/sec   (B) 22 km/sec   (C) 5.5 km/sec   (D) 11 km/sec

6. The resultant resistance between A and B in the following circuit is-

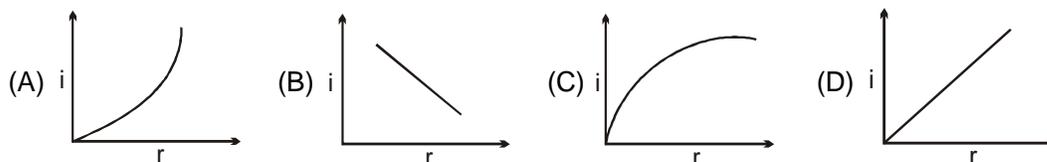(A) $10\,\Omega$ (B) $5\,\Omega$ (C) $20\,\Omega$ (D) $40\,\Omega$

7.

An electron enters a magnetic field at right angle to it as shown in figure. The direction of the force acting on the electron will be

(A) To the right   (B) To the left

(C) Coming out of paper at right angle   (D) Going into the paper at right angle

8. Which of the following correctly represents graphical relation between the angle of incidence I and the angle of reflection r ?

9. Which of the following lenses would you prefer to use while reading small letters found in a dictionary-

(A) Convex lens of focal length 50cm   (B) Concave lens of focal length 50 cm

(C) Convex lens of focal length 5cm   (D) Convex lens of focal length 5cm

---

10. Length of a conducting wire is increased by 100%. The change in the resistance of the wire will be-

(A) 50% (B) 100% (C) 200% (D) 300%

11. Three light bulbs of 40W, 60W and 100W are connected in series with 220 volt source. Which of the bulbs will grow brightest?

(A) 60W (B) 40W (C) 100W (D) All with same brightness

12. The value of gravitational acceleration g at the centre of the earth is-

(A) Infinite (B) 9.8 m/s^2 (C) 32.2 m/s^2 (D) zero

13. Which pair of atomic number represent S-block elements-

(A) 7, 15 (B) 6, 14 (C) 9, 17 (D) 4, 12

14. Valency of carbon in CO_3^{2-} ion is-

(A) 2 (B) 3 (C) 4 (D) 5

15. The electronic configuration of two elements X and Y are given below-

X = 2, 8, 8, 2

Y = 2, 8, 7

The formula of a compound of these two elements is

(A) XY (B) X Y$_2$ (C) X$_2$ Y (D) XY$_3$

16. The main component of Bio gas is-

(A) Methane (B) Benzene (C) Ethylene (D) Ethane

17. Which of the following shows the tyndall effect-

(i) Common salt (ii) milk

(iii) Copper sulphate solution (iv) Starch solution

(A) (i) and (ii) (B) (ii) and (iv) (C) (iii) and (iv) (D) (ii) and (iii)

18. Which one of the following compound will give addition reaction-

(A) CH$_4$ (B) C$_2$H$_6$ (C) C$_2$H$_4$ (D) C$_3$H$_8$

19. Nature of aqueous solution of salt obtained by the reaction of strong acid and strong base is-

(A) Acidic (B) Basic (C) Neutral (D) Amphoteric

20. Which of the following alloy does not contain zinc metal-

(A) Gun metal (B) German silver (C) Brass (D) Bronze

21. The functional group of carboxylic acid is-

(A) –OH (B) –CHO (C) $>\!\!\underset{\|}{\overset{}{C}}$ O (D) $-\underset{\|}{\overset{}{C}}-OH$ O

