

Date: 24/01/2021

Max. Marks: 100

SOLUTIONS

Time allowed: 120 mins


Direction (Q.1 to 4) : Mark at the following information and answer the question based on it. Seven students J, K, L, M, N, O and P are standing in a row from left to right in random order such that:

- (1) P, O, K and N do not stand at either end.
- (2) M is not in the middle.
- (3) J stands to the left of P and to the right of O
- (4) K stands on the right side of N and on the left side of L

1. Who is the middle of the line ?

- (1) N
- (2) J
- (3) P
- (4) K

Ans. (3)

Sol. 

2. Who is standing fifth from the left side of the row ?

- (1) K
- (2) P
- (3) N
- (4) J

Ans. (3)

Sol. 

3. Who is standing to the left of O ?

- (1) L
- (2) J
- (3) M
- (4) P

Ans. (3)

Sol. 

4. K travels a certain distance with L at a speed of 3 km/hr. He then completes a total of 27 km. with M at a speed of 6 km/hr in 7 hours

Find the distance travelled with M.

- (1) 15 km
- (2) 12 km
- (3) 10 km
- (4) 9 km

Ans. (2)

Sol. Let distance with L is k

$$\frac{x}{3} + \frac{27-x}{6} = 7$$

$$\frac{2x + 27 - x}{6} = 7$$

$$x + 27 = 42, \text{ So. } x = 15$$

$$\text{Dis. travelled along with M} = 27 - x = 27 - 15 = 12 \text{ km.}$$

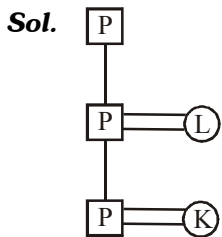
Direction (Q.5 to 7) : Study the following information and answer the questions give below :

- P is the father of A whose son is S.
- L is K's mother who is also the sister of S

5. How is A related to L?

- (1) Brother (2) Husband (3) Wife (4) Sister

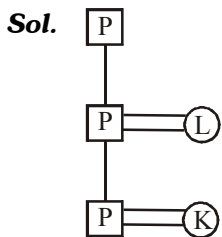
Ans. (2)



6. How is A related to K?

- (1) Father (2) Mother (3) Father in law (4) Son

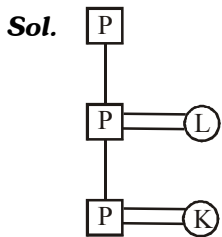
Ans. (1)



7. How is P related to L?

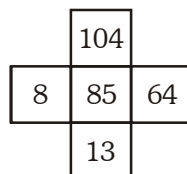
- (1) Father (2) Son (3) Father in law (4) Daughter in law

Ans. (3)

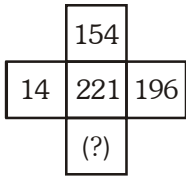


Direction (Q.8 to 10) : In each of the following questions, the numbers have been arranged according to the pattern shown in the sample figure given below. Find the missing figure.

Replace question mark (?) as a missing character with correct option.



8.



(1) 11

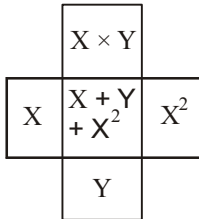
(2) 13

(3) 15

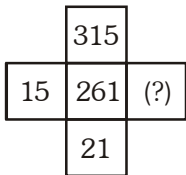
(4) 17

Ans. (1)

Sol.



9.



(1) 125

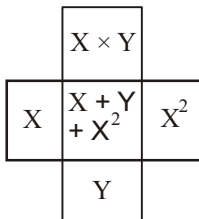
(2) 90

(3) 105

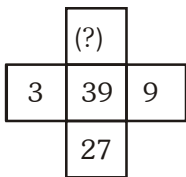
(4) 225

Ans. (4)

Sol.



10.



(1) 33

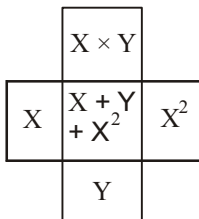
(2) 81

(3) 243

(4) 42

Ans. (2)

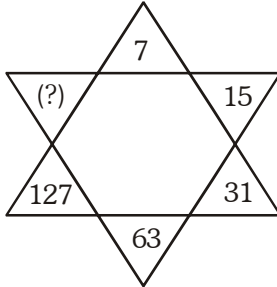
Sol.



Direction (Q.11 to 15) : Find the missing character in each of the following :

In place of question mark (?). Choose the correct option as the answer and mark it on answer-sheet as directed.

11.

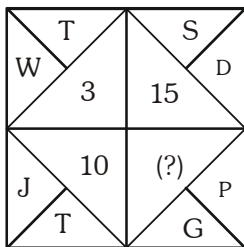


- (1) 190 (2) 221 (3) 236 (4) 255

Ans. (4)

Sol. Pattern : $\times 2 + 1, \times 2 + 1, \times 2 + 1 \dots$

12.



- (1) 5 (2) 9 (3) 11 (4) 13

Ans. (2)

Sol. Alphabet's Position difference.

13.

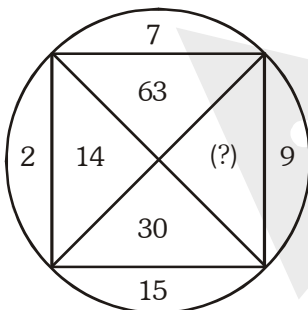
Z ₄	X ₃	V ₉
A ₆	C ₂	(?)
T ₅	R ₄	P ₁₅

- (1) E₁₂ (2) E₁₀ (3) F₁₂ (4) F₁₀

Ans. (1)

Sol. Each row consist of alternate letters . So the missing letter of the second row is E. The number in the columns are 4, 5, 6; 2, 3, 4; 9, 12, 15. Hence the missing character is E₁₂.

