



**NATIONAL TALENT SEARCH EXAMINATION
(NTSE-2020) STAGE -1
STATE : TALANGANA PAPER : MAT**

Date: 03/11/2019

Max. Marks: 100

SOLUTIONS

Time allowed: 120 mins

Direction :

Questions (1 to 5) : In the Number series given below, one Number is missing. Each series is followed by 4 alternatives (1), (2), (3), (4). One of them is the right answer. Identify and indicate it as per the "Instructions".

1. 6, 28, 120, 496,

- (1) 1035 (2) 2016 (3) 2019 (4) 1234

Ans. (2)

Sol. $6 \times 4 + 4 = 28$
 $28 \times 4 + 8 = 120$
 $120 \times 4 + 16 = 496$
 $496 \times 4 + 32 = 2016$

2. 1, 5, 15, 34, 65,

- (1) 111 (2) 76 (3) 87 (4) 104

Ans. (1)

Sol. 1, 5, 15, 34, 65, 111
+4 +10 +19 +31 +46
+6 +9 +12 +15

3. 1, 43, 161, 404,

- (1) 745 (2) 614 (3) 829 (4) 725

Ans. (3)

Sol. 1, 43, 161, 404, 829

1, 43, 161, 407, 829,
+42 +118 +246 +422
+76 +128 +176
+52 +48

4. 7, 31, 211, , 2311,

- (1) 12 (2) 18641 (3) 20141 (4) 30031

Ans. (4)

Sol. $2 \times 3 + 1 = 7$
 $2 \times 3 \times 5 + 1 = 31$
 $2 \times 3 \times 5 \times 7 + 1 = 211$
 $2 \times 3 \times 5 \times 7 \times 11 + 1 = 2311$
 $2 \times 3 \times 5 \times 7 \times 11 \times 13 + 1 = 30031$

5. 5, 23, 72,

- (1) 181 (2) 175 (3) 96 (4) 124

Ans. *

Direction :

Questions (6 to 10) : In each of the following Questions, a letter series is given in which some letters are missing. The missing letters are given in the proper sequence as one of the alternatives. Find the correct alternative.

6. __aba __ba __ab

- (1) abbbba (2) abbab (3) baabb (4) bbaba

Ans. (2)

Sol. a b / ab / a b / a b / a b / ab

7. ab ___ b _ bbaa _

- (1) abaab (2) abbab (3) baaab (4) babba

Ans. (3)

Sol. abb / a a b / a b b / a a b

8. _ baa _ aab _ a _ a

- (1) aabb (2) aaba (3) abab (4) baab

Ans. (3)

Sol. a b a / a b a / a b a / a b a

9. __ babbbaa _ a __

- (1) ababb (2) baaab (3) bbaba (4) babbb

Ans. (4)

Sol. b a b a / b b b a / a b a b / b

10. _ op _ mo _ n __ pnmop _

- (1) mnpmon (2) mpmnop (3) mnompn (4) mnpomn

Ans. (1)

Sol. m o p n / m o p n / m o p n / m o p n

Direction :

Questions (11 to 15) : In the following alphabet series, a term is missing as shown by Question mark (?). Choose the missing term from options.

11. eac, gce, ieg, ?

- (1) jhi (2) jgi (3) kgi (4) khi

Ans. (3)

Sol.

e	a	c	$\begin{array}{c} +2 \\ \hline \end{array}$	g	e	$\begin{array}{c} +2 \\ \hline \end{array}$	i	e	g	$\begin{array}{c} +2 \\ \hline \end{array}$	k	g	i
			$\begin{array}{c} +2 \\ \hline \end{array}$			$\begin{array}{c} +2 \\ \hline \end{array}$				$\begin{array}{c} +2 \\ \hline \end{array}$			

12. ejo, tyd, ins, xch, ?

- (1) nrw (2) mrw (3) msx (4) nsx

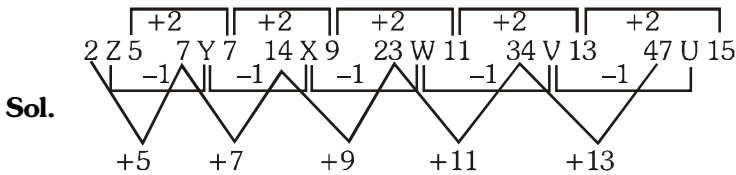
Ans. (2)

Sol.

e	j	o	$\begin{array}{c} -11 \\ \hline \end{array}$	t	y	d	$\begin{array}{c} -11 \\ \hline \end{array}$	i	n	s	$\begin{array}{c} -11 \\ \hline \end{array}$	x	c	h	$\begin{array}{c} -11 \\ \hline \end{array}$	m	r	w
			$\begin{array}{c} +15 \\ \hline \end{array}$				$\begin{array}{c} +15 \\ \hline \end{array}$				$\begin{array}{c} +15 \\ \hline \end{array}$				$\begin{array}{c} +15 \\ \hline \end{array}$			

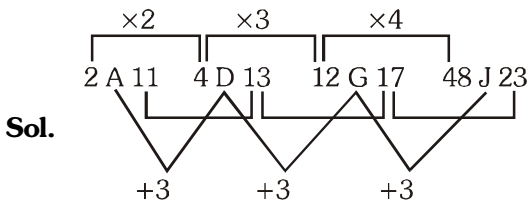
13. 2Z5, 7Y7, 14X9, 23W11, 34V13, ?
 (1) 27U24 (2) 47U15 (3) 45U15 (4) 47V14

Ans. (2)



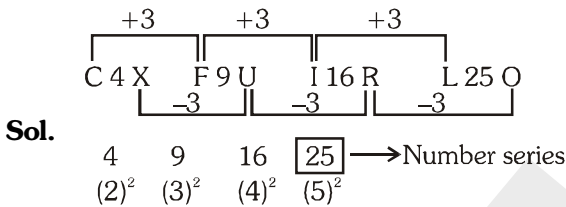
14. 2A11, 4D13, 12G17, ?
 (1) 36I19 (2) 48J21 (3) 36J21 (4) 48J23

Ans. (4)



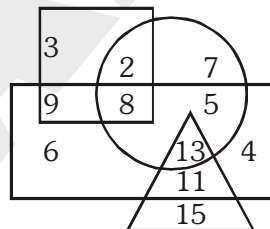
15. CAX, F9U, 116R, ?
 (1) K25P (2) L25P (3) L25O (4) L27P

Ans. (3)



Direction :

Questions (16 to 20) : Observe the diagram carefully and then answer the following Questions. Here, rectangle represents males, triangles represents the people who did PhD, circle represents Urban and square represents civil servants.



