DATE : 04/11/2018

PUNJAB

Aakash

Medical | IIT-JEE | Foundations

(Divisions of Aakash Educational Services Limited)

Regd. Office : Aakash Tower, 8, Pusa Road, New Delhi-110005 | Ph.: 011-47623456

Answers & Solutions

for

NTSE (Stage-I) 2018-19

INSTRUCTIONS TO CANDIDATES

1. Use blue/black ball point pen only. There is no negative marking.
2. All the questions are compulsory. This test booklet contains 200 questions (Paper-I : 100 & Paper-II : 100) of one mark each.
3. Paper-I : MAT : 1 - 100 questions

   Paper-II : SAT : 1 - 100 questions
4. Answer each question by darkening the one correct alternative among the four choices on the OMR Sheet with blue/black ball point pen.
5. Students are not allowed to scratch/alter/change out an answer once marked on OMR Sheet, by using white fluid/eraser/blade/tearing/wearing or in any other form.
6. Separate sheet has been provided for rough work in this test booklet.
7. Please handover the OMR sheet to the invigilator before leaving the Examination Hall.
8. Darken completely the ovals of your answers on OMR Sheet in the time limit allotted for that particular paper.
9. Your OMR Sheet will be evaluated through electronic scanning process. Incomplete and incorrect entries may render your OMR sheet invalid.
10. Use of electronic gadgets, calculator, mobile etc., is strictly prohibited.

PAPER-I : MENTAL ABILITY TEST (MAT)

1. 10000, 11000, 9900, 10890, 9801, ...
   (1) 10241 (2) 10781
   (3) 10929 (4) 10991

Answer (2)

Sol. $10000+\frac{1000}{10}=1000$; $11000+\frac{11000}{10}=9900$

$9900+\frac{9900}{10}=10890$; $10890-\frac{10890}{10}=9801$

2. $\frac{2}{3},\frac{4}{7},$ _____, $\frac{11}{21},\frac{16}{31}$
   (1) $\frac{6}{11}$ (2) $\frac{5}{9}$
   (3) $\frac{9}{17}$ (4) $\frac{7}{13}$

Answer (4)

Sol. $\frac{2}{3},\frac{2+2}{3+4}=\frac{4}{7},\frac{4+3}{7+6}=\frac{7}{13}$; $\frac{7+4}{13+8}=\frac{11}{21}$

3. 3, 12, 27, 48, 75, 108, ...
   (1) 192 (2) 163
   (3) 147 (4) 99

Answer (3)

4. 480, 96, ...,8,4
   (1) 24 (2) 88
   (3) 64 (4) 30

Answer (1)

5. 78, 56, 30,.....
   (1) 0 (2) 1
   (3) 6 (4) 20

Answer (1)

Sol. 7×8 = 56, 5×6 = 30, 3×0 = 0

6. 2, 2, 5, 13, 28,.....
   (1) 49
   (2) 50
   (3) 51
   (4) 52

Answer (4)

Sol. 2 2 5 13 28 52
0 3 8 15 24
3 5 7 9
2 2 2

7. 45, 54, 47, ...,49, 56, 51
   (1) 48 (2) 52
   (3) 55 (4) 62

Answer (3)

Sol. 45 + 9 = 54, 54 – 7 = 47 , 47 + 8 55
55 – 6 = 49, 49 + 7 = 56, 56 – 5 = 51

8. 3, 20, 63, 144, 275,.....
   (1) 352 (2) 468
   (3) 548 (4) 662

Answer (2)

9. 0.5, 0.55, 0.65, 0.8,.....
   (1) 0.1 (2) 1
   (3) 2 (4) 0.91

Answer (2)

Sol. 0.5, 0.55, 0.65, 0.8, 1
0.05 0.10 0.15 0.2

10. 589654, 89654, 9654,.....
    (1) 10093
    (2) 89654
    (3) 9456
    (4) 654

Answer (4)

11. 3,6,15,48,_____
    (1) 192 (2) 193
    (3) 194 (4) 195

Answer (4)

12. 445, 221, 109,_____, 25
    (1) 41 (2) 46
    (3) 53 (4) 58

Answer (3)

Directions Questions (13-17) study the letter sense and asnwer the following.

13. _____,____,babbba, ____,a,___,___
    (1) ababb
    (2) babbb
    (3) baaab
    (4) bbaba

Answer (2)

Sol. b, a, babbba, b, a, a, b, b

14. BMX, DNW, FOU, ____

(1) HPX
(2) HPS
(3) HPT
(4) GPS

Answer (3)

Sol. B → D → F → H

M → N → O → P

X ← W ← U ← T

15. B, E, D, F, ____, H, J, _____,L

(1) M, I (2) I, M
(3) I, N (4) J, M

Answer (2)

Sol. B, E, D, F, I, H, J, M,L

2, 5, 4, 6, 9, 8, 10, 13,12

+3,-1,+2,+3,-1,+2,+3,-1

16. m n o n o p q o q r s __ __ __ __ __ __

(1) mnopqr (2) oqrstu
(3) pqrstu (4) qrstup

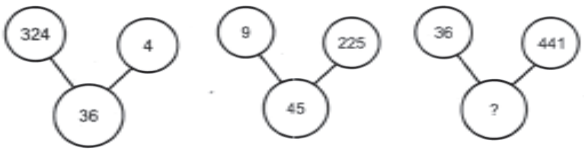
Answer (3)

Sol. mno | nopq | opqrs | pqrstu

17. 2Z5, 7Y7, 14X9, 23W11, 34Y13,_____

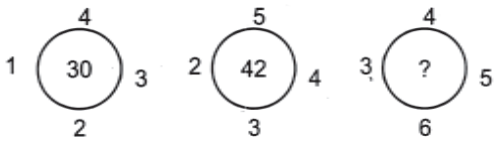
(1) 47U14
(2) 27U24
(3) 45U15
(4) 47U15

Answer (4)

18. 

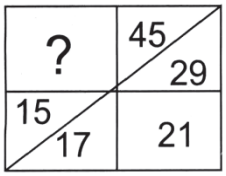
(1) 180 (2) 59
(3) 126 (4) 88

Answer (3)

19. 

(1) 54 (2) 45
(3) 35 (4) 53

Answer (1)

20. 

(1) 16 (2) 14
(3) 10 (4) 8

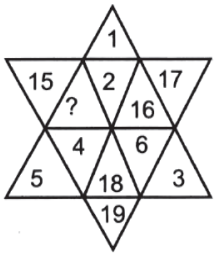
Answer (2)

21.

13	12	5
17	15	8
25	24	?
29	21	20

(1) 6 (2) 7
(3) 8 (4) 9

Answer (2)

22. 

(1) 13 (2) 14
(3) 27 (4) 22

Answer (2)

23. J2Z, K4X, I7V,,__?__,H16R, M22P

(1) I11T (2) L11T
(3) L12S (4) L12T

Answer (2)

Direction (24-27) no./words on the left hand side of sign:: have some relationship developing same realtionship on the right hand side of sign:: answer the Questions.

24. BC : DI:: DE: ?

(1) FG (2) RU
(3) PY (4) SK

Answer (3)

25. KS : $\frac{361}{121}$ :: GD : ?

(1) $\frac{39}{40}$ (2) $\frac{43}{49}$
(3) $\frac{289}{169}$ (4) $\frac{16}{69}$

Answer (*)

26. 76835 : 54613 :: 94328 : ?
(1) 52635 (2) 72106
(3) 81605 (4) 62117

Answer (2)

27. Commander : Navy :: Brigadier : ?
(1) Captain (2) Commander
(3) Air force (4) Army

Answer (4)

Direction (28-31) Find odd one out.

28. (1) Wheat (2) Barley
(3) Rice (4) Mustard

Answer (4)

29. (1) Coal (2) Petroleum
(3) Natural Gas (4) Bio - Gas

Answer (4)

30. (1) 2 : 4 (2) 4 : 8
(3) 10 : 50 (4) 8 : 32

Answer (1)

31. (1) 15 : 63 (2) 22 : 91
(3) 23 : 95 (4) 31 : 97

Answer (4)

Direction Question (32-36) In column I some given words have their codes II column but not arranged in the same manner. Find the codes and answer.