22. Number of moles in 128 gm of sulphur will be-

(A) 0.5 (B) 2 (C) 4 (D) 8

23. In the end of manufacturing of cement _____ is mixed with the clinkers-

(A) Gypsum powder (B) Magnesium powder

(C) Alumina powder (D) None of the above

24. A group of inter connected food chains is called-

(A) Food cycle   (B) Pyramid of energy

(C) Complex food chain   (D) Food web

25. Which of the following organ is not related with excretion-

(A) Lungs   (B) Pancreas   (C) Liver   (D) Skin

26. Parallel venation is found in which of the following leaves

(A) Lemon   (B) Mango   (C) Grass   (D) Rose

27. Which of the following is not found in the animal cell-

(A) Plastid   (B) Mitochondria   (C) Golgi body   (D) Endoplasmic reticulum

28. Carbon dioxide transports in the blood through-

(A) Red blood cells   (B) Plasma   (C) White blood cells   (D) Platelets

29. Which of the following is not an endocrine gland-

(A) Pituitary gland   (B)Thyroid gland   (C) Liver   (D) Adrenal gland

30. Fibrous connective tissue is-

(A) Tendon and ligament   (B) Blood and lymph

(C) Bone and cartilage   (D) None of the above

31. Which of the following is an example of algae-

(A) Yeast   (B) Spirogyra   (C) Fern   (D) Amoeba

32. Limiting factors for the rate of photosynthesis are-

(A) Oxygen and water   (B) Mineral and salt

(C) Light intensity and temperature   (D) Structure of leaf and stem

33. Earthworm is related to which of the following phylum-

(A) Arthropoda   (B) Annelida   (C) Echinodermeta   (D) Mollusca

34. Rickets is caused by the deficiency of which of the following-

(A) Carbohydrate   (B) Vitamin A   (C) Vitamin D   (D) Protein

35. What will be the ratio of dominant and recessive character inherited in first filial generation of monohybrid cross done by the mendal-

(A) 3 : 1   (B) 1 : 3   (C) 2 : 3   (D) 3 : 2

36. Period of first world war-

(A) 1916 to 1919   (B) 1920 to 1922   (C) 1925 to 1935   (D) 1914 to 1918

37. What does satyagraha mean?

(A) Fight against injustice

(B) Complete independence

(C) Following the path of truth and non-violence

(D) All of the above

38. Who was the khalifa ?

(A) The political leader of the Islamic world   (B) The spiritual head of the Islamic world

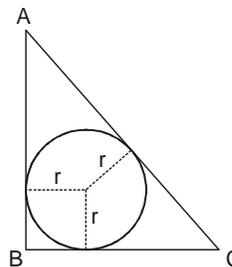(C) The spiritual leader of the whole world   (D) The spiritual leader of the Saudi Arabia

39. The Simon commission was greeted on its arrival in India with a famous slogan-

(A) Come back Simon

(B) Welcome back Simon

(C) Go back Simon

(D) Stay here Simon

40. The place where Jallianwala Bagh incident took place-

(A) Meerut   (B) Jhansi   (C) Delhi   (D) Amritsar

41. Which freedom fighter is known by his newspaper "kesari"?

(A) Rabindranath Tagore

(B) Mukund Das

(C) Lala lajpat Rai

(D) Bal Gangadhar Tilak

42. Azad Hind sena was established in-

(A) II world war

(B) I world war

(C) Indo-China border confict

(D) Bangladesh conflict

43. II battle of Panipat was fought between:

(A) Between Akbar and Hemu

(B) Between Babar and Ibrahim Lodhi

(C) Between Humayun and Bahadurshan

(D) Between Akbar and Rajput

44. Who captured the Peacock Throne of emperor Shah Jahan ?

(A) Timur lung

(B) Nadir Shah

(C) Mahmud Ghajnavi

(D) Dara Shikoh

45. Who built Khajuraho temple?

(A) Solanki dynasty

(B) Parmar dynasty

(C) Chandela dynasty

(D) Chouhan dynasty

46. Name the group of islands of India lying in the Bay of Bengal are,

(A) lakshyadweep

(B) Andman-Nicobar dweep

(C) Maldives

(D) Minicoy dweep

47. Which line of axis divides India into two parts?

(A) The tropic of cancer

(B) The tropic of Capricorn

(C) Equator

(D) Greenwhich line

48. In which of the forests are the trees with conical shaped leaves found ?

(A) Evergreen forest   (B) Coniferous forest   (C) Deciduous forest   (D) Tropical rain forest