16. How many urban male civil servants are there?
 (1) 8 (2) 26 (3) 11 (4) 39

Ans. (1)

Sol. Number of urban male civil servants are represented by '8'

17. How many female PhD are there?

- (1) 39 (2) 11 (3) 15 (4) 26

Ans. (3)

Sol. Number of female PHD are represented by '15'

18. How many urban male PhD civil servants are there?

- (1) 10 (2) 8 (3) 13 (4) None of these

Ans. (4)

Sol. None of the number represents the urban male PHD Civil servants are three.

19. How many urban female civil servants are there?

- (1) 3 (2) 2 (3) 7 (4) 15

Ans. (2)

Sol. Number of urban female civil servants are represented by '2'.

20. How many urban male PhD are there?

- (1) 15 (2) 13 (3) 39 (4) None of these

Ans. (2)

Sol. Number of urban male PHD are represented by '13'.

Direction :

Questions (21 to 25) : In each of the following Questions, the two expressions on either side of sign (=) will have the same value. If two terms on either side or on the same side are interchanged, the correct terms to be interchanged have been given as one of the alternatives under the expressions. Find the correct alternative in each case.

21. $5 + 3 \times 6 - 4 \div 2 = 4 \times 3 - 10 \div 2 + 7$

- (1) 4, 7 (2) 5, 7 (3) 6, 4 (4) 6, 10

Ans. (3)

Sol. $5 + 3 \times 6 \div 2 = 4 \times 3 - 10 \div 2 + 7$

after interchanging 6, 4

$$5 + 3 \times 4 - 6 \div 2 = 4 \times 3 - 10 \div 2 + 7$$

$$17 - 3 = 19 - 5$$

$$14 = 14$$

$$\text{LHS} = \text{RHS}$$

22. $7 \times 2 - 3 + 8 \div 4 = 5 + 6 \times 2 - 24 \div 3$

- (1) 2, 6 (2) 6, 5 (3) 3, 24 (4) 7, 6

Ans. (4)

Sol. $7 \times 2 - 3 + 8 \div 4 = 5 + 6 \times 2 - 24 \div 3$

After interchanging 7 and 6

$$6 \times 2 - 3 + 8 \div 4 = 5 + 7 \times 2 - 24 \div 3$$

$$12 - 3 + 2 = 5 + 14 - 8$$

$$14 - 3 = 19 - 8$$

$$11 = 11$$

$$\text{LHS} = \text{RHS}$$

23. $15 + 3 \times 4 - 8 \div 2 = 8 \times 5 + 16 + 2 - 1$

(1) 3, 5

(2) 15, 5

(3) 15, 16

(4) 3, 1

Ans. (1)

Sol. $15 + 3 \times 4 - 8 \div 2 = 8 \times 5 + 16 \div 2 - 1$

After interchanging 3 and 5

$15 + 5 \times 4 - 8 \div 2 = 8 \times 3 + 16 \div 2 - 1$

$15 + 20 - 4 = 24 + 8 - 1$

$35 - 4 = 32 - 1$

$31 = 31$

LHS = RHS

24. $6 \times 3 + 8 \div 2 - 1 = 9 - 8 \div 4 + 5 \times 2$

(1) 3, 4

(2) 3, 5

(3) 6, 9

(4) 9, 5

Ans. (4)

Sol. $6 \times 3 + 8 \div 2 - 1 = 9 - 8 \div 4 + 5 \times 2$

After interchanging 9 and 5

$6 \times 3 + 8 \div 2 - 1 = 5 - 8 \div 4 + 9 \times 2$

$18 + 4 - 1 = 5 - 2 + 18$

$21 = 21$

LHS = RHS

25. $8 \div 2 \times (-11) + 9 = 6 \times 2 - 5 + 4 \div 2$

(1) 5, 9

(2) 8, 5

(3) 9, 6

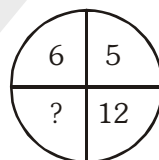
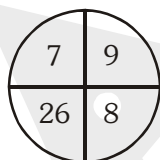
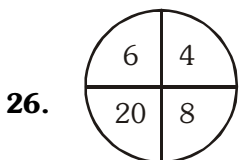
(4) 11, 5

Ans. BONUS

Sol.

Direction :

Questions (26 to 30) : In this type of Questions, a figure or a matrix is given in which some numbers are filled according to a rule. A place is left blank with Questions mark. Find out which number will replace the Questions mark. Find out which number will replace the Question mark (?) from given options.



(1) 23

(2) 25

(3) 18

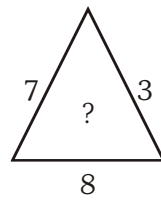
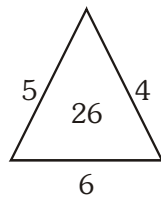
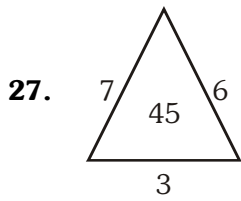
(4) 22

Ans. (2)

Sol. $(6 + 8 + 4) + \underline{2} = 20$

$(7 + 9 + 8) + \underline{2} = 26$

Similarly $(6 + 5 + 12) + 2 = 25$



(1) 29

(2) 42

(3) 36

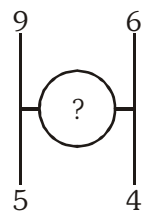
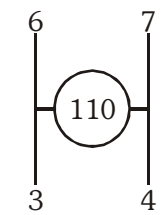
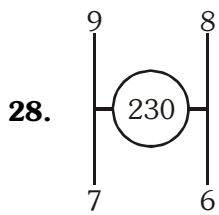
(4) 28