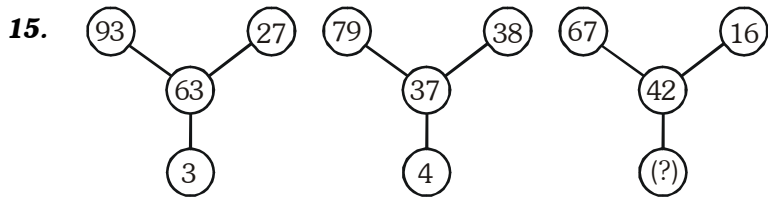
14.



- (1) 18 (2) 33 (3) 135 (4) 145

Ans. (3)

Sol. $9 \times 7 = 63; 7 \times 2 = 14, 2 \times 15 = 30; 15 \times 9 = 135.$



(1) 5

(2) 6

(3) 8

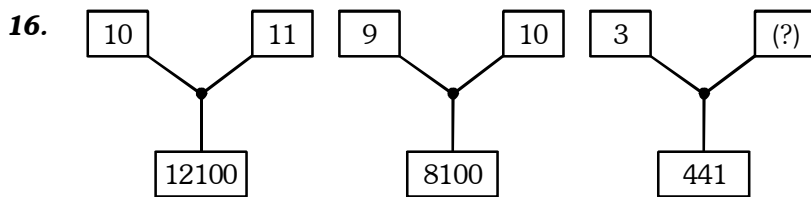
(4) 9

Ans. (4)

Sol. $67 - 42 - 16 = 9$.

Direction (Q.16 to 20) : In each of the following questions, a set of figure carrying certain characters is given.

Assuming that the character in each set follow a similar pattern, find the missing character in each case. Mark the correct selected options as the answer on the answer-sheet as instructed.



(1) 8

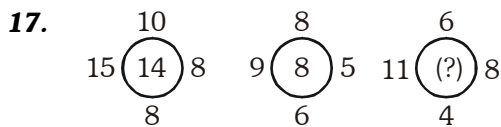
(2) 9

(3) 7

(4) 21

Ans. (3)

Sol. Top numbers square multiply given in bottom.



(1) 6

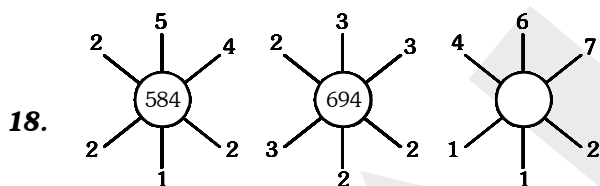
(2) 8

(3) 9

(4) 12

Ans. (1)

Sol. Face number difference then multiply.



(1) 678

(2) 769

(3) 824

(4) 937

Ans. (1)

Sol. $(5 \times 1)(4 \times 2)(2 \times 2) = 584$

19.

5	6	7
3	4	5
9	10	11
345	460	(?)

(1) 535

(2) 577

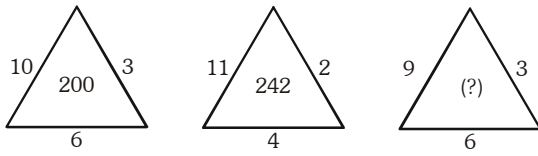
(3) 755

(4) 775

Ans. (2)

Sol. In column ; $3(9 \times 5) = 345$

20.



- (1) 486 (2) 72 (3) 162 (4) 243

Ans. (3)

Sol. $10^2 \times (6 \div 3) = 100 \times 2 = 200$

21. If, A:B = 2:5

B:C = 3:4

Then what will be the value of A : C ?

- (1) 1:2 (2) 3:10 (3) 2:3 (4) 5:4

Ans. (2)

Sol. A : B = 2 : 5

B : C = 3 : 4

So, A : C = 6 : 20 = 3 : 10

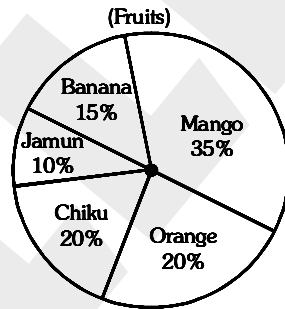
22. A clock runs 5 minutes faster in 1 hour. It has been set right at 12:00 in the afternoon. Now the clock is showing 6:30 in the evening. So, that will be the actual time ?

- (1) 5:00 pm. (2) 5:15 pm. (3) 5:30 pm. (4) 6:00 pm

Ans. (4)

Sol. Clearly from option if it is gain 6 hrs then it covers 30 min. So at 6:00 o'clock incorrect watch shows 6:30 pm.

Direction (Q.23 to 25) : The following Pie-Chart shows the distribution of fruit trees in a field. Consider the chart and answer the questions based on it.



23. Sector angle of banana is.....

- (1) 90° (2) 54° (3) 72° (4) 36°

Ans. (2)

Sol. 100 % = 360°. So, 1% = 3.6°.

Now 15% = 15 × 3.6 = 54°.

24. If there are 960 trees in total, how many of them are mango trees ?

- (1) 192 (2) 288 (3) 384 (4) 336

Ans. (4)

Sol. 100% = 960. So 1% = 9.6

Now 35% = 336.

25. What is the proportion of chiku and mango trees in the field to jamun, orange and banana trees ?
 (1) 1 (2) 1:3 (3) 11:9 (4) 3:1

Ans. (3)

Sol. $\frac{20+35}{20+10+15} = \frac{55}{45} = \frac{11}{9}$

26. Which of the following words cannot be formed using the words used in 'HIGHLIGHTS' ?
 (1) HIGH (2) HABIT (3) HITS (4) HEAT

Ans. (2, 4)

Sol. Two words HABIT and HEAT cannot be formed using the letters of the words HIGHLIGHTS. Hence answer is (2 and 4 options.)

