Reasoning

Coding Decoding

CODING-DECODING is an important part of the Logical reasoning section in all aptitude related examinations. Coding is a process used to encrypt a word , a number in a particular code or pattern based on some set of rules. Decoding is a process to decrypt the pattern into its original form from the given codes

Some of the major types of coding logics are →
(a) Constant addition in the position of letters.
(b) Constant subtraction in the position of letters.
(c) Denoting the position of letters in the whole alphabetical order.
(d) Addition of the positions of all the letters to make code for the word.
(e) Constant addition and subtraction alternatively in the position of all the letters.
(f) Square of the number of letters in the word.
(g) Arranging the letters in alphabetical order.
(h) Arrangement of letters in the word given in reverse order.
(i) Interchanging each pair of the letters in the given word.
(j) Constant addition and then reversal of the letters to form the final word.

⇒ In this chapter, mainly four types of questions are asked.
1. Letter coding
2. Number/Symbol coding
3. Words coding
4. Condition coding

TYPE-I
Letter coding - It consists of a set of letters, whose code is given as another set of characters. Based on this, the code of another letter group has to be found. Following are some examples of this -
1.Example - In a code language, QUESTION is written as OPJUTFVR. How will FACTOR be written in that language ?
Solution: QUESTION → (OPJUTFVR)
There is a pattern :-
Q + 1 = R ;   U + 1 = V ;   E + 1 = F;
S + 1 = T ;   T + 1 = U ;   I + 1 = J ;
O + 1 = P and N + 1 = O .
Write it in reverse order. (OPJUTFVR)
In the same way FACTOR is written as
F + 1 = G ;   A + 1 = B ;   C + 1 = D;
T + 1 = U ;   O + 1 = P ;   R + 1 = S.
Now , after reversing it (SPUDBG)

is the correct answer.

2. Example - If NBSJOF is coded as ENIRAM, then how will UFNQFS be written in that   language ?
Solution : NBSJOF → ENIRAM
There is a pattern :-
N - 1 = M ;   B - 1 = A ;   S - 1 = R ;
J - 1 = I ;   O - 1 = N ;   F - 1 = E ;
Write it in reverse order. (ENIRAM)
In the same way UFNQFS is written as
U - 1 = T ;   F - 1 = E ;   N - 1 = M ;
Q - 1 = P ;   F - 1 = E ;   S - 1 = R ;
Now , after reversing it (REPMET)
is the correct answer.

TYPE - II
Number/symbol coding - In the letters of the English alphabet are coded with numbers or symbols which have to be understood and answered in the same code.
Following are some Example -

1.Example - In a code language, YOGHURT is written as 251578211820. How will DEVELOP be written as in that language ?
Solution : YOGHURT → 251578211820
Direct place values of the letters are written. So the code for DEVELOP will be 45225121516.

2. Example - In a code language, if 'BADGE' is written as '4281410', then how will 'NORMS' be written in that language?
Solution : BADGE → 4281410
Logic :- Place value × 2
B × 2 = 4 ;   A × 2 = 2 ;   D × 2 = 8 ;
G × 2 = 14 ; E × 2 = 10 ;
In the same way, NORMS →
N × 2 = 28 ;   O × 2 = 30 ; R × 2 = 36 ;
M × 2 = 26 ; S × 2 = 38 ;
So, NORMS → 2830362638

TYPE - III
Word coding - It contains a word or a set of words whose code is given   as another word or group of words.
Based on this, the code of a word has to be determined. Some examples of this are:
1.Example - If in a language, 'FOOT' is called 'ELBOW', 'ELBOW' is called 'ANKLE' , 'ANKLE' is called 'PALM' , 'PALM' is called 'FINGER' and 'FINGER' is called 'KNEE' , then in that language, on what would one wear a ring?
Solution : We wear the ring in "FINGER".
And the code for FINGER → KNEE.
So , KNEE is the right answer.