Ans. (1)

Sol. $7 \times 6 + 3 = 45$

$5 \times 4 + 6 = 26$

$7 \times 3 + 8 = 29$



(1) 186

(2) 175

(3) 158

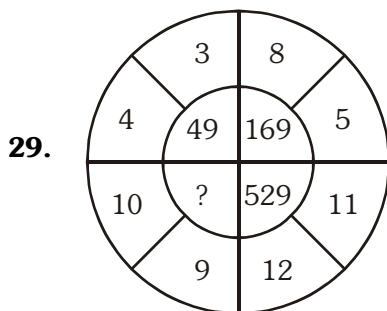
(4) 211

Ans. (3)

Sol. $9^2 + 8^2 + 7^2 + 6^2 = 230$

$6^2 + 7^2 + 3^2 + 4^2 = 110$

$9^2 + 6^2 + 5^2 + 4^2 = 158$



(1) 441

(2) 324

(3) 462

(4) 361

Ans. (4)

Sol. $(4 + 3)^2 = 49$

$(8 + 5)^2 = 169$

$(11 + 12)^2 = 529$

$(10 + 9)^2 = 361$

30.

9	17	16
5	4	8
5	4	?
9	17	8

(1) 5

(2) 4

(3) 8

(4) 6

Ans. (2)

Sol. $\frac{9 \times 5}{9} = 5$

$\frac{17 \times 4}{17} = 4$

$\frac{8 \times 8}{16} = 4$

Direction :

Questions (31 to 35) : Arrange the words given below in a meaningful sequence and choose correct answer from the 4 options.

31. 1. Key, 2. Door, 3. Lock, 4. Room, 5. Switch on.

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

Ans. (3)

Sol. Key-Lock-Door-Room-Switch on

1, 3, 2, 4, 5

32. 1. Word, 2. Paragraph, 3. Sentence, 4. Letters, 5. Phrase

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

Ans. (4)

Sol. Letters – Word – Phrase – Sentence – Paragraph.

4, 1, 5, 3, 2

33. 1. Police, 2. Punishment, 3. Crime, 4. Judge, 5. Judgement

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

Ans. (4)

Sol. Crime – Police – Judge – Judgement – Punishment

3, 1, 4, 5, 2

34. 1. Family, 2. Community, 3. Member, 4. Locality, 5. Country

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

Ans. (1)

Sol. Member – Family – Community – Locality – Country

3, 1, 2, 4, 5

35. 1. Poverty, 2. Population, 3. Death, 4. Unemployment, 5. Disease

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

Ans. (3)

Sol. Population – Unemployment – Poverty – Disease – Death

2, 4, 1, 5, 3

Direction :

Questions (36 to 40) : Find out the relationship between the first two words and choose the word from the given alternative, which bears the same relationship to the third word, as the first two bear.

36. Funk : Vitamins :: Curie : ?

- (1) Uranium (2) Radium (3) Radioactivity (4) Photography

Ans. (2)

Sol. Casimir Funk formulated 1st the concept of vitamins.

Marie Curie was pioneer of radium.

37. Virology : Virus :: Semantics : ?

- (1) Amoeba (2) Language (3) Nature (4) Society

Ans. (2)

Sol. Virology deals with effects of virus

Similarly semantics deals with the effects of language.

38. Pituitary : Brain :: Thymus : ?

- (1) Larynx (2) Spinal Cord (3) Throat (4) Chest

Ans. (4)

Sol. Pituitary is a gland in the brain.

Similarly, Thymus is a gland of chest

39. Vine : Graphes :: Poppy : ?

- (1) Opium (2) Toabacco (3) Pears (4) Pineapple

Ans. (1)

Sol. 1st is obtained from 2nd

Poppy is obtained from opium.

40. Karanataka : Gold :: Madhya Pradesh : ?

- (1) Diamond (2) Iron (3) Copper (4) Gems

Ans. (1)

Sol. Gold is mined in Karanataka.

Diamond is mined in M.P.

Direction :

Questions (41 to 45) : In these Questions, one word is coded according to a particular pattern and the condidate is asked to given the code leters for the another word following the same pattern.

41. In a certain code, LAWN is written as JCUP. How will SLIT be coded in that code?

- (1) QNGV (2) QJGV (3) QNVG (4) NJGV

Ans. (1)

Sol. L A W N

-2 +2 -2 +2

J C U P

Similarly

S L I T

-2 +2 -2 +2

Q N G V

42. In a given code, SISTER is coded as 535301. UNCLE as 84670 and BOY as 129. How is RUSTIC written in the code?

- (1) 633185 (2) 185336 (3) 363815 (4) 581363

Ans. (2)

Sol. S I S T E R

5 3 5 3 0 1

U N C L E

8 4 6 7 0

B O Y

1 2 9

Direct Coding

R U S T I C

1 8 5 3 3 6

43. In a certain code, LONG is written as 5123 and GEAR is written as 3748. How is LANE written in that code?
 (1) 5427 (2) 5247 (3) 5847 (4) 5237

Ans. (1)

Sol. L O N G G E A R
 5 1 2 3 3 7 4 8
 Direct Coding
 L A N E
 5 4 2 7

44. In a certain code READ is written as # 5%6 and PAID is written as \$%46. How is RIPE written in that code?
 (1) #4\$5 (2) #6\$5 (3) \$4#5 (4) \$4#6

Ans. (1)

Sol. R E A D P A I D
 # 5 % 6 \$ % 4 6
 Direct Coding
 R I P E
 # 4 \$ 5

45. In a code CORNER is written as GSVRIV. How can CENTRAL be written in the code?
 (1) DFOUSBM (2) GIRXVEP (3) GNFJKER (4) None of these

Ans. (2)

Sol. C O R N E R
 ↓+4 each
 G S V R I V

Similarly, CENTRAL $\xrightarrow{+4\text{each}}$ G I R X V E P

Direction :

Questions (46 to 49) : In each of the following Questions, four words are given. Which one of them will come in the third position, if all of them are arranged alphabetically as in a dictionary?