27. If the following, four words are arranged in alphabetical order, which word will come third.
 (1) False (2) Fool (3) Follow (4) Faith

Ans. (3)

Sol. Faith I False II Follow III Fool IV

Direction (Q.28 to 32) : Which of the following questions is based on the following alphabet series :
 ABCDEFGHIJKLMNOPQRSTUVWXYZ

28. Which letter is exactly midway between G and Q in the given alphabet ?
 (1) K (2) L (3) M (4) N

Ans. (2)

Sol. H I J K L M N O P

29. Which letter in the alphabet is as far from G as T is from M ?
 (1) M (2) N (3) O (4) P

Ans. (2)

Sol. T is on 7th position on the right side of M.
 Similarly N is on 7th position on two right side of G.

30. Which letter is sixteenth to the right of the letter which is fourth to the left of I ?
 (1) S (2) T (3) U (4) V

Ans. (3)

Sol. Fourth to left of I is (E) and 16th to the right of E is (U)

31. If the above alphabet is written in the reverse order, which will be the eight letter to the right of O ?
 (1) F (2) G (3) V (4) W

Ans. (2)

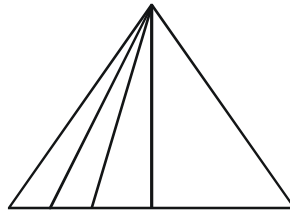
Sol. Z Y X W V U T S R Q P O N M L K J I H G F E D C B A
 └──────────────────────────┘
 8th to the right

32. If 'ROME' is written as 'MORE' then 'DARE' is written as :
 (1) RDAE (2) RDEA (3) RAED (4) RADE

Ans. (4)

Sol. Pattern is 2nd and 3rd letters get reversed and take place of 1st and 2nd position and 1st and 4th letter come on place of 3rd and 4th position respectively.

33. How many triangles are there in the figure given below ?



(1) 5

(2) 12

(3) 9

(4) 10

Ans. (4)

Sol. By observation

34. 'Mirror' is related to 'Reflection' in the same way as 'water' is related to.....?

(1) Conduction

(2) Dispersion

(3) Immersion

(4) Refraction

Ans. (4)

Sol. Like Mirror is related with reflection. Similarly, water is related with refraction.

35. If the car be a transistor, then what would be Petrol ?

(1) Transmitter Electric

(2) Electric

(3) Battery/Cell

(4) Transmission

Ans. (3)

Sol. If car be a transistor, then petrol be a Baltery/cell.

36. If the fish were birds, what would be the sea be ?

(1) Forest

(2) Sky

(3) Nest

(4) Island

Ans. (2)

Sol. If fish were birds, then sea be sky. Hence answer is (2).

37. Shirt is related to Button, in the same way as shoes is related to.....?

(1) Stitch

(2) Leg

(3) Socks

(4) None of these

Ans. (4)

Sol. Shirt is related with button. Similarly shoes is related with laces. Hence answer is (4)

Direction (Q.38 to 40) : Three words in bold letters are given in each questions, which have something in common among themselves. Out of the four given alientatives, choose the most appropriate description about these three words.

38. **Vote : Ballot : Poll**

(1) Election

(2) Nomination

(3) Selection

(4) Participation

Ans. (1)

Sol. Vote, Ballot and poll are related with election. Hence answer is (1)

39. **Newspaper : Hoarding : Television**

(1) Press

(2) Media

(3) Broadcast

(4) Rumour

Ans. (2)

Sol. News paper, Hoarding and television are related with media. Hence answer is (2)

40. **Wheat: Barley : Rice**

(1) Food

(2) Agriculture

(3) Grams

(4) Cereals

Ans. (4)

Sol. By observation

Direction (Q.41 to 45) : In each of the following questions- four words have been given, out of which three are alike in some manner and the fourth one is different.

Choose out the odd one and mark it on answer-sheet as directed.

41. (1) Venus (2) Moon (3) Saturn (4) Mars

Ans. (2)

Sol. Except (2) all others are planets.

42. (1) Iron (2) Silver (3) Mercury (4) Zinc

Ans. (3)

Sol. Mercury is the only liquid metal among all. Hence answer is (3)

43. (1) Infrared rays (2) Ultraviolet rays (3) Radio waves (4) X-rays

Ans. (3)

Sol. All except radio waves are short wavelength radiation. Hence answer is (3).

44. (1) Man-Earth (2) Birds-Sky (3) Fish-Water (4) Train-Station

Ans. (4)

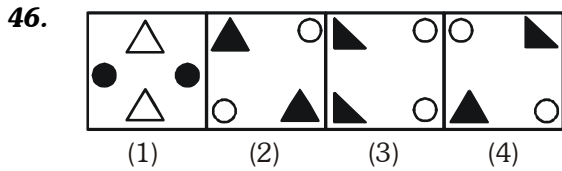
Sol. Second word shows the place where the first word can sustain except in (4).

45. (1) Mother (2) Father (3) Brother (4) Teacher

Ans. (4)

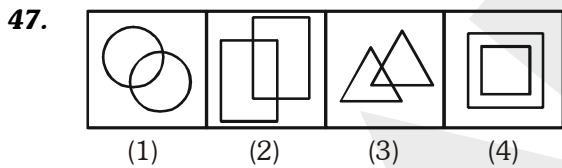
Sol. Except (4) all others are blood relative.

Direction (Q.46 to 50) : In the question given below, four figures are given. Three of the four figures are similar on the basis of any one property and one is different in all the ways. Select this different figure.



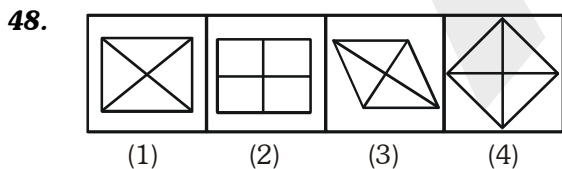
Ans. (1)

Sol. By observation



Ans. (4)

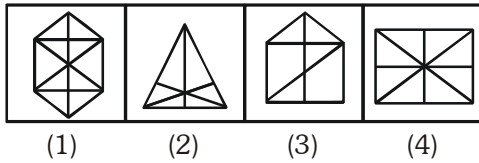
Sol. By observation



Ans. (3)

Sol. By observation

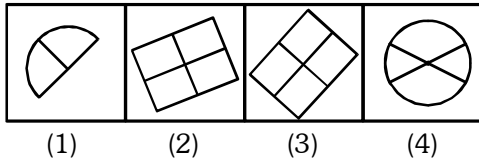
49.