COLUMN–I	COLUMN–II
SAY	nls
SIP	msr
ROTATE	ihhpok
TYRE	nhpk
YEAR	nkpl
TREAT	khlph
TAPE	pmlh
TIE	hrp
COUP	moij

32. REACT
(1) liphr (2) pkjih
(3) kplih (4) jklph

Answer (3)

33. EASY
(1) plsn (2) lnps
(3) pnls (4) lpns

Answer (1)

34. SOUP
(1) osjm (2) sojm
(3) somj (4) osmj

Answer (2)

35. TRACE
(1) hlkip (2) pklih
(3) pihkl (4) hklip

Answer (4)

36. CURE
(1) kipj (2) jikp
(3) ijkp (4) pikj

Answer (3)

Directions (37-38) Questions A + B means A is the son of B, A – B means A is the wife of B,A x B means A is the brother of B, A ÷ B means A is the mother of B.

37. What does P + R – Q means
(1) Q is the father of P
(2) Q is th son of P
(3) Q is the Uncle of P
(4) Q is the brother of P

Answer (1)

38. What does P×R÷Q means.
(1) P is the brother of R
(2) P is the nephew of R.
(3) P is the father of Q.
(4) P is the Material uncle of Q.

Answer (1 & 4)

39. A & B are brothers , C & D are sisters, A's son is D's brother, How is B related to C?
(1) Grand Father (2) Father
(3) Uncle (4) Brother

Answer (3)

Direction (40-41) Questions Read the following and answer.

Six sutdents A, B, C, D, E and F are sitting on the Ground A & B are from NEHRU HOUSE while the rest belongs to GANDHI HOUSE, D & F are tall while the others are short, A, C and D are wearing glasses while the others are not wearing glasses.

40. Which short student of Gandhi House is not wearing the glasses?
(1) F (2) E
(3) D (4) C

Answer (2)

41. Which tall student of Gandhi house is not wearing glasses?

(1) D (2) E

(3) F (4) A

Answer (3)

42. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre, A and P are at the ends. R is sitting on the left of A, Then who is sitting on the Right of P?

(1) A (2) S

(3) X (4) Z

Answer (3)

Alka is older then Mala. Gopal is older than mala but younger than alka KAPIL is younger than Ram and Mala. Mala is older than Ram.

43. Whose age is exactly in the middle of five

(1) GOPAL (2) Ram

(3) Alka (4) Mala

Answer (4)

44. Five boys took part in race, Raj finished before Mohit but behind Gaurav, Ashish Finished before SANJIT but behind Mohit, who won the race?

(1) RAJ (2) Gaurav

(3) Mohit (4) Ashish

Answer (2)

45. In a class of 60, where girls are twice that of boys, Kunal ranked seventeenth from the top. If there are Nine girls ahead of Kunal, how many boys after his Rank?

(1) 3 (2) 9

(3) 12 (4) 21

Answer (3)

46. Amit is now 6 times old as his son. Four years after the sum of their ages will be 43 years, Determine Amit's Present age?

(1) 30 years (2) 32 years

(3) 34 years (4) 38 years

Answer (1)

47. In a row of ten boys, when Varun was shifted two places towards the left, he become Seventh from the left end, what was his earliest position from the right end?

(1) 6th

(2) 4th

(3) 2nd

(4) 1st

Answer (3)

Directions Questions (48-49) Find the correct Group of signs to solve the equation?

48. 24 * 16 * 8 * 32

(1) + – = (2) ÷ – =

(3) – + = (4) × ÷ =

Answer (1)

49. 9 * 7 * 2 * 3 * 10

(1) ÷ × + = (2) – + ÷ =

(3) + – × = (4) – ÷ × =

Answer (3)

50. A is 40 mts. South-West of B, C is 40 mts. South-East of B, Then C is in which direction of A?

(1) East (2) West

(3) North-East (4) South

Answer (1)

51. Karan &Arjun start simultaneously from 9 O'clock and 6 O'clock with same speed. In clockwise and anti-clock wise direction respectively. Where will be Karan & Arjun after walking for 15 minutes.

(1) NORTH & East

(2) South & North

(3) East & West

(4) East & North

Answer (1)

52. Asha is going Northwards, She turns right, Moves some distance and again turns to her right. After moving some distance she turns to her left, goes forward and again turns to her left, Now In which direction is Asha going.

(1) North

(2) South—West

(3) South

(4) West

Answer (1)

53. The Last day of the century can not be?

(1) Wednesday

(2) Monday

(3) Friday

(4) Thursday

Answer (4)

54. Find the day of the weak on 5th November 1999?

(1) Monday (2) Wednesday

(3) Friday (4) Saturday

Answer (3)

55. At what time between 4:00 P. M. & 5:00 P. M. Hands of clock will coincide?

(1) $4:21\frac{7}{11}$P.M.

(2) $4:21\frac{8}{11}$P.M.

(3) $4:21\frac{9}{11}$P.M.

(4) $4:21\frac{10}{11}$P.M.

Answer (3)

56. In which century February will have 29 days from the following?

(1) 2200

(2) 2300

(3) 2400

(4) 2500

Answer (3)

Direction (57-60) A solid cube of each side 8 cms, has been painted Red, Blue and Black on pairs of opposite faces. It is than cut into cubical blocks of each side 2 cms.

57. How many cubes have only two faces painted?

(1) 8

(2) 16

(3) 20

(4) 24

Answer (4)

58. How many cubes have two faces painted red and black and all other faces unpainted?

(1) 4 (2) 8

(3) 16 (4) 32

Answer (2)

59. How many cubes have only one face painted red and all other faces unpainted?

(1) 4 (2) 8

(3) 12 (4) 16

Answer (2)

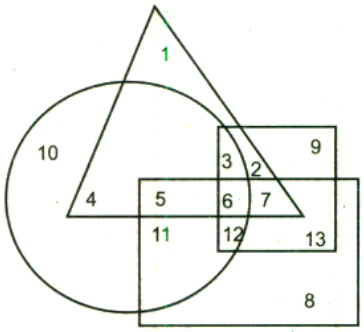
60. How many cubes have two faces painted black?

(1) 2 (2) 4

(3) 8 (4) None

Answer (4)

Direction (61-62) Questions Triangle stands for Land owned by R, square stands for the Land owned by T, Rectangle stands for the area where vegetables are grown and circle stands for the area where Fruits are grown.



61. Which Number represents the area that belongs to both R & T where vegetables & fruits both are grown?

(1) 3 (2) 5

(3) 6 (4) 12

Answer (3)

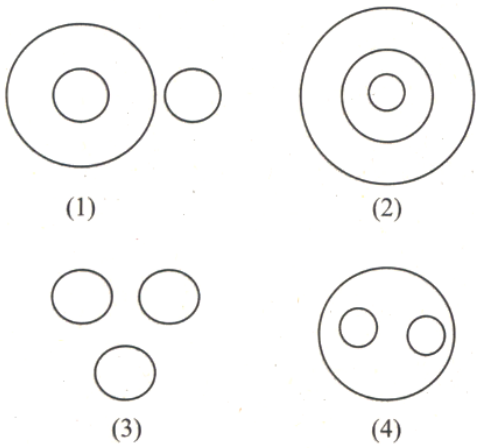
62. Which Number represents the area which belongs to R alone and where both vegetables & fruits are grown?

(1) 2 (2) 3

(3) 4 (4) 5

Answer (4)

Direction (63-65) Questions which of the following diagrams correctly represents the relation between given three words.



63. BED, WARD, HOSPITAL

Answer (2)

64. SEED, LEAF, ROOT

Answer (3)

65. SEA, MOUNTAIN, ISLAND

Answer (1)

66. Which one word can be formed from the following Letters.

a a b c i l l n o o o r t

(1) Collapsible (2) Locomotive

(3) Colour fullers (4) collaboration

Answer (4)

67. Arrange words as they occur in dictionary.

(1) Pestle (2) Pestilence

(2) Pester (4) Pest

(5) Pessimist

(1) 4,3,1,5,2 (2) 3,4,2.5,1

(3) 5.4.3.2.1 (4) 4,5,1,2,3

Answer (3)

68. Number of letters skipped between adjacent letters in the series is in order of 1^2, 2^2, 3^2, which of the following series observe the rule given above.