46. 1. Bishop 2. Bifocal 3. Bicycle 4. Bitter

Ans. (1)

Sol. Bicycle Bifocal Bishop Bitter
 1 2 3 4

47. 1. Parasite 2. Party 3. Petal 4. Paste

Ans. (2)

Sol. Parasite Party Paste Petal
 1 2 3 4

48. 1. Research 2. Rational 3. Round 4. Rustic

Ans. (3)

Sol. Rational Research Round Rustic
 1 2 3 4

49. 1. Nature 2. Native 3. Narrate 4. Diastole

Ans. (1)

Sol. Diastole Narrate Native Nature
 1 2 3 4

Direction :

Questions (50 to 55) : From the given five groups of letters, four of them are similar to each other in some manner, while one is different and this is to be chosen from the four alternative answers.

50. DE, PQ, TU, MO, FG

- (1) DE (2) PQ (3) TU (4) MO

Ans. (4)

Sol. $\begin{array}{ccccc} \text{D E} & \text{P Q} & \text{T U} & \text{M O} & \text{F G} \\ \cup & \cup & \cup & \cup & \cup \\ +1 & +1 & +1 & +2 & +1 \end{array}$

MO is different from Rest

51. XW, FG, ML, PO, TS

- (1) XW (2) FG (3) ML (4) PO

Ans. (2)

Sol. Except FG, all letters have -1 pattern.

52. BD, MP, NQ, HK, TW

- (1) BD (2) MP (3) NQ (4) HK

Ans. (1)

Sol. Except BD, all letters have +3 pattern.

53. AE, AI, IO, EI, OU

- (1) AE (2) AI (3) IO (4) EI

Ans. (2)

Sol. A, E, I, O, U are vowels is sequence.

∴ AI is odd one out.

54. KP, MN, HR, GT, EV

- (1) KP (2) MN (3) HR (4) GT

Ans. (3)

Sol. $\begin{array}{cccccccccccc} \text{A} & \text{B} & \text{C} & \text{D} & \boxed{\text{E}} & \text{F} & \boxed{\text{G}} & \text{H} & \text{I} & \text{J} & \boxed{\text{K}} & \text{L} & \boxed{\text{M}} \\ \text{Z} & \text{Y} & \text{X} & \text{W} & \boxed{\text{V}} & \text{V} & \boxed{\text{T}} & \text{S} & \text{R} & \text{Q} & \boxed{\text{P}} & \text{O} & \boxed{\text{N}} \end{array}$

Sum of both letters is 27. so HR is odd one out.

55. Monday, Tuesday, Thursday, Saturday

- (1) Monday (2) Tuesday (3) Thursday (4) Saturday

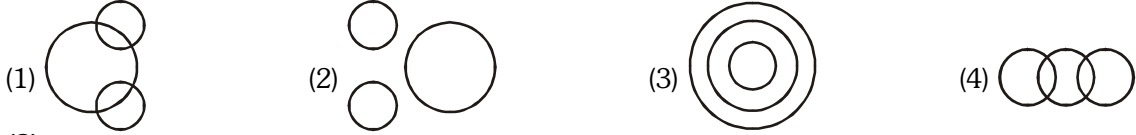
Ans. (1)

Sol. Except Monday all these days are even numbered days.

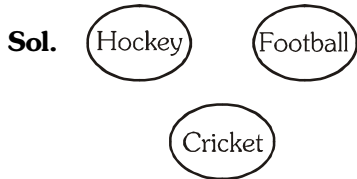
Directions :

Questions (56 to 60) :

56. Which of the following diagrams indicates the best relation between Hockey, Football and Cricket?



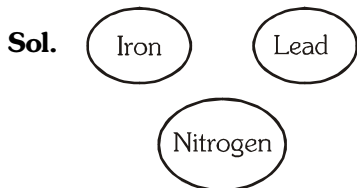
Ans. (2)



57. Which of the following diagrams indicates the best relation between Iron, Lead and Nitrogen?



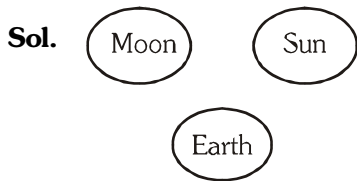
Ans. (2)



58. Which of the following diagrams indicates the best relation between Moon, Sun and Earth?



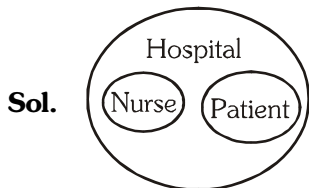
Ans. (3)



59. Which of the following diagrams indicates the best relationship between Hospital, Nurse and Patient?



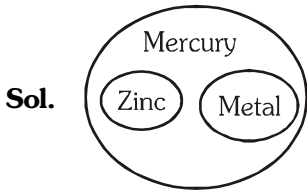
Ans. (3)



60. Which of the following diagrams indicates the best relationship between Mercury, Zinc and Metal?



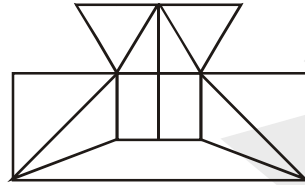
Ans. (2)



Directions :

Questions (61 to 65) : These Questions are based on analytical reasoning.

61. Find the minimum number of straight lines required to make the given figure.

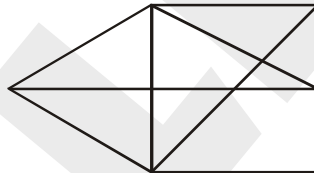


- (1) 16 (2) 17 (3) 18 (4) 19

Ans. (2)

Sol. By counting straight line.

62. The number of triangles in the figure.

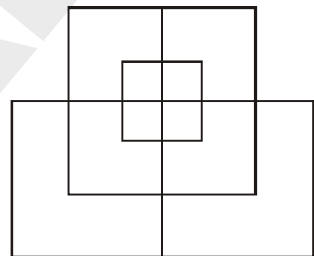


- (1) 12 (2) 13 (3) 14 (4) 15

Ans. (4)

Sol. By counting the triangles.