Ans. (3)

Sol. By observation

50.

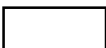




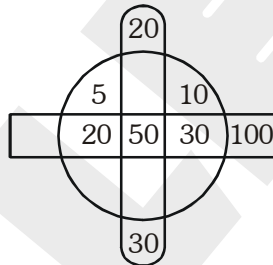
Ans. (4)

Sol. By observation

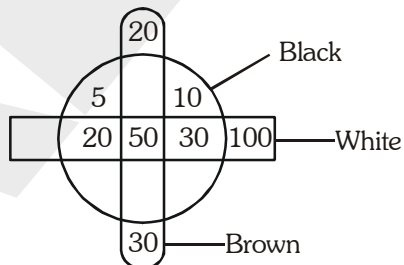
Direction (Q.51 to 53) : Study the diagram shown below and answer the questions based on it.

This Venn diagram shows children's choice of colour.

- Rectangle  shows the choice of White colour.
- Circle  shows the choice of Black colour
- while capsule shaped  shows choice of Brown colour.



51. How many children like both brown and white but do not like black ?



(1) 10

(2) 50

(3) 20

(4) None of these

Ans. (4)

Sol. By observation

52. What is the ratio of the children who like brown to those who like black ?

- (1) $\frac{5}{3}$ (2) $\frac{1}{2}$ (3) 1 (4) $\frac{5}{6}$

Ans. (NA)

53. What is the ratio of children who do not like black to children who only like black and white?

- (1) 3:1 (2) 3:2 (3) 12:5 (4) 5:12

Ans. (1)

Sol. Children who do not like black $100 + 30 + 20 = 150$

Children who only like black and white 50

$$\text{Ratio} = \frac{150}{50} = \frac{3}{1}$$

54. If, WORLD = YMTJF then, CONCERN = ?

- (1) AQLCTL (2) EQPEGTP (3) EMPAGPP (4) AMLACPL

Ans. (3)

Sol. WORLD = YMTJF

W	O	R	L	D	C	O	N	C	E	R	N
↓+2	↓-2	↓+2	↓-2	↓+2	↓+2	↓-2	↓+2	↓-2	↓+2	↓-2	↓+2
Y	M	T	J	F	E	M	P	A	G	P	P

55. If, PEN = 613 and STRING = 580934 then, RIPENING = ?

- (1) 09631934 (2) 09163934 (3) 09316934 (4) 09613934

Ans. (4)

Sol. PEN = 613, STRING = 580934, RIPENING = ?

By direct coding

R = 0, I = 9, P = 6, E = 1, N = 3, G = 4

So, RIPENING
09613933

56. If 'UNCLE' is written as 'QQYOA', then what will be written to 'COLUMN' ?

- (1) YROXIQ (2) YRHQIQ (3) YHRXIQ (4) YRHXIQ

Ans. (4)

Sol. UNCLE → QQYOA

U	N	C	L	E	C	O	L	U	M	N
↓-4	↓+3	↓-4	↓+3	↓-4	↓-4	↓+3	↓-4	↓+3	↓-4	↓+3
Q	Q	Y	O	A	Y	R	H	X	I	Q

YRHXIQ

57. If, HIDE = 1440, then what will be the value of 'WIDE' ?

- (1) 1560 (2) 3265 (3) 4140 (4) 2580

Ans. (3)

Sol. HIDE \longrightarrow 1440

$$H = 8, I = 9, D = 4, E = 5$$

$$8 \times 9 \times 4 \times 5 = 1440$$

WIDE \longrightarrow 4140

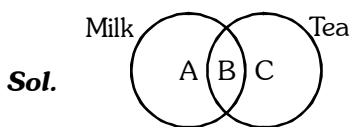
$$W = 23, I = 9, D = 4, E = 5$$

$$23 \times 9 \times 4 \times 5 = 4140$$

58. In a class of 52 students, 24 students drink milk. 28 students drink tea and 8 students do not drink anything. Find how many students drink both milk and tea.

- (1) 8 (2) 6 (3) 2 (4) 10

Ans. (1)



$$A + B = 24 \quad \dots(1)$$

$$B + C = 28 \quad \dots(2)$$

$$A + B + C + 8 = 52 \quad \dots(3)$$

$$A + B + C = 44$$

$$24 + C = 44$$

(Put A + B here)

$$C = 44 - 24 = 20$$

$$B + C = 28$$

$$B + 20 = 28$$

$$\text{So } B = 8$$

59. If P means ' \div ', Q means '+', R means '-' and S means ' \times ', then what will be the value of 10R192P48S48P96Q1?