(1) RTWZ (2) EGLO

(3) CEJT (4) EGLP

Answer (3)

69. Arrange the letters so meaningful word form?

R	T	A	O	U	H
1	2	3	4	5	6

(1) 124365 (2) 634152

(3) 521436 (4) 251436

Answer (*)

70. If you write down all the numbers from 1 to 100 than how many times do you write 3?

(1) 18 (2) 19

(3) 20 (4) 21

Answer (3)

71. A Total No. of 324 coins of 20 paise and 25 paise makes a sum of Rs. 71. The No. of 25 paise coin is?

(1) 120 (2) 124

(3) 132 (4) 200

Answer (2)

72. A certain no. of horses & same No. of men are going somewhere. Half of owners on their horses Back while the remaining ones are walking along leading their horses. IF the No. of legs walking on the ground is 70, how many horses are there?

(1) 10 (2) 12

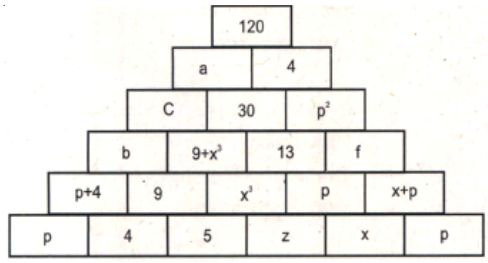
(3) 14 (4) 16

Answer (3)

Direction Question (73-74) The sum of the values of below bricks give the value of the bricks which is above two bricks?

4 + = 9

x^3 + p = 13



73. What will be the value of p?

(1) 5 (2) 6

(3) 8 (4) 9

Answer (1)

74. Find the value of y?

(1) 25 (2) 45

(3) 55 (4) 65

Answer (*)

Direction (75-76) Questions are given below with statement followed by conclusions. You have to decide which of the given conclusion follows from the given statements, disregarding commonly known facts.

75. **Statements:-**

Some kings are Queens.

All Queens are beautiful.

Conclusions:-

I. All kings are beautiful.

II. All conclusions I follows>

(1) Only conclusion I follows:

(2) Only conclusion II follows.

(3) Either I or II follows.

(4) Neither I nor II follows

Answer (4)

76. **Statements:-**

Most Lilies are Roses.

Some Roses are daffodils.

Conclusions:-

I. Some daffodils are Roses.

II. Some lilies are daffodils.

III. All daffodils are lilies.

IV. No lily is a daffodil.

(1) Only I and either II or IV follows.

(2) Only I follows.

(3) Either I or IV follows.

(4) Only I and III follows.

Answer (1)

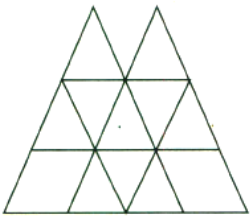
77. What is the minimum number of colours required to fill the spaces in the diagram without any two adjacent spaces having same colour.

(1) 6 (2) 5

(3) 4 (4) 3

Answer (4)

78. Count the Parallelogram in the given figure

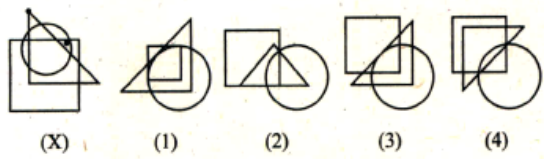


(1) 23 (2) 22

(3) 21 (4) 18

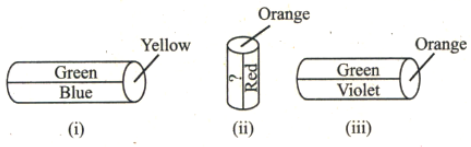
Answer (4)

79. Select the one which satisfies the same conditions of placement of the dot as in fig. **(X)**



Answer (4)

80. A cylinder is painted in 6 colours-green, blue, yellow, violet, Red and orange. Three positions are shown below



What is the colour in the emply space.

(1) Blue

(2) Green

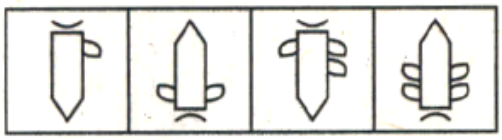
(3) Violet

(4) Yellow

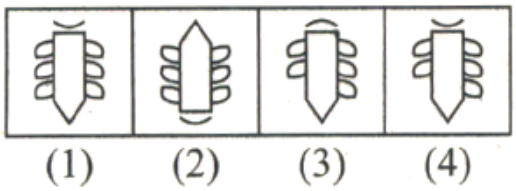
Answer (3)

Direction: Find the figure from the answer figure which will continue the series (81-82)

81. Problem figure

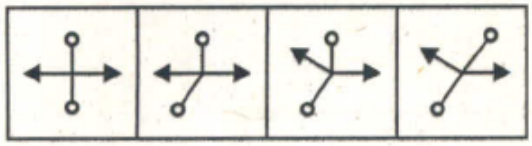


Answer figure

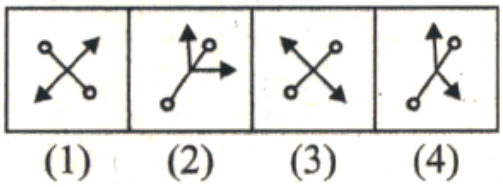


Answer (4)

82. **Problem figure**



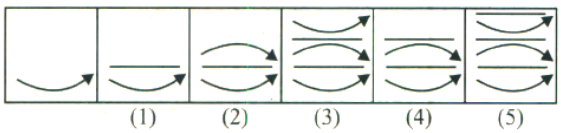
Answer Figure



Answer (3)

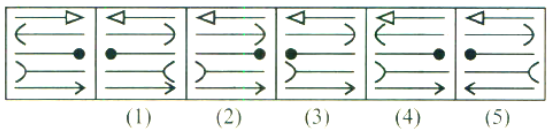
Direction: All the figures together form a series. The unnumbered figure marks the beginning of series position of two figures in the series are incorrect. Series will be correct if these are interchanged. The earliest of two numbered figures whose position are to be interchanged is the answer (83-84)

83.



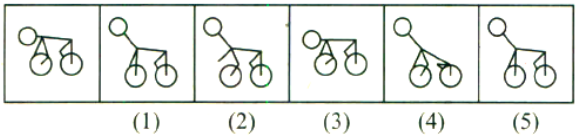
Answer (3)

84.



Answer (1)

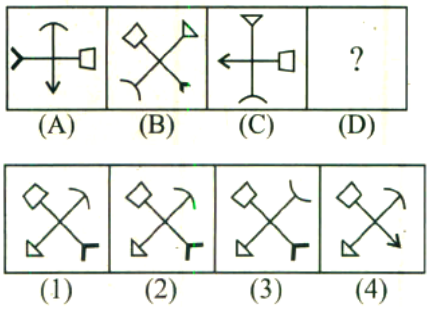
85.



Answer (3)

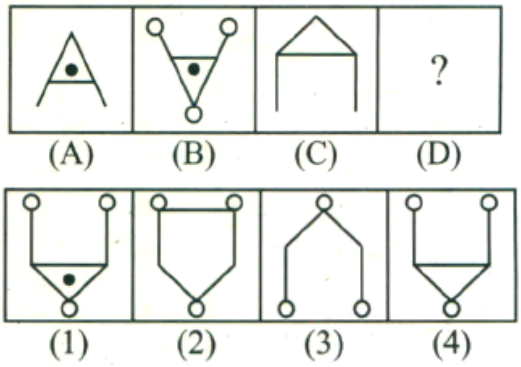
Direction: Figures A and B are related in some way. According to same relationship among C and D figures choose the consent alternative (85-88)

86.



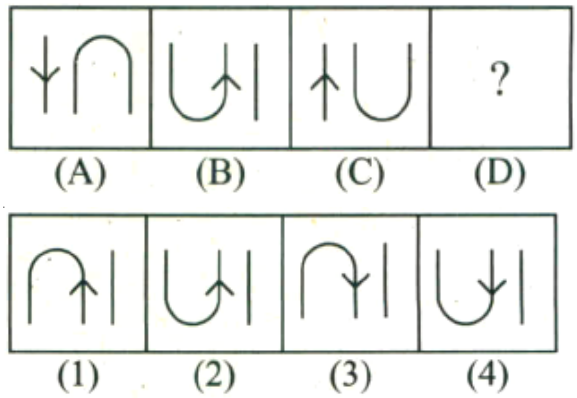
Answer (4)

87.