63. Find the number of straight lines required to make the given figure.

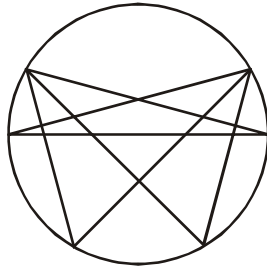


- (1) 13 (2) 15 (3) 17 (4) 19

Ans. (1)

Sol. By counting the straight lines.

64. The number of triangles in the given figure.

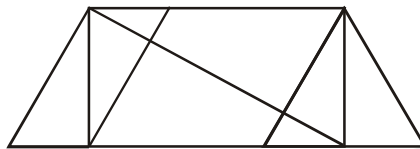


- (1) 22 (2) 24 (3) 26 (4) 28

Ans. (2)

Sol. By counting the triangles.

65. The number of triangles in the given figure.



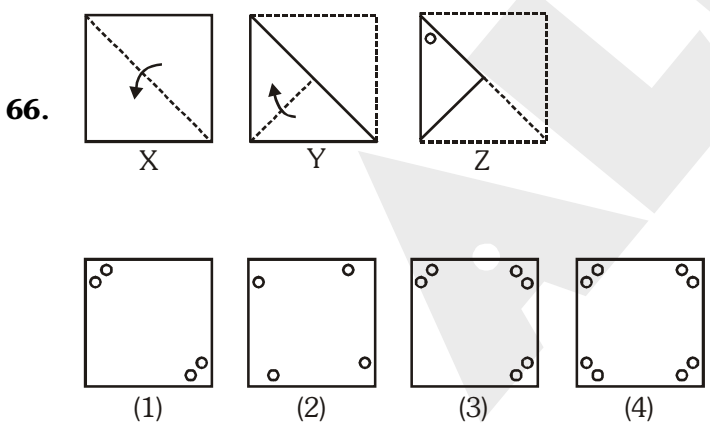
- (1) 8 (2) 10 (3) 12 (4) 14

Ans. (4)

Sol. By counting triangles.

Directions :

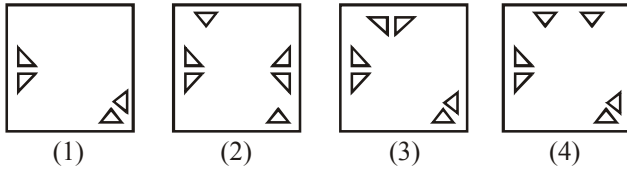
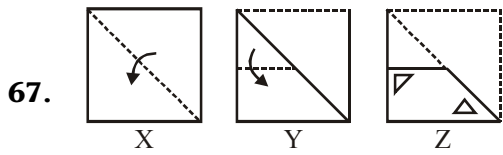
Questions (66 to 70) : Each of the following Questions consists of a set of three figures X, Y and Z showing a sequence of folding of piece of paper. Figure (Z) shows the manner in which the folded paper has been cut. These three figures are followed by four answer figures from which you have to choose a figure which would mostly closely resemble the unfolded form of figure (Z).



- (1) 1 (2) 2 (3) 3 (4) 4

Ans. (1)

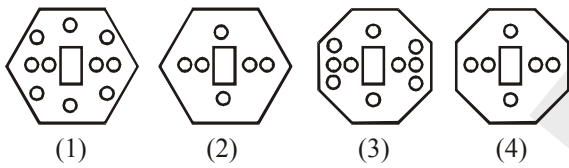
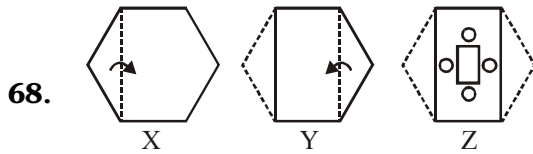
Sol. By observation.



(1) 1 (2) 2 (3) 3 (4) 4

Ans. (3)

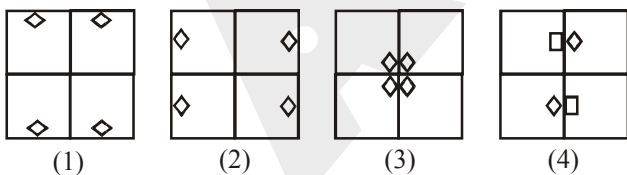
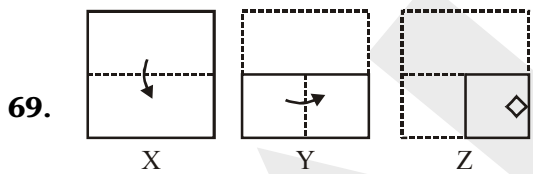
Sol. By observation.



(1) 1 (2) 2 (3) 3 (4) 4

Ans. (2)

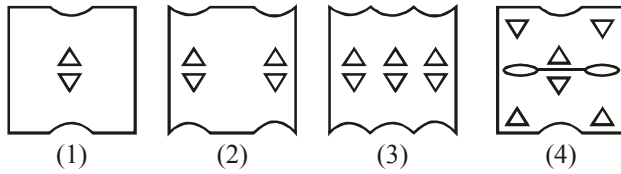
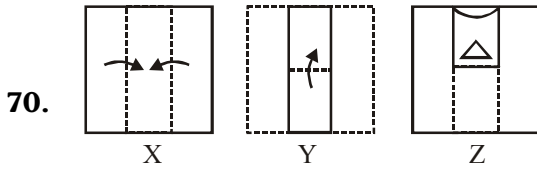
Sol. By observation.



(1) 1 (2) 2 (3) 3 (4) 4

Ans. (2)

Sol. By observation.



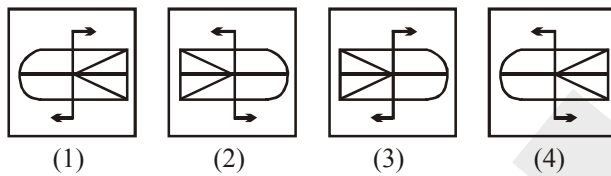
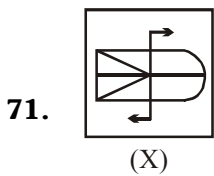
(1) 1 (2) 2 (3) 3 (4) 4

Ans. (3)

Sol. By observation.