49. Which is the largest desert in the world?

(A) Gobi   (B) Kalahari   (C) Pantagonia   (D) Sahara

50. Hirakund Dam is built on the river-

(A) Chambal   (B) Mahanadi   (C) Damodar   (D) Kaveri

51. Shimla is capital of which state-

(A) Himachal Pradesh

(B) Andhra Pradesh

(C) Tamil Nadu

(D) Madhya Pradesh

52. Which of the following term is used to describe trade between two or more countries-

(A) Internal trade

(B) International trade

(C) External trade

(D) Local trade

53. Water availability per person in India is-

(A) Decreasing   (B) Increasing   (C) Stagnant   (D) None of the above

54. Silicon valley is located in-

(A) Banglore   (B) California   (C) Uganda   (D) Ahmedabad

55. Mansoon arrives in India approximately in-

(A) Early may   (B) Early June   (C) Early July   (D) Early August

56. The model of fundamental rights had been taken from-

(A) USA   (B) Ireland   (C) Canada   (D) Great britain

57. In which year were the fundamental duties added to the constitution-

(A) 1966   (B) 1976   (C) 1974   (D) 1978

58. Who appoints the chief election commissioner of India-

(A) Parliament   (B) President   (C) Prime minister   (D) Chief justice

59. How many members are nominated by the president in Lok Sabha ?

(A) 2 members   (B) 3 members   (C) 12 members   (D) 6 members

60. The judges of the supreme court of India retire at the age of-

(A) 60 years   (B) 64 years   (C) 65 years   (D) 70 years

61. Which of the following is not a quality of good citizenship-

(A) Ignorance   (B) Good health   (C) Education   (D) Patriotism

62. How many articles are there in the Indian Constitution?

(A) 195   (B) 295   (C) 395   (D) 495

63. Who holds the power of judicial review in India?

(A) Parliament   (B) Law minister

(C) Supreme court and High court   (D) Only supreme court

64. Which of the following articles of the Indian constitution deals with the directive principles of state policy?

(A) Article 26 to 41   (B) Article 31 to 56   (C) Article 41 to 66   (D) Article 36 to 51

65. "Satyameva Jayate" has been taken from-

(A) Mundak Upnishad   (B) Rigveda

(C) Natya Sutra   (D) None of these

66. Which place does India hold in the world regarding the population?

(A) First   (B) Second   (C) Third   (D) Fourth

67. The duration of first five year plan-

(A) 1955 to 60   (B) 1962 to 67   (C) 1950 to 56   (D) 1951 to 56

68. White revolution means-

(A) Dairy product   (B) Wheat product   (C) Rubber product   (D) Pulse product

69. Agmark and ISI mark shows-

(A) Quality and standard of products   (B) Quantity of the product

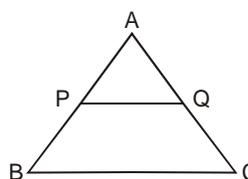(C) Availability of the product   (D) None of these

70. Write the full form of PDS?
    (A) Price distribution system   (B) Plural distribution system
    (C) Public distribution system   (D) Place distribution system

71. Equivalent of $\dfrac{6}{20}$ is-
    (A) 6%   (B) 20%   (C) 26%   (D) 30%

72. How many surfaces in solid cylinder-
    (A) 1   (B) 2   (C) 3   (D) 4

73. The order of any matrix is 3 × 2 then no. of element it are-
    (A) 3   (B) 2   (C) 5   (D) 6

74. If (x – 2) is a factor of polynomial $x^3 + 2x^2 - kx + 10$. Then the value of k will be-
    (A) 10   (B) 13   (C) 16   (D) 9

75. From a pack of playing cards all cards whose numbers are multiple of 3 are removed. A card is now drawn at random. Then the probability that the card drawn is an even number is red card-
    (A) $\dfrac{10}{52}$ (B) $\dfrac{1}{4}$ (C) $\dfrac{1}{5}$ (D) $\dfrac{3}{13}$

76. Median of 4, 5, 10, 6, 7, 14, 9 and 15 will be-
    (A) 6   (B) 7   (C) 8   (D) 9

77. Mean proportion of 64 and 225 will be-
    (A) 120   (B) 90   (C) 60   (D) 30

78. If the points (–2, –5), (2, –2) and (8, a) are collinear then value of a will be-
    (A) $\dfrac{1}{2}$ (B) $\dfrac{3}{2}$ (C) $\dfrac{-5}{2}$ (D) $\dfrac{5}{2}$