Answer (4)

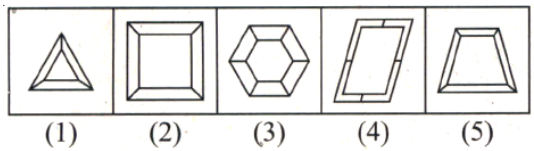
88.



Answer (3)

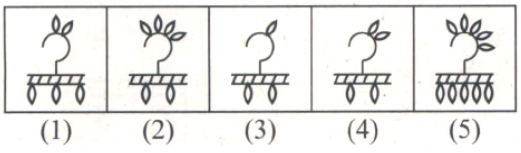
Direction: Among five figures four figures are similar in a certain way. Find the different figure (89-90)

89.



Answer (4)

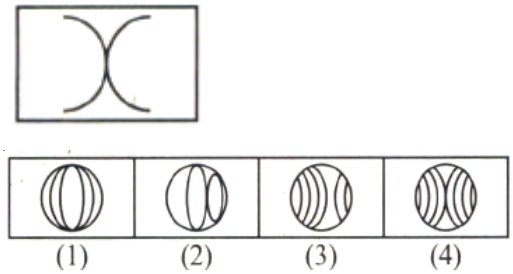
90.



Answer (2)

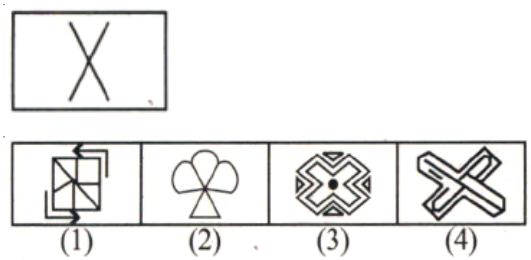
Direction: In questions (91-93) question figure is embedded in one of the answer figures. Find the correct one in which it is embedded.

91.



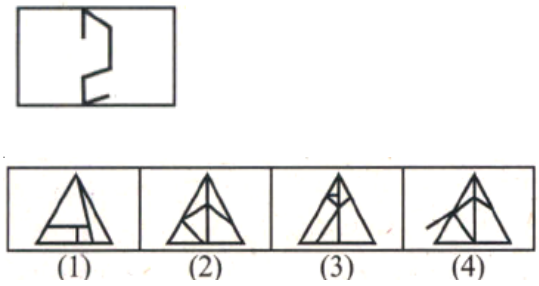
Answer (4)

92.



Answer (2)

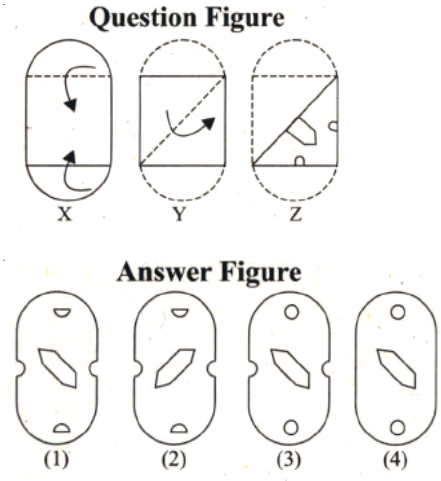
93.



Answer (1)

Direction: In questions (94) square / circular paper has been folded as shown with the dotted lines in the given figures. The last figure (2) shows how the paper has been cut. How would the paper look like when unfolded.

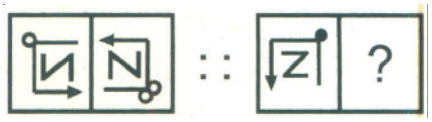
94.



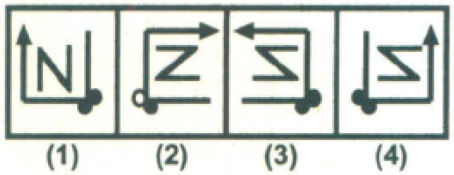
Answer (3)

Direction (95-96) In each of the following questions there is a relationship between two figures on the left side of the sine ::, the same relationship exists between the two, to the right side of sign ::, Find the correct alternative.

95. Question figure

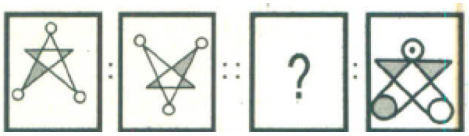


Answer figure

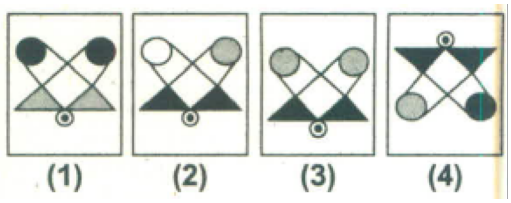


Answer (4)

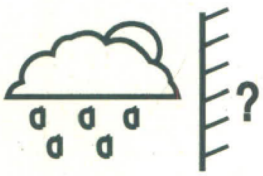
96. Question figure



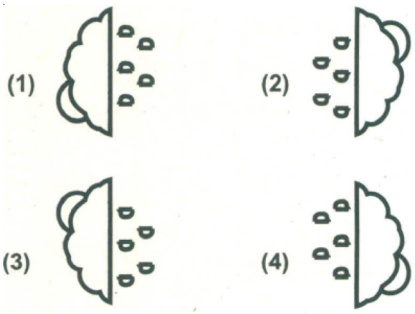
Answer figure



Answer (2)

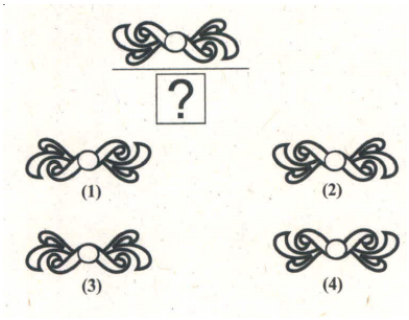
97. 

If the mirror image of the above figure is rotated to 90° in clockwise direction, It will look like:



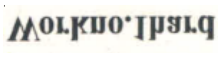
Answer (2)

98. Find the water image of given figure



Answer (1)

99. Find the water image of given figure Workno.1hard

(1) 

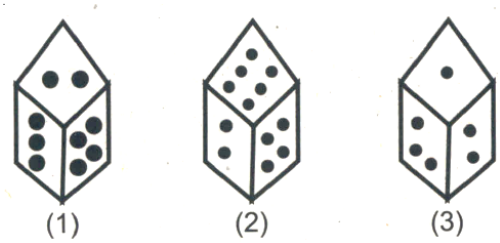
(2) 

(3) 

(4) 

Answer (*)

100. Given below are three different positions of dice. Find the number of dots on the face to opposite the face bearing (3) three dots?



(1) 1

(2) 5

(3) 6

(4) None

Answer (3)

❑ ❑ ❑

PAPER-II : SCHOLASTIC APTITUDE TEST (SAT)

1. A body is thrown vertically upwards against gravity alone with velocity 'u'. The greatest height 'h' to which it will rise and time taken 't' to attain this height is given by

(1) $\frac{u}{2g}, \frac{2u}{g}$ (2) $\frac{u}{g}, \frac{u}{g}$

(3) $\frac{u^2}{g}, \frac{2u}{g}$ (4) $\frac{u^2}{2g}, \frac{u}{g}$

Answer (4)

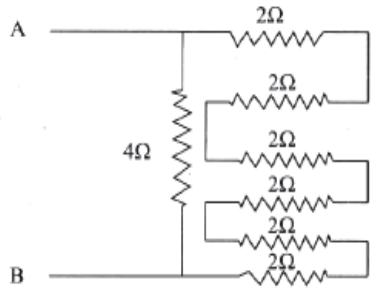
Sol. Using $\Delta y = ut + \frac{1}{2}at^2$ and $v = u + 9t$

$\uparrow +ve \quad h = ut - \frac{gt^2}{2}$ ....(1)

$0 = u - gt$ ...(2)

$t = \frac{u}{g}, \quad h = \frac{u^2}{2g}$

2. What is the equivalent resistance between A and B.



(1) 16Ω (2) 1Ω

(3) 7Ω (4) 3Ω

Answer (4)

Sol. All 2Ω resistors are in series and their combination is in parallel with 4Ω

$\Rightarrow Req = \frac{4 \times 12}{4 + 12} = 3\Omega$

3. A lady is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of same size and that of legs smaller. Which of the following is the correct order of combination for the magic mirror from the top.