Directions :

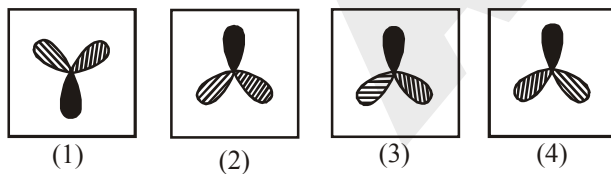
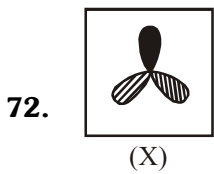
Questions (71 to 75) : In each of the following questions, choose the correct mirror images of the given fig. (X) from amongst the four alternatives (1), (2), (3), (4) given along with it. Mirror is placed right to each figure.



(1) 1 (2) 2 (3) 3 (4) 4

Ans. (4)

Sol. By observation.



(1) 1 (2) 2 (3) 3 (4) 4

Ans. (4)

Sol. By observation.



(X)



(1)



(2)



(3)



(4)

(1) 1

(2) 2

(3) 3

(4) 4

Ans. (1)

Sol. By observation.



(X)



(1)



(2)



(3)



(4)

(1) 1

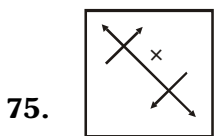
(2) 2

(3) 3

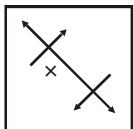
(4) 4

Ans. (1)

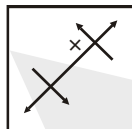
Sol. By observation.



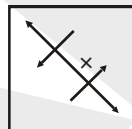
(X)



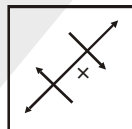
(1)



(2)



(3)



(4)

(1) 1

(2) 2

(3) 3

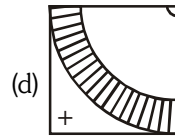
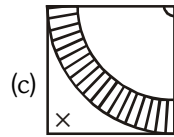
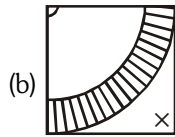
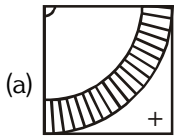
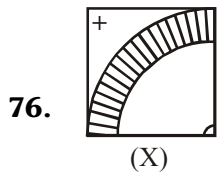
(4) 4

Ans. (2)

Sol. By observation.

Directions :

Questions (76 to 80) : The reflection of an object as seen in water is called its water image. It is the inverted image. Find the water image of the figure (X) from the four alternative answers.



(1) (a)

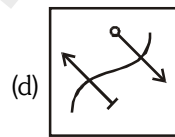
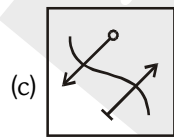
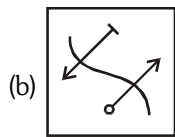
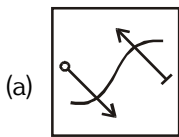
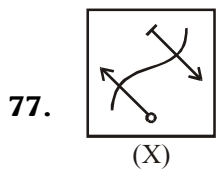
(2) (b)

(3) (c)

(4) (d)

Ans. (4)

Sol. By observation



(1) (a)

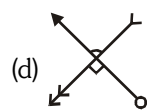
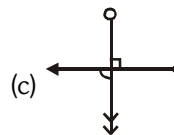
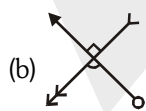
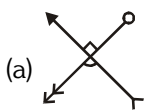
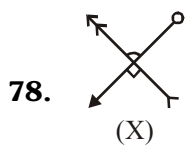
(2) (b)

(3) (c)

(4) (d)

Ans. (3)

Sol. By observation



(1) (a)

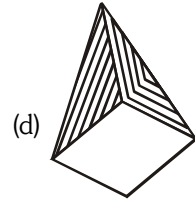
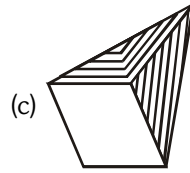
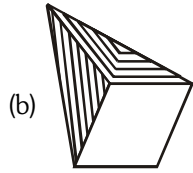
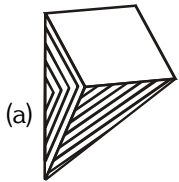
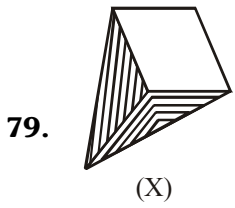
(2) (b)

(3) (c)

(4) (d)

Ans. (2)

Sol. By observation



(1) (a)

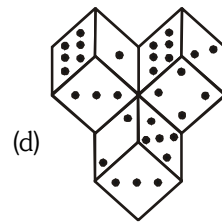
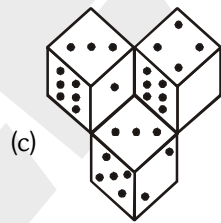
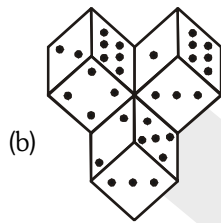
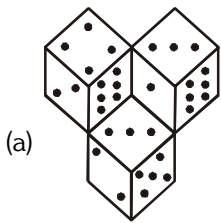
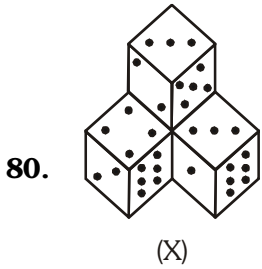
(2) (b)

(3) (c)

(4) (d)

Ans. (2)

Sol. By observation



(1) (a)

(2) (b)

(3) (c)

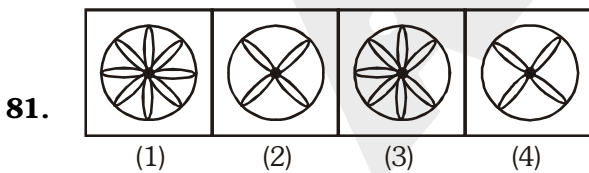
(4) (d)

Ans. (2)

Sol. By observation

Directions :

Questions (81 to 85) : In each of the following questions, choose the figure which is different from the rest.