- (1) 10 (2) 9 (3) 8 (4) 7

Ans. (2)

Sol. 10R192P48S48P96Q1

$$10 - 192 \div 48 \times 48 - 96 + 1$$

$$10 - 4 \times 0.5 + 1$$

$$10 - 2.0 + 1$$

$$11 - 2 = 9$$

60. If '+' means 'X', '-' means ' \div ', ' \times ' means '+' and ' \div ' means '-' then compute the value of following expression

$$45 - 9 + 4 \times 5$$

- (1) 21 (2) 25 (3) 26 (4) 23

Ans. (2)

Sol. 45 \div 9 \times 4 + 5 (After changing sign)

$$5 \times 4 + 5$$

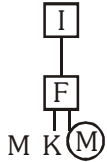
$$20 + 5$$

$$25$$

- 61.** Pointing to K, M says that I am the daughter of his grandfather's only son. How is M related to K?
 (1) Mother (2) Maternal Aunt (3) Daughter (4) Sister

Ans. (4)

Sol. Sister



- 62.** Which signs should be interchanged to correct the equation given below ?

$$4 - 13 \div 7 + 6 \div 7 \times 1 = 5$$

- (1) \times and $+$ (2) $-$ and \times (3) $+$ and $-$ (4) $+$ and \times

Ans. (3)

Sol. $4 - 13 \div 7 + 6 \div 7 \times 1 = 5$

After putting (3) option we get

$$4 + 13 \div 7 - 6 \div 7 \times 1 = 5$$

$$4 + \frac{13}{7} - \frac{6}{7} \times 1 = 5$$

$$4 + \frac{13}{7} - \frac{6}{7} = 5$$

$$\frac{28 + 13 - 6}{7} = 5$$

$$\frac{35}{7} = 5$$

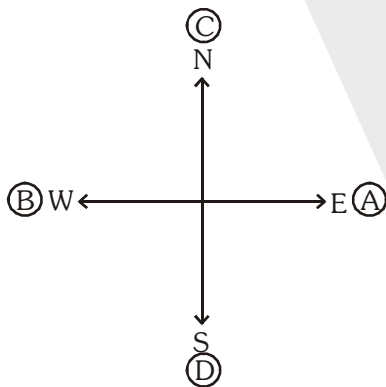
$$5 = 5$$

- 63.** A, B, C and D are playing cards. A and B are partners. D faces towards North. If A faces towards West, then who faces towards South?

- (1) B (2) C (3) D (4) None of these

Ans. (2)

Sol.

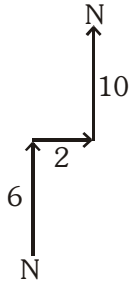


64. After walking 6 km, I turned right and covered a distance 2 km, then turned left and covered a distance of 10 km. In the end I was moving towards the North. From which direction did I start my journey ?

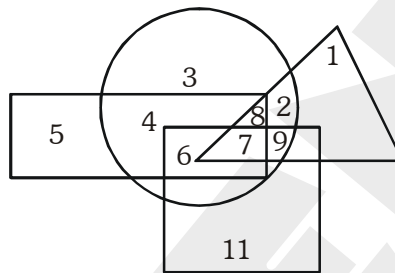
- (1) Nonh (2) South (3) East (4) West

Ans. (1)

Sol. North



Direction (Q.65 to 69) : In the following figure, rectangle, squaje, circle and triangle represent the regions of wheat, gram, maize and rice cultivation respectively. On the basis of figures, answer the following questions.

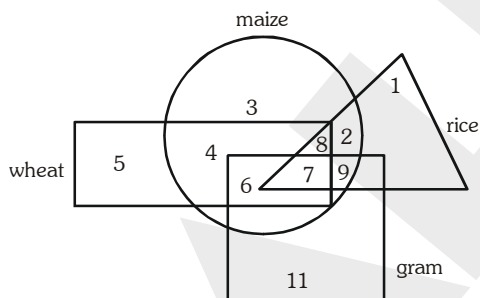


65. Which area is cultivated by all the four commodities ?

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

Ans. (1)

Sol.



Number which is common in all the four figures = 7

So option (1) 7

66. Which area is cultivated by wheat and maize only ?

- (1) 8 (2) 6 (3) 5 (4) 4

Ans. (4)

Sol. Area which is common between rectangle & circle only = 4

67. Which area is cultivated by Rice only ?
(1) 5 (3) 1 (3) 2 (4) 11

Ans. (2)

Sol. By observation

68. Which area is cultivated by maize only ?
(1) 5 (2) 1 (3) 2 (4) 9

Ans. (NA)

Sol. By observation = 3

69. Which area is cultivated by rice and maize and nothing else ?
(1) 9 (2) 8 (3) 2 (4) 7

Ans. (3)

Sol. Number which is common between triangle & circle is only = 2

70. In the numbers from 100 to 600, how many times digit 1 comes at the ten's place?
(1) 6 (2) 7 (3) 60 (4) 50

Ans. (4)

Sol. 110 - 119 → 10 times
210 - 219 → 10 times
310 - 319 → 10 times
410 - 419 → 10 times
510 - 519 → 10 times
50 times

71. How many combinations of two digits numbers having 8 can be made from the following numbers ?
8, 5, 2, 1, 7, 6

(1) 9 (2) 10 (3) 11 (4) 12

Ans. (3)

Sol. 11

Combinations of two digits number having 8

85, 58, 82, 28, 81, 18, 87, 78, 85, 68, 88

72. If every second Saturday and all Sundays are holidays in a 30 days month beginning on Saturday, then how many working days are there in that month ?

(1) 20 (2) 21 (3) 22 (4) 23

Ans. (4)

Sol. 23

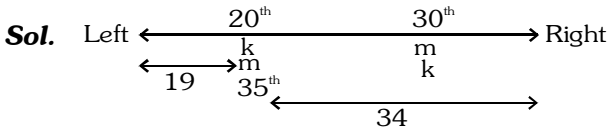
Date	Day	Holiday
2	Sunday	Holiday
8	2 nd saturday	Holiday
9	Sunday	Holiday
16	Sunday	Holiday
22	2 nd saturday	Holiday
23	Sunday	Holiday
30	Sunday	Holiday

Total days 30 – Holiday 7 = Working day = 23

73. In a row of men. Manoj is 30th from the right and Kiran is 20th from the left. When they interchange their position, Manoj becomes 35th from the right. What is the total number of men in a row ?

- (1) 34 (2) 54 (3) 45 (4) 44

Ans. (2)



So total man = 19 + 1 + 34 = 54

Direction (Q.74 to 77) : In each of the questions given below, there are two statements labelled as Assertions (A) and Reason (R).

Mark your answer as per the options provided below the question.