(1) Plane, Convex, Concave

(2) Convex, Plane, Concave

(3) Plane, Concave, Convex

(4) Concave, Plane, Convex

Answer (4)

Sol. As Magnified image is formed only by cancave mirror

$\therefore$ Correct combination is cancave, plane and convex.

4. An electric Kettle consumes 1 KW of electric power when operated at 220 V. A fuse wire of what rating must be used for it.

(1) 1A (2) 2A

(3) 5A (4) 4A

Answer (3)

Sol. $P = VI = I = \frac{1000}{220} \simeq 4.6A$

$\therefore$ Fuse rating should be 5A

5. A person cannot see objects distinctly kept beyond 2m. This defect can be corrected by the which type of the lens and of what power of its.

(1) Convex Lens +0.5D

(2) Concave Lens, + 0.5 D

(3) Convex Lens,-0.2 D

(4) Concave Lens, -0.5 D

Answer (4)

Sol. To correct myopia cancave length used

$P = -\frac{1}{2} = -0.5D$

6. Action and Reaction according to Newton's third law act on.

(1) Same body in opposite direction.

(2) Different bodies in same direction.

(3) Different bodies in opposite direction.

(4) Same body in same direction

Answer (3)

Sol. $P = \frac{q}{t} \Rightarrow n = \frac{I}{et}$

7. A passenger, in a moving bus tosses a coin which falls behind him. It means that motion of the bus is:

(1) Uniform (2) Accelerated

(3) Retarded (4) Circular motion

Answer (2)

Sol. Accelerated

Horizontal velocity of coin = velocity of bus at time of projection

Since coin falls behind final velocity of bus is greater than velocity of coin.

8. A current of 2 amp is drawn by a filament by an electric bulb. No. of electrons passing through a cross section of the filament in 8 seconds would be approximately

(1) 10^{20} (2) 10^{27}

(3) 10^{32} (4) 10^{40}

Answer (1)

Sol. 10^{20}

Charge = current × time

no. of × chage of $1e^{-1}$ = 2 Amp × 8sec

n electrons $\times 1.6\times10^{-19}$ = 16 coloumbs

$$n = \frac{10}{10^{-19}}$$

n = 10^{20} electrons

9. The voltage can be written as:

(1) $\text{Work done} \times \text{Charge} \times \text{Time}$

(2) $\dfrac{\text{Work done} \times \text{Time}}{\text{Current}}$

(3) $\dfrac{\text{Work done}}{\text{Current} \times \text{Time}}$

(4) Work done × charge

Answer (3)

Sol. Voltage = $\dfrac{\text{Work Done}}{\text{Charge}}$

$\dfrac{\text{Work Done}}{\text{current} \times \text{time}}$ [current × time = charge]

10. The strength of magnetic field inside a long current carrying straight solenoid is:

(1) Minimum in the middle

(2) More at the ends than at the centre

(3) Same at all points

(4) Found to increase from one end to the other.

Answer (3)

Sol. For long straight solenoid magnetic field is nearly uniform and constant.

11. In which of the following situations the distance moved and the magnitude of displacement are euqal?

(1) A Pendulum is moving to and fro

(2) Moon is revolving around the earth

(3) A boy is sitting in moving merry go round

(4) A bus is moving on a straight road.

Answer (4)

Sol. (1) Distance > Displacement

(2) Distance > Displacement

(3) Distance> Displacement

(4) Distance = Displacement

12. Ocean thermal energy is due to:

(1) Energy stored by waves in the ocean

(2) Pressure difference at different levels in ocean

(3) Tides arising out in the ocean

(4) Temperature difference at different levels in the oceans.

Answer (4)

Sol. It is based on the temperature difference between the layers of water.

13. The major problem in harnessing nuclear energy is how to:

(1) Split nucleus

(2) Sustain the reaction

(3) Dispose off spent fuel safely

(4) Convert Nuclear energy into electrial energy

Answer (3)

Sol. Problem of disposal of Radioactive waste is the major hurdle in harnessing nuclear energy.

14. Calculate the number of atoms in 0.2 mole of sodium Carbonate (Na_2CO_3)

(1) 7.2264×10^{33} atoms

(2) 12.044×10^{23} atoms

(3) 6.022×10^{23} atoms

(4) 1.505×10^{23} atoms

Answer ()

Sol. No option is correct

1 mole $NaCO_3$ cantains $6 \times N_A$ atoms ($N_A \rightarrow$ avagadro no.)

0.2 mole Na_2CO_3 contains

$= 6 \times 6.022 \times 10^{23} \times 0.2$

$= 7.2264\times10^{23}$ atom

15. Which of the following radioactive isotope is used in the treatment of Cancer?

(1) Iodine -131

(2) Uranium-235

(3) Sodium -24

(4) Cobalt -60

Answer (4)

Sol. Fact (based)

16. In the given reation the oxidizing agent is

$Br_2 + 2I^- \longrightarrow 2Br^- + I_2$

(1) (Br_2) (2) (I^-)

(3) (Br^-) (4) (I_2)

Answer (1)

Sol. loss of electron (reduction)

$Br_2 + 2I^- \longrightarrow 2Br^- + I_2$

Gain of electron (oxidation)

oxidising nature of hologen decreases down the group.

17. While cooking, if the bottom of utensil is getting blackened on the outside, it means that:-

(1) the food is not cooked completely

(2) the fuel is not burning completely

(3) the fuel is wet

(4) the fuel is burning completely

Answer (2)

Sol. Utensil turns black due to incomplete oxidation of fuel

18. Which of the following is not base?

(1) NaOH (2) KOH

(3) NH_3 (4) C_2H_5OH

Answer (4)

Sol. A base is that substance which can either donate $\overline{OH}$ ions (hydroxide ions) or can donate lone pair of electron

$\therefore$ C_2H_5OH Weak acid.

19. When 200 ml of a gas at constant pressure is heated from 0°C to 100°C, the volume must be multiplied by:-

(1) $\frac{0}{100}$ (2) $\frac{100}{0}$

(3) $\frac{273}{373}$ (4) $\frac{373}{273}$

Answer (4)

Sol. At constant pressure

volume × T(K)

$\frac{V_1}{T_1(K)} = \frac{V_2}{T_2(K)} = \frac{200}{273} = \frac{V_2}{373}$

$V_2 = \frac{373}{273} \times 200$

20. You are given the following chemical equation:-

$Mg_{(s)} + CuO(s) \longrightarrow MgO_{(s)} + Cu_{(s)}$

(1) Decomposition and displacement reaction

(2) Combination and double displacement reaction

(3) Redox and displacement reaction

(4) Double displacement and redox reaction.

Answer (3)

Sol. Since both oxidation and reduction takes place in same reaction so it is a redox reaction.

$\overset{+2}{CU}O + \overset{0}{Mg} \rightarrow \overset{2+}{Mg}O + \overset{0}{CU}$

oxidation

reduction

In this reaction magnesium diplaces cu^{+2} ion so this reaction is called as displacement reaction.

21. A metal 'X' form a water-soluble salt XNO_3. When an aqueous solution of XNO_3 is added to common salt solution, then a white precipitate of compound 'Y' is formed along with sodium nitrate solution. Metal 'X' is said to be the best conductor of elctricity and it does not evolve hydrogen when put in dilute hydrochloric acid. What is metal 'X', salt XNO_3 and compund 'Y'?

(1) Metal 'X' is Silver (Ag), Salt is Silver Nitrate and compound 'Y' is Silver Chloride.

(2) Metal 'X' is Megnesium (Mg), Salt is Magnesium Nitrate and compound 'Y' is Magnesium Chloride.