(1) 1

(2) 2

(3) 3

(4) 4

Ans. (3)

Sol. By observation

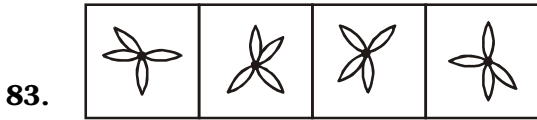


(1) (2) (3) (4)

(1) 1 (2) 2 (3) 3 (4) 4

Ans. (4)

Sol. By observation

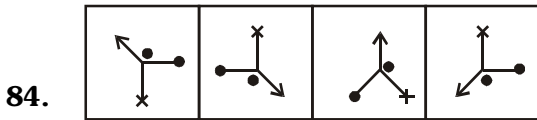


(1) (2) (3) (4)

(1) 1 (2) 2 (3) 3 (4) 4

Ans. (1)

Sol. By observation

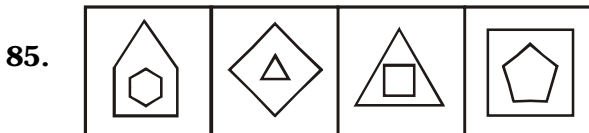


(1) (2) (3) (4)

(1) 1 (2) 2 (3) 3 (4) 4

Ans. (3)

Sol. By observation



(1) (2) (3) (4)

(1) 1 (2) 2 (3) 3 (4) 4

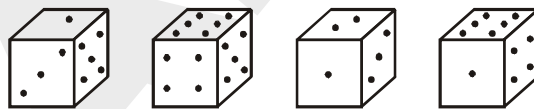
Ans. (2)

Sol. By observation

Directions :

Questions (86 to 90) :

86. How many points will be on the face opposite to face, which contains 2 points?



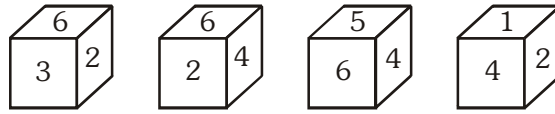
(1) 1 (2) 5 (3) 4 (4) 6

Ans. (4)

Sol. From Dice (i) and (ii), By rotating CW

5 3 (2)
1 ✗ 4 (6) so opposite of 2 is 6.

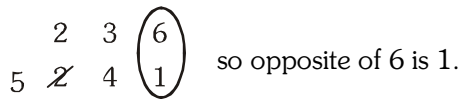
87. Which number is on the face opposite to 6?



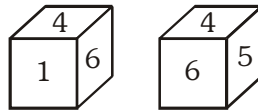
- (1) 4 (2) 1 (3) 2 (4) 5

Ans. (2)

Sol. From dice (i) and (iv), By rotating CW



88. Two positions of a dice are shown below. When number '1' is on the top, what number will be at the bottom?

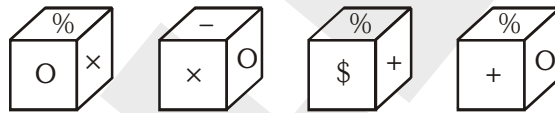


- (1) 3 (2) 5 (3) 2 (4) 6

Ans. (2)

Sol. Here opposite of 1 is 5. {In general dice when two faces are common than 3rd face in both the dices opposite to each other.}

89. Here 4 positions of a cube are shown. Which sign will be opposite to '+'?



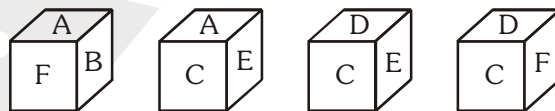
- (1) % (2) - (3) x (4) \$

Ans. (3)

Sol. From Dice (i) & (iv). Here opposite of ± is x.

{Two faces common, so 3rd faces in both the dices opposite to each other}.

90. The position of a cube are shown below. Which letter will be on the face opposite to face with A?



- (1) D (2) B (3) C (4) F

Ans. (1)

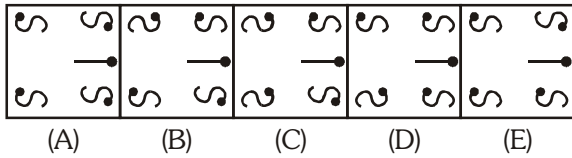
Sol. Adjacent of A → B, C, E, F

So, opposite of A is D.

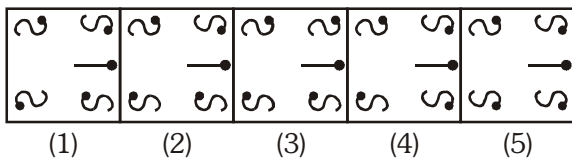
Directions :

Questions (91 to 95) : Each of the following questions consists of five figures marked A, B, C, D and E called the problem figures; followed by five other figures marked 1, 2, 3, 4 and 5 called the answer figures. Select a figure which will continue the same series as established by the five problem figures.

91. Problem figures



Answer figures



(1) 1

(2) 2

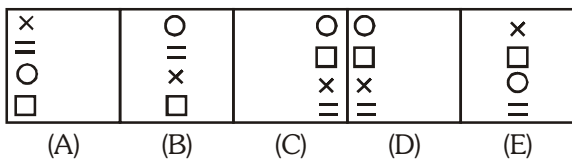
(3) 3

(4) 4

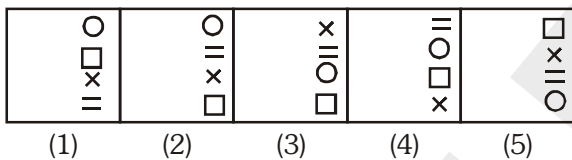
Ans. (2)