74. Assertion (A) : We prefer to wear white clothes in winter

Reason (R) : White clothes are good reflectors of heat.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
 (2) Both (A) and (R) are true but (R) is not correct explanation (A)
 (3) (A) is true but (R) is false
 (4) (A) is false but (R) is true

Ans. (4)

Sol. By observaiton (A) is false but (R) is true

75. Assertion (A) : Vaccines prevents disease.

Reason (R) : Vaccine must be given to children.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
 (2) Both (A) and (R) are true but (R) is not correct explanation (A)
 (3) (A) is true but (R) is false
 (4) (A) is false but (R) is true

Ans. (2)

Sol. By observaiton Both (A) and (R) are true but (R) is not correct explanation (A)

76. Assertion (A) : Copper is used to make electrical wires.

Reason (R) : Copper has very low electrical resistance.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
 (2) Both (A) and (R) are true but (R) is not correct explanation (A)
 (3) (A) is true but (R) is false
 (4) (A) is false but (R) is true

Ans. (1)

Sol. Both assertion and reason is true and (R) is correct explanation of (A)

77. Assertion (A) : Leakage in household gas (LPG) cylinders can be detected.

Reason (R) : LPG has a strong smell.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
 (2) Both (A) and (R) are true but (R) is not correct explanation (A)
 (3) (A) is true but (R) is false
 (4) (A) is false but (R) is true

Ans. (1)

Sol. Both Assertion and reason are true and (R) is correct explanation of (A)

Direction (Q.78 to 80) : In each of the following questions, four probable answers have been given as alternatives. Select the most appropriate alternatives as the answer.

78. Your friend has lost his/her purse with your important documents in it. You would.....

- (1) feel angry but do not react as anyone can make mistakes.
- (2) feel angry and ask him/her to replace/duplicate the documents.
- (3) understand the situation and tell him/her that it's OK and not to worry about it.
- (4) blame him/her for being careless and stop talking to him/her.

Ans. (3)

Sol. Understand the situation and tell him/her that it's OK and not to worry about it.

79. A train always has:

- (1) Engine
- (2) Guard
- (3) Driver
- (4) Passengers

Ans. (1)

Sol. A train always has engine. As it drives the train.

80. Atmosphere always has :

- (1) Oxygen
- (2) Air
- (3) Dust
- (4) Germs

Ans. (2)

Sol. Atmosphere always have air.

Direction (Q.81 to 85) : In each of the following questions, various terms an alphabet series/number series/ alpha-numeral series are given with one term missing as shown by (?). Choose the missing term out of the given alternatives.

81. $\frac{3}{7}, \frac{4}{11}, (?), \frac{9}{31}, \frac{13}{47}$

- (1) $\frac{6}{15}$
- (2) $\frac{6}{19}$
- (3) $\frac{6}{17}$
- (4) $\frac{5}{15}$

Ans. (2)

Sol. $\frac{3}{7}, \frac{4}{11}, \frac{6}{19}, \frac{9}{31}, \frac{13}{47}$

$\begin{matrix} +1 & +2 & +3 & +4 \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright \\ \frac{3}{7} & \frac{4}{11} & \frac{6}{19} & \frac{9}{31} & \frac{13}{47} \\ \curvearrowleft & \curvearrowleft & \curvearrowleft & \curvearrowleft \\ +4 & +8 & +12 & +16 \end{matrix}$

Option (2) 6/19

82. AJS, GPY, (?), SBK, YHQ

- (1) DMV
- (2) MVE
- (3) OUA
- (4) QZI

Ans. (2)

Sol. A J S , G P Y , M V E , S B K , Y H Q

$\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 1 & & 7 & & 13 & & 19 & & 25 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & +6 & & +6 & & +6 & & +6 & \\ 10 & & 16 & & 22 & & 28 & & 34 \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ & +6 & & +6 & & +6 & & +6 & \\ 19 & & 25 & & 31 & & 37 & & 43 \\ & & & & = E = 31 - 26 = 5 & & & & \end{matrix}$

83. 2A11, 4D13, 12G17, (?)

(1) 48I19

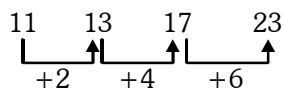
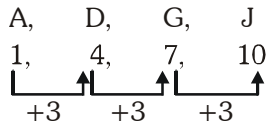
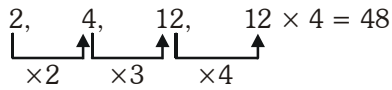
(2) 36J21

(3) 48J21

(4) 48J23

Ans. (4)

Sol. 2A11, 4D13, 12G17, ____



84. 625, 5, 125, 25, 25, (?), 5

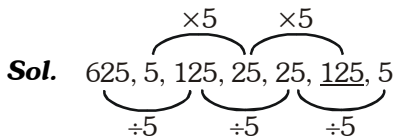
(1) 5

(2) 25

(3) 125

(4) 625

Ans. (3)



85. 4, 8, 28, 80, 244, (?)

(1) 278

(2) 428

(3) 628

(4) 728

Ans. (4)

Sol. 4, 8, 28, 80, 244, ____

$$3^1 + 1 = 4$$

$$3^2 - 1 = 8$$

$$3^3 + 1 = 28$$

$$3^4 - 1 = 80$$

$$3^5 + 1 = 244$$

$$3^6 - 1 = 728$$

Direction (Q.86 to 90) : Study the given Information carefully and answer the questions that follow :-

- A, B, C, D, E, F and G are sitting on wall and all of them are facing East.
- C is on the immediate right of D.
- B is at an extreme end and has E his neighbour.
- G is between E and F
- D is sitting third from the south end.

86. Who is sitting to the right of E ?

(1) A

(2) G

(3) D

(4) F

Ans. (2)

Sol. B E G F D C A

G is sitting to right of E.