(3) Metal 'X' is Lead (Pb), Salt is Lead Nitrate and compund 'Y' is Lead Chloride.

(4) Metal 'X' is Copper (Cu), Salt is Copper Nitrate and Compound 'Y' is Copper Chloride.

Answer (1)

Sol. $AgNo_3$ is water soluble.

$AgNO_{3(aq)} + Nacl_{(aq)} \rightarrow \underset{(white\ ppt)}{Agcl_{(s)}} + NaNO_{3(aq)}$

$Ag + HCl \rightarrow No\ reaction$

22. The salt which will given a neutral solution on dissolving in water will be:-

(1) CH_3COONa

(2) NH_4Cl

(3) KCl

(4) Na_2CO_3

Answer (3)

Sol. KCl is a salt of strong acid and strong base that's why its aqueous soultion is neutral.

23. Which of the following is the correct electronic configuratin of Nickel with an atomic number 28?

(1) $1s^2 2s^2 2p^4 3s^2 3p^8 3d^{10}$

(2) $1s^2 2s^2 2p^6 3s^2 3p^8 3d^{10}$

(3) $1s^2 2s^2 2p^4 3s^2 3p^6 3d^{10} 4s^2$

(4) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8 4s^2$

Answer (4)

Sol. Ni: – $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8 4s^2$

24. Which of the following gives the correct increasing order of acidic strength?

(1) Water, Acetic acid, Hydrochloric Acid

(2) Water, Hydrochloric acid, Acetic acid

(3) Acetic acid, Water, Hydrochloric acid

(4) Hydrochloric acid, Water, Acetic acid

Answer (1)

Sol. Water< Acetic Acid < Hydrochloric acid HCl has greater tedency to donate H^+ than acetic acid and water; acetic acid has greater tendency to lose H^+ than water.

25. Which of the following metals form an amphoteric oxide:-

(1) Na (2) Ca

(3) Al (4) Cu

Answer (3)

Sol. Al_2O_3 can react with acid as well as with base while rest metal reacts with acid only.

26. A common metal which is highly resistance to corrosion is:-

(1) Iron (2) Copper

(3) Aluminimum (4) Magnesium

Answer (3)

Sol. Due to the formation of a thin oxide layer, Al is resistant to corrosion.

27. Mitrochondria and Plastids are able to synthesize some of their proteins because they have

(1) DNA

(2) RNA

(3) DNA and Ribosomes

(4) RNA and Ribosomes

Answer (3)

Sol. Mitochondria and plastids have their own DNA and Ribosomes so they are semi - autonomous in nature as they synthesise some of its proteins by itself and for some it is dependent on nucleus.

28. Which of the following statement is correct about Cardiac Muscles

(1) Cardiac Muscles are uninucleate and Unbrached.

(2) Cardiac Muscles are Multinucleate and Unbrached

(3) Cardiac Muscles are uninucleate and brached

(4) Cardiac Muscles are Multinucleate and branched.

Answer (3)

Sol. Mostly cardiac muscles are uninucleated, as they have single nucleus in muscle fibre. These muscle fibres are branched and possess intercalated discs.

29. The correct pathway of blood in circulatory system is :

(1) Auricles → Ventricles → Artery → Veins

(2) Ventricles → Auricles → Veins → Artery

(3) Ventricles → Veins → Artery → Artery

(4) Auricles → Artery → Veins → Ventricles

Answer (1)

Sol. Blood inside the circulatory system follows following pathway:

In right side

Auricles

↓

Ventricles

↓

Pulmonary Trunk

↓

Artery

↓

Veins

30. Which one of the following is an incorrect match.

(1) Ovary-Estrogen

(2) Pancreas - Insulin

(3) Pituitary gland - Adrenaline

(4) Testis - Testosterone

Answer (3)

Sol. Adrenal glands releases adrenaline & non - adrenaline. They are present above the Kidneys

31. Concentration of urine depends on the presence of .....
(1) Thyroxine
(2) Testosterone
(3) ADH (Antidiuretic hormone)
(4) Melatonin

Answer (3)

Sol. ADH is the (Antidiuretic hormone), Also known as vassopressin. It is released in respect to the thirst inside the body. It is responsible for conditional reabsorption of water across DCT.

32. Which leaves have parallel venation.
(1) Peepal Leaves (2) Hibiscus Leaves
(3) Banana Leaves (4) Banyan Leaves

Answer (3)

Sol. Parallel venation is present in monocot leaves. eg. Banana

33. Which of the following equation is the summary of photosynthesis.
(1) $6CO_2 + 12H_2O \xrightarrow[\text{Sunlight}]{\text{Chlorophyll}} C_6H_{12}O_6 + 6O_2 + 6H_2O$
(2) $6CO_2 + 12H_2O \longrightarrow C_6H_{12}O_6 + 6O_2 + 6H_2O$
(3) $6CO_2 + 6H_2O \xrightarrow[\text{Sunlight}]{\text{Chlorophyll}} C_6H_{12}O_6 + 6O_2 + 6H_2O$
(4) $6CO_2 + H_2O \xrightarrow[\text{Sunlight}]{} C_6H_{12}O_6 + 6O_2 + 6H_2O$

Answer (1)

Sol. Fact

34. The breakdown of Pyruvate to give Carbon dioxide, water and energy takes place in .....
(1) Cytoplasm (2) Mitochondria
(3) Chloroplast (4) Nucleus

Answer (2)

Sol. The breakdown of glucose to pyruvate occurs in cytoplasm and in aerobic respiration pyruvate is broken down to give CO_2, H_2O and energy that occurs in mitochondria.

35. Choose the correct statement
(1) The female gamete is called zygote.
(2) Twins are always Identical
(3) Gregor Mendel is the father of Genetics.
(4) In human beings sex is determine by presence of X and Y Chromosome

Answer (3)

Sol. Zygote is formed after fertilization of male gamete with female gamete.

Only monozygotic twins are identical whereas dizygotic twins are never identical.

36. The nature of nerve impulse is .....
(1) Chemical (2) Magnetic
(3) Electrochemical (4) Electromagnetic

Answer (3)

Sol. Nerve impulse is both electrical and chemical in nature.

37. Which of the following are called "Amphibians of plant kingdom"?
(1) Bryophytes (2) Pteridophytes
(3) Thallophytes (4) Gymnosperms

Answer (1)

Sol. Bryophytes are amphibians of the plant kingdom because though they are terristrial but still need water for sexual reproduction.

38. The Centre of sense of smell in brain is :
(1) Mid brain
(2) Olfactory lobes
(3) Cerebellum
(4) Cerebrum

Answer (2)

Sol. Fact

39. A tissue which makes up the husk of coconut and whose cells are dead, elongated and lignified is :
(1) Chlorenchyma (2) Collenchyma
(3) Parenchyma (4) Sclerenchyma

Answer (4)

Sol. Sclerenchyma are dead tissues because of lignin deposition and present in husk of coconut.

40. Which of the following is not a part of male reproductive system in human being.
(1) Testes
(2) Prostate gland
(3) Vas deferens
(4) Fallopian tube

Answer (4)

Sol. Fallopian tubes are the part of female reproductive system.