TYPE - IV
Condition coding - In this type of questions, some letters or numbers are

given, and some signs or letters are marked in the form of signs and some special rules are given below. In the question, one has to find a group of signs from a group of numbers or letters or a group of letters from a group of signs .
1. Example - In a code language, GATE is written as 5⋆3$ and TOUR is written as 32&% then How will URGE be written in that language ?
Solution :

Then , the code for URGE → &%5$

Questions:-

Q.1. In a certain code language, 'BLUE' is coded as '1542' and 'ABLE' is coded as '1745'. What is the code for 'A' in the given code language ?
SSC MTS 01/09/2023 (1st Shift)
(a) 7   (b) 1   (c) 4   (d) 5

Q.2. In a certain code language, 'ENVY' is coded as 'FMWX' and 'ALAS' is coded as 'BKBR'. What is the code for 'BODY' in the given code language?
SSC MTS 01/09/2023 (1st Shift)
(a) DNEY (b) DNEX (c) CPEY (d) CNEX

Q.3. In a certain code language, 'ESCORT' is coded as 'GRBNQV' and 'APRON' is coded as 'COQNP'. What is the code for 'CRANKY' in the given code language?
SSC MTS 01/09/2023 (2nd Shift)
(a) FPZNKC   (b) DQYNKB
(c) DPANJB   (d) EQZMJA

Q.4. In a certain code language, 'BATH' is coded as '1482' and 'HALT' is coded as '8126'. What is the code for 'L' in the given code language?
SSC MTS 01/09/2023 (2nd Shift)
(a) 1   (b) 8   (c) 2   (d) 6

Q.5. In a certain code language, 'LED' is coded as '15-22-23' and 'BMW' is coded as '25-14-4'. What is the code for 'QUF' in the given code language ?
SSC MTS 01/09/2023 (3rd Shift)
(a) 9 - 4 - 21   (b) 10 - 6 - 21
(c) 11 - 5 - 20   (d) 9 - 5 - 20

Q.6. In a certain code language, 'DEAN' is coded as '2458' and 'LEND' is coded as '8352'. What is the code for 'L' in the given code language ?
SSC MTS 01/09/2023 (3rd Shift)
(a) 5   (b) 3   (c) 8   (d) 2

Q.7. In a certain code language, 'COIN' is coded as '9735' and 'ONCE' is coded as

'3459'. What is the code for 'E' in the given code language ?
SSC MTS 04/09/2023 (1st Shift)
(a) 5   (b) 3   (c) 4   (d) 9

Q.8. In a certain code language, 'BLANCH' is coded as '36' and 'ARAB' is coded as '24". What is the code for 'CORRECT' in the given code language ?
SSC MTS 04/09/2023 (1st Shift)
(a) 41   (b) 39   (c) 42   (d) 40

Q.9. In a certain code language, 'YJM' is coded as '26-11-14' and 'SOP' is coded as '20-16-17'. What is the code for 'BTX' in the given code language ?
SSC MTS 04/09/2023 (2nd Shift)
(a) 3 - 21 - 25   (b) 5 - 22 - 24
(c) 5 - 23 - 25   (d) 4 - 22 - 24

Q.10. In a certain code language, 'LIAR' is coded as '5148' and 'REAL' is coded as '1582'. What is the code for 'E' in the given code language ?
SSC MTS 04/09/2023 (2nd Shift)
(a) 5   (b) 8   (c) 2   (d) 1

Q.11. In a certain code language. 'GLOAT' is coded as 'EJMYR' and 'INCUR' is coded as 'GLASP'. What is the code for 'PANDA' in the given code language ?
SSC MTS 04/09/2023 (3rd Shift)
(a) MZMCZ   (b) MYMCX
(c) NXNBY   (d) NYLBY

Q.12. In a certain code language, 'MINT' is coded as '4735' and 'TIME' is coded as '5483' What is the code for 'E' in the given code language ?
SSC MTS 04/09/2023 (3rd Shift)
(a) 8   (b) 5   (c) 4   (d) 3

Q.13. In a certain code language. 'get more sleep' is coded as 'wo bt gk' and 'less is more' is coded as 'ap gk cm' How is 'more' coded in the given language"
SSC MTS 05/09/2023 (1st Shift)
(a) wo   (b) cm   (c) bt   (d) gk

Q.14. In a certain code language, 'PING' is coded as '62' and 'HAZE' is coded as '68' What is the code for 'GOAT' in the given code language?
SSC MTS 05/09/2023 (1st Shift)
(a) 67   (b) 65   (c) 66   (d) 69