79. If the number 13, 15, 17, 18 and n are arranged in ascending order and their arithmetic mean and median are equal then value of n will be-
    (A) 27   (B) 22   (C) 28   (D) None of these

80. $\log_{10} 1 = ?$
    (A) 0   (B) 10   (C) 100   (D) 1000

81. If in an arithmetic progression sum of first n terms is $2n^2 + 3n$. Its common difference is-
    (A) 6   (B) 3   (C) 2   (D) 4

82. The area of three adjoining faces of cuboid are A, B and C respectively then its volume will be
    (A) ABC   (B) $\sqrt{ABC}$ (C) $A^2B^2C^2$ (D) None of these

83. If the radius of circle is π, then its area will be-
    (A) π (B) π^2 (C) π^3 (D) 3π

84. If the co-ordinate of any circle are (3, 4) and the co-ordinate of one ends of its diameter are (5, 3) then co-ordinate of other ends of diameter are-
    (A) (4, 1)   (B) (1, 4)   (C) (1, 5)   (D) (5, 1)

85. The value of $\cos^2 26^o + \cos 64^o \sin 26^o + \dfrac{\tan 36^o}{\cot 54^o}$

(A) 2   (B) 1   (C) 0   (D) None of these

86. $\sqrt[3]{64} = ?$

(A) 2   (B) 4   (C) 6   (D) 8

87. The additive inverse of $\dfrac{2x - 3}{3x + 5}$ is-

(A) $\dfrac{3 - 2x}{3x + 5}$ (B) $\dfrac{3x + 5}{3x - 3}$ (C) $\dfrac{3 - 2x}{-3x - 5}$ (D) $\dfrac{2x - 3}{-3x - 5}$

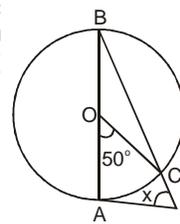**88.** In the given figure $\triangle ABC$ is a right angle triangle in which $\angle B = 90^o$ and BC = 6 cm and AB = 8 cm. Then radius of incircle will be-

(A) 5 cm   (B) 4 cm

(C) 3 cm   (D) 2 cm

89. In the given figure PQ||BC and AP : PB = 1 : 2. Then the ratio of $\triangle APQ$ and $\triangle ABC$ will be-

(A) 1 : 2   (B) 1 : 4

(C) 1 : 9   (D) 4 : 1

90. In the given figure AB is a diameter of circle and AT is tangent line then value of x will be-

(A) 65° (B) 50°

(C) 45° (D) 90°

ANSWERS

1.	(B)	2.	(B)	3.	(B)	4.	(C)	5.	(B)
6.	(B)	7.	(D)	8.	(D)	9.	(A)	10.	(D)
11.	(B)	12.	(D)	13.	(D)	14.	(A)	15.	(B)
16.	(A)	17.	(B)	18.	(C)	19.	(C)	20.	(C)
21.	(D)	22.	(C)	23.	(A)	24.	(D)	25.	(B)
26.	(C)	27.	(A)	28.	(A)	29.	(C)	30.	(A)
31.	(B)	32.	(C)	33.	(B)	34.	(C)	35.	(A)
36.	(D)	37.	(D)	38.	(B)	39.	(C)	40.	(D)
41.	(D)	42.	(A)	43.	(A)	44.	(B)	45.	(C)
46.	(B)	47.	(A)	48.	(B)	49.	(D)	50.	(B)
51.	(A)	52.	(B)	53.	(A)	54.	(B)	55.	(B)
56.	(A)	57.	(B)	58.	(B)	59.	(A)	60.	(C)
61.	(A)	62.	(C)	63.	(D)	64.	(D)	65.	(A)
66.	(B)	67.	(D)	68.	(A)	69.	(A)	70.	(C)
71.	(D)	72.	(C)	73.	(D)	74.	(B)	75.	(C)
76.	(C)	77.	(A)	78.	(D)	79.	(B)	80.	(A)
81.	(D)	82.	(B)	83.	(C)	84.	(C)	85.	(A)
86.	(B)	87.	(A)	88.	(D)	89.	(C)	90.	(A)