41. Three digit numbers are formed using the digits 0,2 and 5 without repetition. Find the probability that the number is divisible by 5.
(1) $\frac{3}{4}$ (2) $\frac{1}{2}$
(3) $\frac{1}{4}$ (4) 0

Answer (1)

Sol. 205, 250, 502, 520

42. If α and β are the roots of the equation $2x^2 - 3x + 4 = 0$, then find the equation whose roots are α^2 and β^2.

(1) $4x^2 + 7x + 1 = 0$ (2) $4x^2 + 7x + 6 = 0$

(3) $4x^2 + 7x + 16 = 0$ (4) $4x^2 - 7x + 16 = 0$

Answer (3)

Sol. $2x^2 - 3x + 4 = 0$

$2y - 3y^{1/2} + 4 = 0$

$4y^2 + 16 + 16y = 9y$

$4y^2 + 7y + 16 = 0$

43. If Pth term of an A.P. is $\frac{1}{q}$ and qth term is $\frac{1}{p}$ then $(pq)^{th}$ term of this A.P will be

(1) 1 (2) 0

(3) $\frac{pq}{p+q}$ (4) $\frac{p-q}{pq}$

Answer (1)

Sol. $a + (p-1)d = \frac{1}{q}$

$a + (q-1)d = \frac{1}{p}$

$\Rightarrow a = \frac{1}{pq}, d = \frac{1}{pq}$

$a_{pq} = a + (pq-1)d = 1$

44. If $\tan\theta + \sin\theta = p$ and $\tan\theta - \sin\theta = q$, then $p^2 - q^2$ is equal to:-

(1) 4 pq (2) $4\sqrt{pq}$

(3) 2 pq (4) $2\sqrt{pq}$

Answer (2)

Sol. $\tan\theta(1+\cos\theta) = p$

$\tan\theta(1-\cos\theta) = q$

$\frac{1-\cos\theta}{1+\cos\theta} = \frac{q}{p}$

$\tan^2\frac{\theta}{2} = \frac{q}{p}$

$$p^2 - q^2 = 4\tan\theta\sin\theta = 4 \times \frac{2\tan\frac{\theta}{2}}{1-\tan^2\frac{\theta}{2}} \times \frac{2\tan\frac{\theta}{2}}{1+\tan^2\frac{\theta}{2}}$$

$$= \frac{16 \times \frac{q}{p}}{\left(1-\frac{q}{p}\right)\left(1+\frac{q}{p}\right)} = \frac{16qp}{p^2-q^2}$$

$$= \left(p^2 - q^2\right)^2 = 16qp$$

$p^2 - q^2 = 4\sqrt{pq}$

45. If mid. point of the line segment joining the point A(3,4) and B(k,6) is P(x,y) and $x + y - 10 = 0$, then the value of 'k' is

(1) -7 (2) 7

(3) $\frac{10}{3}$ (4) 13

Answer (2)

Sol. $\frac{k+3}{2} + \frac{4+6}{2} = 10$

k = 7

46. the average age of a group of eight persons is same as it was 3 years ago, when a young member is substituted for an old member of the group. How many years the new member is younger to the outgoing member.

(1) 11 years (2) 28 years

(3) 16 years (4) 24 years

Answer (4)

Sol. $\frac{\sum_{i=1}^{7} x_i + x}{8} = \frac{\sum_{i=1}^{7}(x_i + 3) + y + 3}{8}$

$\sum xi + x = \sum xi + y + 24$

x – y = 24

47. If $x^3 + \frac{1}{x^3} = 2$ then value of $\frac{x^2+1}{x}$ is

(1) $-1, 2$ (2) $1, 2$

(3) $-1, -2$ (4) $1, -2$

Answer (1)

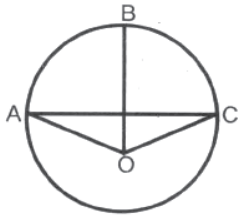
Sol. $x^3 + \frac{1}{x^3} = 2$

$\Rightarrow \left(x + \frac{1}{x}\right)^3 - 3\left(x + \frac{1}{x}\right) - 2 = 0$

$\left(\left(x + \frac{1}{x}\right) - 2\right)\left(\left(x + \frac{1}{x}\right)^2 + 2\left(x + \frac{1}{x}\right) + 1\right) = 0$

$\Rightarrow x + \frac{1}{x} = 2, -1$

48. In the given figure, If A, B and C are the three points on a circle such that the angles subtended by the chords AB and AC at centre 'O' are 60º and 100º respectively, then find the value of $\angle BAC$.



(1) 20º (2) 50º

(3) 80º (4) 30º

Answer (1)

Sol. $\angle BOC = 40^\circ$

Hence $\angle BAC = 20^\circ$

49. 'A' takes 6 days less than the time taken by 'B' to finish a piece of work. If both A and B together can finish it in 4 days, find the time taken by 'B' to finish the work.

(1) 2 days

(2) 12 days

(3) 6 days

(4) 10 days

Answer (2)

Sol. Time taken by B $\longrightarrow$ t days

Time taken by A $\longrightarrow$ t – 6 days

$$\frac{x}{t}+\frac{x}{t-6}=\frac{x}{4}$$

$$\frac{2t-6}{t(t-6)}=\frac{1}{4}$$

$8t - 24 = t^2 - 6t$

$t^2 - 14t + 24 = 0$

$t = 12$

50. Find the value of

$$\frac{\cos^2(45^\circ+\theta)+\cos^2(45^\circ-\theta)}{\tan(60^\circ+\theta)\tan(30^\circ+\theta)}$$

(1) 2 (2) $\frac{1}{2}$

(3) $\frac{1}{3}$ (4) 1

Answer (4)

Sol. $$\frac{\text{Cos}^2\left(45^0+\theta\right)+\sin^2\left(45^0+\theta\right)}{\tan\left(60^0+\theta\right).\cot\left(60^0+\theta\right)}=1$$

51. In a circle of diameter 40 cm, the length of the chord is 20 cm. Find the length of the minor are corresponding to the chord.

(1) $\frac{2\pi}{3}$

(2) $\frac{20\pi}{3}$

(3) $\frac{10\pi}{3}$

(4) 10π

Answer (2)

Sol. Length of minor

$$\text{arc} = 2\pi\times 20\times\frac{60}{360}=\frac{20\pi}{3}$$

52. If the roots of the polynomial x^3-3x^2+x+1 are $(a-b)$, a and $(a+b)$ then find the value of 'a' and 'b'.

(1) $a=\pm\sqrt{2}, b=1$

(2) $a=1,\ b=2$

(3) $a=2, b=\pm\sqrt{2}$

(4) $a=1, b=\pm\sqrt{2}$

Answer (4)

Sol. $x^3 - 3x^2 + x + 1$

$a - b + a + a + b = 3$

$a = 1$

$(a - b)a (a + b) = -1$

$1 - b^2 = -1$

$b = \pm\sqrt{2}$

53. If $\sec\theta-\tan\theta=2$, then the value of $\sec\theta+\tan\theta=2$ will be equal to (where θ is an acute angle).

(1) 1 (2) $\frac{1}{\sqrt{2}}$

(3) 0 (4) $\frac{1}{2}$

Answer (4)

Sol. $(\text{Sec}\theta + \tan\theta)(\text{Sec}\theta - \tan\theta) = 1$

$\sec\theta + \tan\theta = \frac{1}{2}$

54. Two dicesds are thrown together, find the probability that sum of numbers of both up sides of both dices is a perfect cube

(1) $\frac{6}{36}$ (2) $\frac{7}{36}$

(3) $\frac{0}{36}$ (4) 5

Answer (4)

Sol. Sum 8 $\rightarrow$ (2, 6)
(6, 2)
(3, 5)
(5, 3)
(4, 4)

$= \frac{5}{36}$

55. 'B' speaks truth in 75% cases and 'A' speaks truth in 80% cases. Find the probability that they constradict each other in a statement is :-

(1) $\frac{13}{20}$ (2) $\frac{3}{5}$

(3) $\frac{2}{5}$ (4) $\frac{7}{20}$

Answer (4)

Sol. Probability $\rightarrow \frac{3}{4}\times\frac{1}{5}+\frac{1}{4}\times\frac{4}{5}=\frac{7}{20}$

56. Ashok, Usha, Rani and Sonu have to given speeches in a class. In how many different ways, the teacher can arrange the order of their presentation.

(1) 4
(2) 12
(3) 256
(4) 24

Answer (4)

Sol. 4! = 24

57. For any ΔABC, find the value of $\cos\frac{(A+B+C)}{2}$

(1) $\frac{1}{2}$ (2) 1

(3) $\frac{3}{2}$ (4) 0

Answer (4)

Sol. A + B + C = π

$\text{Cos}\left(\frac{\pi}{2}\right)=0$

58. If $\frac{2+\frac{1}{3\frac{4}{5}}}{2+\frac{1}{3+\frac{1}{1+\frac{1}{4}}}}=x$ then find the value of 'x'

(1) $\frac{1}{7}$ (2) $\frac{3}{7}$

(3) 1 (4) $\frac{8}{7}$

Answer (3)

Sol. $3+\frac{1}{1+\frac{1}{4}}=3+\frac{4}{5}=\frac{19}{5}$

$2+\frac{1}{\frac{19}{5}}=2+\frac{5}{19}=\frac{39}{19}$

$2+\frac{1}{3\frac{4}{5}}=2+\frac{5}{19}=\frac{39}{19}$

Hence x = 1

59. The capacity of a cylindrical tank is 246.4 litres. If the height of tank is 4 metres, then what is diameter of its base?