Sol. By Observation

92. Problem figures



Answer figures



(1) 1

(2) 2

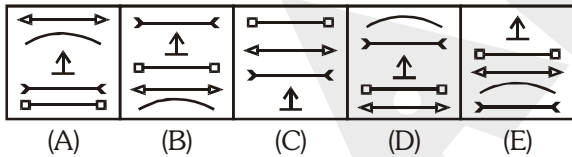
(3) 3

(4) 4

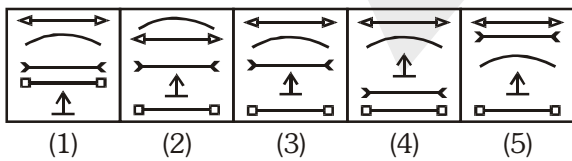
Ans. (3)

Sol. By Observation

93. Problem figures



Answer figures



(1) 1

(2) 2

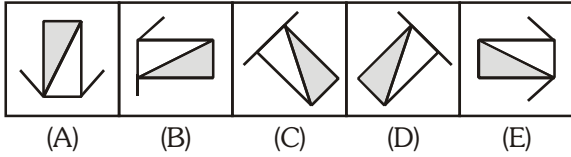
(3) 3

(4) 4

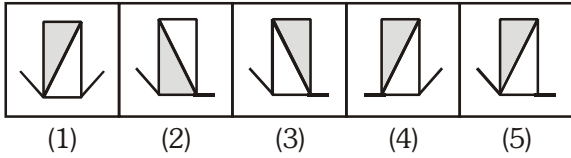
Ans. (3)

Sol. By Observation

94. Problem figures



Answer figures



(1) 1

(2) 2

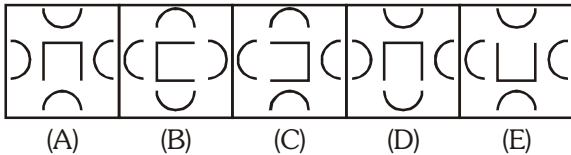
(3) 3

(4) 4

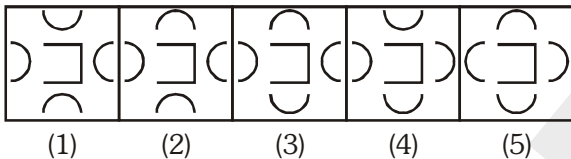
Ans. (3)

Sol. By Observation

95. Problem figures



Answer figures



(1) 1

(2) 3

(3) 2

(4) 5

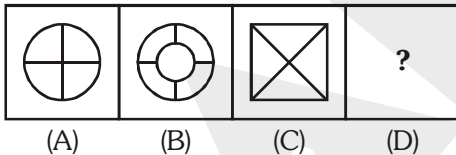
Ans. (2)

Sol. By Observation

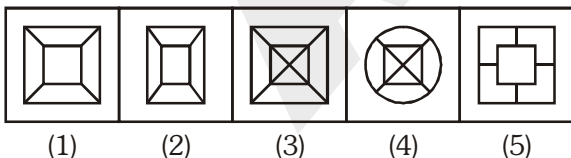
Directions :

Questions 96 to 100 : Each of the following questions consists of two sets of figures. There is a definite relationship between figures A to B. Establish a similar relationship between figures C and D by selecting suitable figure from the answer set :

96. Problem figures



Answer figures



(1) 1

(2) 2

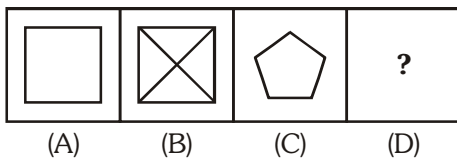
(3) 3

(4) 4

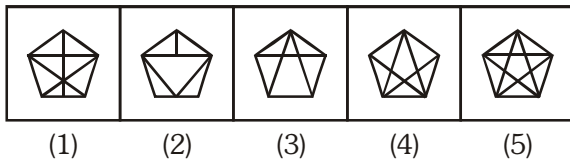
Ans. (1)

Sol. By Observation

97. Problem figures



Answer figures



(1) 2

(2) 3

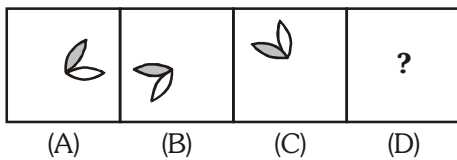
(3) 5

(4) 4

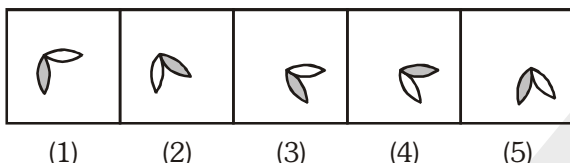
Ans. (3)

Sol. By Observation

98. Problem figures



Answer figures



(1) 5

(2) 3

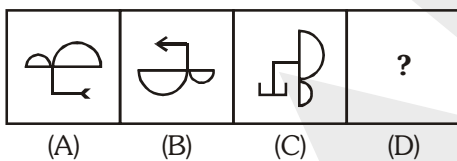
(3) 4

(4) 1

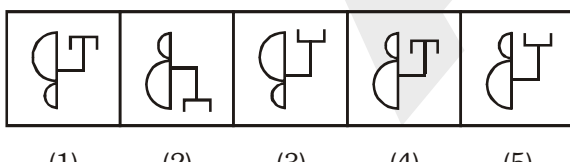
Ans. (1)

Sol. By observation

99. Problem figures



Answer figures



(1) 4

(2) 5

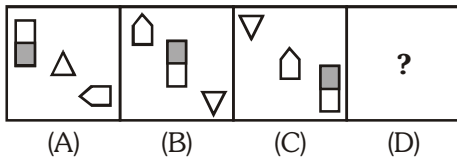
(3) 2

(4) 3

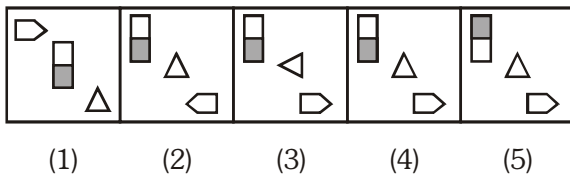
Ans. (2)

Sol. By Observation

100. Problem figures



Answer figures



(1) 1

(2) 2

(3) 3

(4) 4

Ans. (4)

Sol. By Observation