87. Which of the following pairs of people are sitting at the extreme ends ?

- (1) AB (2) AE (3) CB (4) FB

Ans. (1)

Sol. AB are sitting at extreme ends.

88. Name of the person who should change place with C, such that he gets the third place from the north end.

- (1) E (2) F (3) G (4) D

Ans. (3)

Sol. G should change place with C in order to come on 3rd place from North.

89. Immediately between which of the following pairs of people is D sitting ?

- (1) AC (2) AF (3) CE (4) CF

Ans. (4)

Sol. C and F are adjacent to D.

90. Who is sitting exactly in the middle of this seating arrangement ?

- (1) F (2) G (3) D (4) None of these

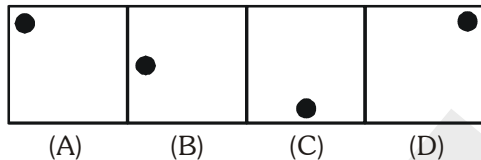
Ans. (1)

Sol. 'F' is sitting in middle of the arrangement.

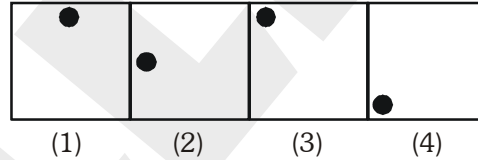
Direction (Q.91 to 100) : Each of the following consists of four 'Problem-figures' marked A, B, C and D, and four 'Answer-figure' marked 1, 2, 3, & 4. Select the figure from amongst the Answer-figure which will continue the series established by the four problem-figures.

The correct option taken from Answer-figure (1, 2, 3 or 4) will be marked as the answer to the related question on the Answer-Sheet.

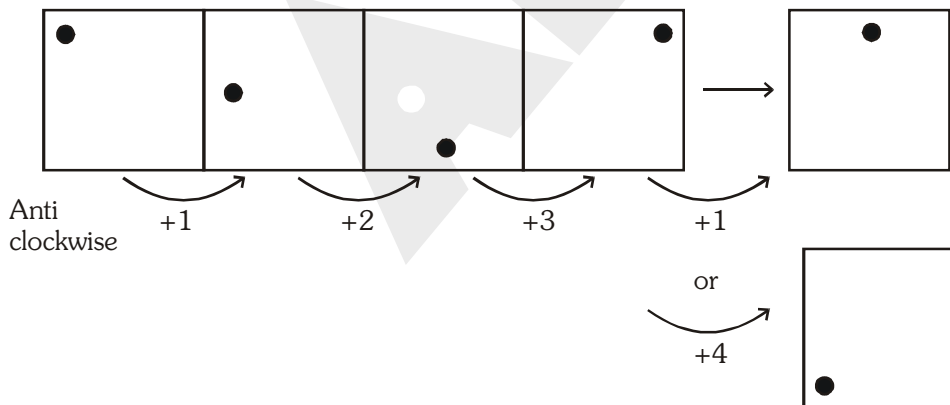
91. Problem Figures



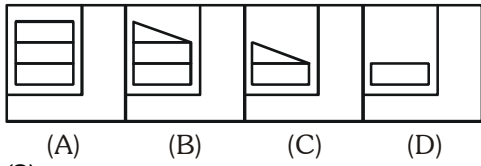
Answer Figures



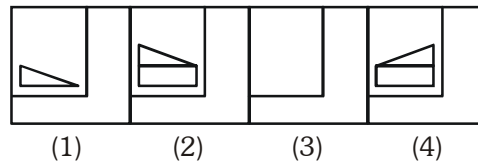
Ans. (1) or (4)



92. Problem Figures

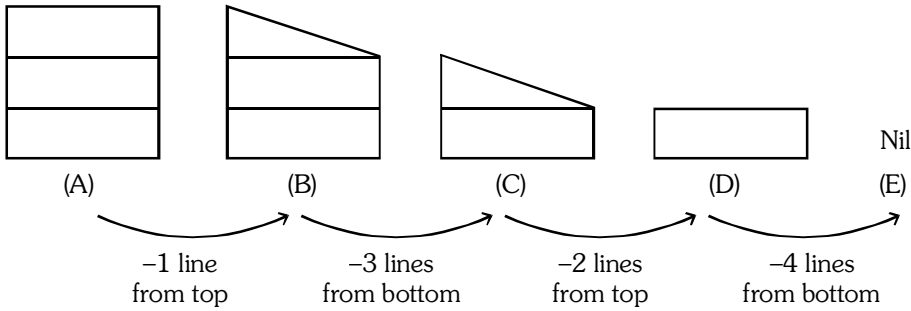


Answer Figures

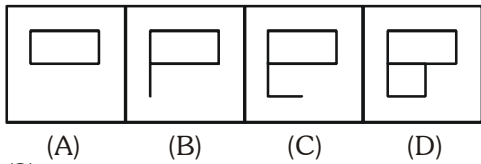


Ans. (3)

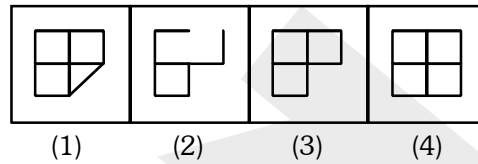
Sol.



93. Problem Figures



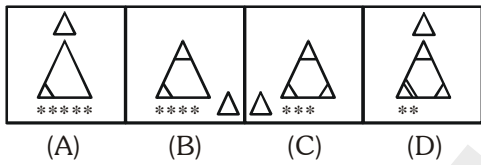
Answer Figures



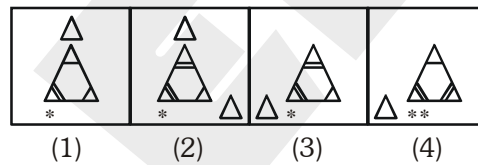
Ans. (3)

Sol. One line added in each step.