(1) 1.4m
(2) 2.8m
(3) 14m
(4) 28m

Answer (*)

Sol. $\pi r^2\times 4 = 246.4\times10^{-3}$

$r^2 = 7^2\times0.04\times10^{-2}$

r = 0.14m

diameter = 0.28m

No option is correct.

60. If the area of a squared field is 69696 cm^2. Then what is the length of its diagonal.

(1) 313.296 cm (2) 353.2963 cm

(3) 373.296 cm (4) 393.296 cm

Answer (3)

Sol. a^2 = 69696

$\Rightarrow$ a = 264cm

Diagonal = $264\times\sqrt{2}$

= 373.3cm

61. Aus, Aman and Boro, grown thrice in a year are the types of _____ crop.
(1) Maize (2) Rice
(3) Millets (4) Wheat

Answer (2)

62. Which type of soil is also known as 'Regur Soil'
(1) Black Soil (2) Red Soil
(3) Sandy Soil (4) Yellow Soil

Answer (1)

63. The first cement plant of India was established at:
(1) Mumbai (2) Ahmadabad
(3) Madurai (4) Chennai

Answer (4)

64. In which state the 'Kaziranga Sanctuary' is situated?
(1) Jammu and Kashmir (2) Assam
(3) Haryana (4) Kerala

Answer (2)

65. What is the population density of India as per the census 2011?
(1) 382 person per sq. kilometer
(2) 482 person per sq. kilometer
(3) 582 person per sq. kilometer
(4) 682 person per sq. kilometer

Answer (1)

66. 'Konkan Railways' stretches along the
(1) Northern plains (2) East coast
(3) West coast (4) Great Indian desert

Answer (3)

67. Which sea existed at the place of the present Himalayas?
(1) Arctic (2) Tethys
(3) Alps (4) Andes

Answer (2)

68. Which of the following is the main tree of Tropical Evergreen vegetation?
(1) coconut (2) Accecia
(3) Silver Fur (4) Mahogany

Answer (4)

69. Which river is called 'sorrow' of West Bengal?
(1) Narmada River
(2) Tapi River
(3) Damodar River
(4) Indus River

Answer (3)

70. On which three the Silkworms are reared?
(1) Tahli (2) Accecia
(3) Mulberry (4) Mango

Answer (3)

71. Which place is known as 'Silicon Valley' of India?
(1) Bangaluru (2) Mumbai
(3) Ahmedabad (4) Nagpur

Answer (1)

72. Who made the law for the security of forests in 1855 A.D.?
(1) Lord Dalhousie (2) Lord Cornwalis
(3) Lord Rippan (4) Lord Wellesley

Answer (1)

73. 'Safrej Movement' was related to which category of the society?
(1) Children (2) Women
(3) Men (4) Old people

Answer (2)

74. Which Sikh Guru Sahib compiled 'Jap Sahib'?
(1) Shri Guru Nanak Dev Ji
(2) Shri Guru Hargobind Rai Ji
(3) Shri Guru Gobind Singh Ji
(4) Shri Guru Teg Bahadur Ji

Answer (3)

75. When did ' the treaty of Bhairowal' take place?
(1) 24 Dec. 1846 A.D. (2) 25 Dec. 1846 A.D.
(3) 26 Dec. 1846 A.D. (4) 27 Dec. 1846 A.D.

Answer (3)

76. When did Vietnam become a United Country?
(1) 15th April 1974 A.D. (2) 30th April 1975 A.D.
(3) 30th April 1973 A.D. (4) 15th April 1976 A.D.

Answer (2)

77. Karl Marx was against:
(1) Democracy (2) Capitalism
(3) Communism (4) Socialism

Answer (2)

78. Who was 'Giuseppe Mazzinio'?
(1) An Italian Economist
(2) A German Nationalist
(3) A German Professor
(4) A Italian Nationalist

Answer (4)

79. Which among the following cities is hub of the new print culture.
(1) Hong Kong (2) Tokyo
(3) Shanghai (4) Chicago

Answer (3)

80. Which is the best literary work of Prem Chand?
(1) Do Bigha Zameen (2) Godan
(3) Anand Math (4) Sewa Sadan

Answer (2)

81. Who formed 'Young Italy' a secret society?
(1) Bismarck (2) Wilhelm Wolff
(3) Mazzini (4) Mettermich

Answer (3)

82. Which of the following is the presidency city -
(1) Luckhnow (2) Delhi
(3) Bombay (4) Ahmedabad

Answer (3)

83. Under which Article 'Untouchability' is abolished and its practice is punishable?
(1) Article - 15 (2) Article - 17
(3) Article - 16 (4) Article - 19

Answer (2)

84. An individual who is not a member of either house of parliament, can be appointed a member of council of either house within a period of .....
(1) one month (2) 3 months
(3) 1 year (4) 6 months

Answer (4)

85. Who is regarded as the supreme commander of the defence forces in India?
(1) President (2) Prime Minister
(3) Defence Minister (4) Chief of defence forces

Answer (1)

86. Which of the following institutions is not a part of the 'Rural' local self Government?
(1) Nagar Panchayat
(2) Panchayat
(3) Panchayat Samiti
(4) Zila Parishad

Answer (1)

87. How many members of elected from Punjab in Lok sabha?
(1) 7 (2) 13
(3) 21 (4) 17

Answer (2)

88. Under which Fundamental Right in Indian constitution 'Right to free and compulsory Education' has been given?
(1) Under - Right to equality
(2) Under - Right against exploitation
(3) Under - Right to Religious Freedom
(4) Under - Right to Freedom

Answer (4)

89. When was the charter of United Nation organization, accepted by 51 countries?
(1) 24th October 1945
(2) 26th June 1945
(3) 10th August 1939
(4) 24th April 1954

Answer (2)

90. Who was the President of constituent Assembly of India?
(1) Pt. Jawahar Lal Nehru
(2) Dr. B.R Ambedkar
(3) Sardar Vallabha bhai Patel
(4) Dr. Rajendra Prasad.

Answer (4)

91. Who has said these words regarding the 'Panchsheel' principles,"By Implementing these Principles, there will be permanent world peace".
(1) Mahatma Gandhi
(2) Dr. B.R. Ambedkar
(3) Shri lal Bahdur Shastri
(4) Pandit Jawahar Lal Nahru

Answer (4)

92. Which of the following features is not a federal feature of Indian constitution?
(1) Surpremacy of the constitution
(2) Distribution of powers between centre and states
(3) Appointment of Governors by president of India
(4) Independent Judiciary

Answer (3)

93. Which of the following is the correct equation
(1) Saving = Income+consuption
(2) Savings = Consumption – Income
(3) Income = Savings = Consuption
(4) Consumption = Income + Savings

Answer (3)

94. Which group belongs to all direct taxes?
(1) Income tax, Gift tax, Sale tax
(2) Income tax, Wealth tax, Sale tax
(3) Gift tax, Wealth tax, Sale tax
(4) Income tax, Gift tax, Wealth tax

Answer (4)

95. Which is the Central Bank of India?
(1) SBI
(2) RBI
(3) HDFC
(4) ICICI

Answer (2)

96. In which sector, Natural sources are used for production?
(1) Service Sector
(2) Secondary Sector
(3) Primary Sector
(4) Financial Sector

Answer (3)

97. Monetary Policy has one component of policy
(1) Bank Rate (Interest)
(2) Public Income
(3) Public Works
(4) Deficit Financing

Answer (1)

98. MGNREGA 2005 was initiated with the aim to provide
(1) Employment (2) Health Facilities
(3) Education Facilities (4) Irrigation Facilities

Answer (1)

99. Which service is not related to basic infrastructure.
(1) Communication (2) Education
(3) Irrigation (4) Banking

Answer (2)

100. What is the effect of unfavourable balance of trade on Foreign Exchange Reserves?
(1) It reduces (2) It increases
(3) No effect (4) It remains same

Answer (1)

❑ ❑ ❑