94. Problem Figures

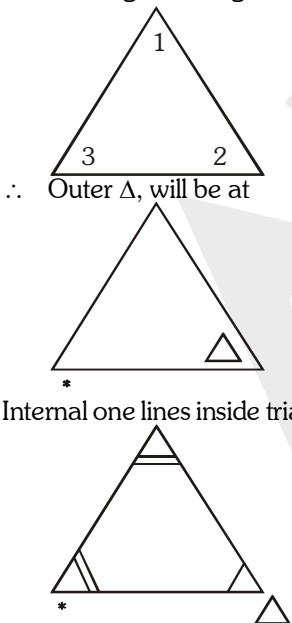


Answer Figures

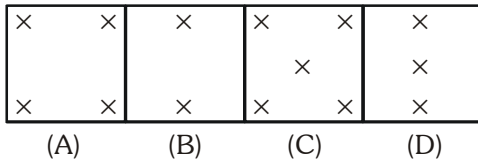


Ans. (NA)

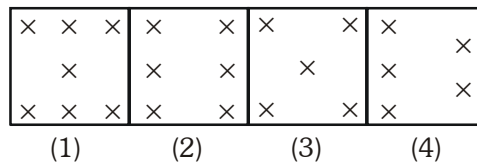
Sol. Star's given at bottom, reducing by 1 in each step,
Outer triangle moving at 3 positions in clockwise direction



95. Problem Figures

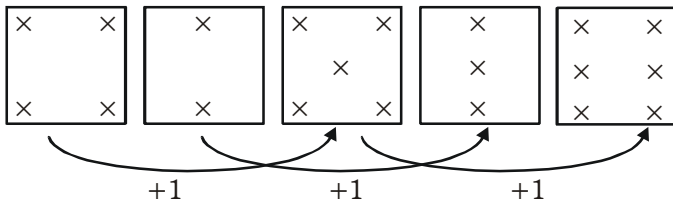


Answer Figures

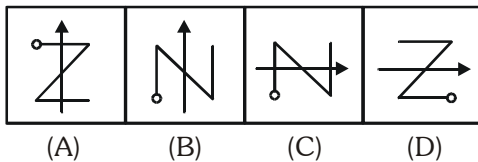


Ans. (2)

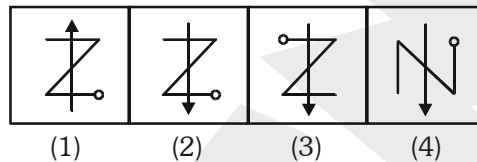
Sol.



96. Problem Figures

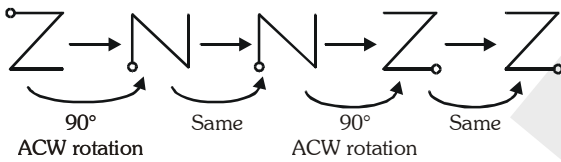


Answer Figures

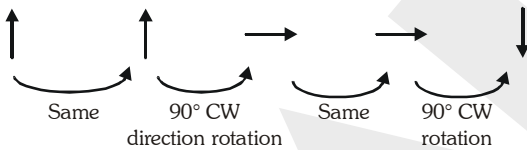


Ans. (2)

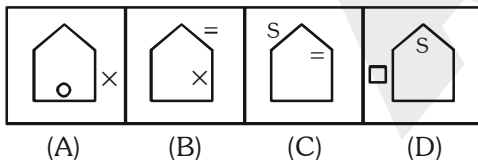
Sol.



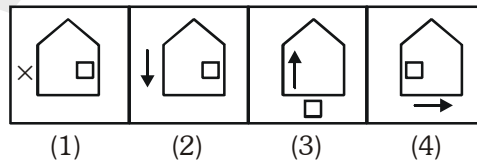
Arrow movement



97. Problem Figures



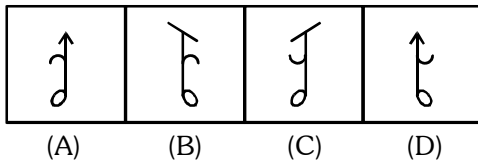
Answer Figures



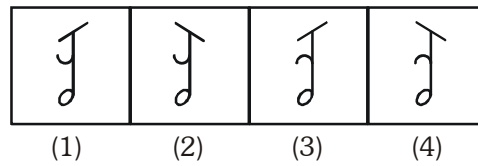
Ans. (4)

Sol. Fig. inside the pentagon changes to new fig. and move outside. Fig. outside doesnot change shape but comes inside on the very same position. □ will come inside, only option 4 follows.

98. Problem Figures



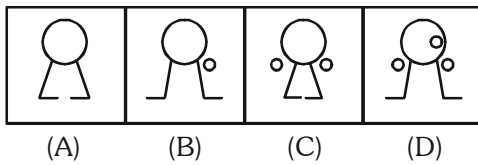
Answer Figures



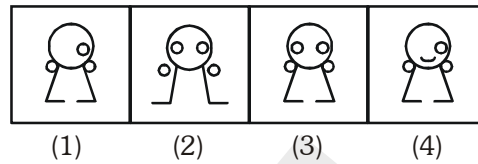
Ans. (4)

Sol. By observation

99. Problem Figures



Answer Figures

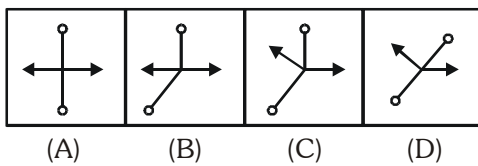


Ans. (3)

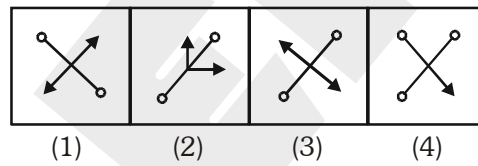
Sol. Bottom lines moving inside and outside in adjacent figures. One circle is increasing at each step by observation.

Problem Figures

100.



Answer Figures



Ans. (3)

Sol.