Q.15. In a certain code language, 'ETHOS' is coded as '15' and 'CHEERFUL' is coded as '24'. What is the code for 'CHIMNEY' in the given code language?
SSC MTS 05/09/2023 (2nd Shift)
(a) 18   (b) 21   (c) 19   (d) 23

Q.16. In a certain code language, 'make your life' is coded as 'uk ox zt' and 'life is good' is coded as 'qr uk va'. How is 'life'

coded in the given language?
SSC MTS 05/09/2023 (2nd Shift)
(a) zt   (b) ox   (c) uk   (d) qr

Q.17. In a certain code language, 'CHEW' is coded as '39' and 'FORE' is coded as '44' What is the code for 'GLIT' in the given code language ?
SSC MTS 05/09/2023 (3rd Shift)
(a) 48   (b) 51   (c) 50   (d) 52

Q.18. In a certain code language, 'OPEN' is coded as'4582' and 'PORE' is coded as '2385'. What is the code for 'R' in the given code language ?
SSC MTS 05/09/2023 (3rd Shift)
(a) 8   (b) 2   (c) 3   (d) 5

Q.19. In a certain code language, 'NAME' is coded as '2473' and 'MEND' is coded as '7642'. What is the code for 'D' in the given code language?
SSC MTS 06/09/2023 (1st Shift)
(a) 4   (b) 6   (c) 7   (d) 2

Q.20. In a certain code language, 'CHORAL' is coded as 'OHCLAR' and 'FOREGO' is coded as 'ROFOGE'. What is the code for 'GALLEY' in the given code language?
SSC MTS 06/09/2023 (1st Shift)
(a) GYALLE   (b) ELLAGY
(c) LAGYEL   (d) YELLAG

Q.21. In a certain code language, 'BLAME is coded as 'CMBNF' and 'CHANGE' is coded as 'DIBOHF'. What is the code for 'DESERT' in the given code language?
SSC MTS 06/09/2023 (2nd Shift)
(a) EGTGSV   (b) FHSGTV
(c) EFTFSU   (d) FGRFST

Q.22. In a certain code language, 'WHAT' is coded as 5298 and 'THAN' is coded as 9826. What is the code for 'W' in the given code language?
SSC MTS 06/09/2023 (2nd Shift)
(a) 8   (b) 5   (c) 2   (d) 6

Q.23. In a certain code language. 'MACABRE' is coded as '8' and 'HEDONISM' is coded as '9'. What is the code for 'ERUPT' in the given code language?
SSC MTS 06/09/2023 (3rd Shift)
(a) 8   (b) 6   (c) 5   (d) 7

Q.24. In a certain code language, 'never lose hope' is coded as 'tu fk mb' and 'winners never quit' is coded as 'dg vc fk. How is 'never' coded in the given language ?
SSC MTS 06/09/2023 (3rd Shift)
(a) vc   (b) tu   (c) fk   (d) dg

Q.25. In a certain code language, 'YOU' is coded as '20' and 'LIP' is coded as '44'. What is the code for 'ROB' in the given code language?
SSC MTS 08/09/2023 (1st Shift)
(a) 44   (b) 46   (c) 41   (d) 42

Q.26. In a certain code language, 'ATOM' is coded as '9613' and 'BOAT' is coded as '1938'. What is the code for 'B' in the given code language?
SSC MTS 08/09/2023 (1st Shift)
(a) 9   (b) 8   (c) 3   (d) 1

Q.27. In a certain code language, 'YOJ' is coded as 'BRM' and 'DSP' is coded as 'GVS'. What is the code for 'ZMC' in the given code language?
SSC MTS 08/09/2023 (2nd Shift)
(a) DQE (b) CPF (c) CQF (d) DPG

Q.28. In a certain code language, 'good vibes only' is coded as 'vn mj kl' and 'change is good' is coded as 'mj ro dh'. How is 'good' coded in the given language?
SSC MTS 08/09/2023 (2nd Shift)
(a) ro   (b) dh   (c) vn   (d) mj

Q.29. In a certain code language, 'PORTAL' is coded as 'RQTVCN' and 'QUIET' is coded as 'SWKGV'. What is the code for 'SIMPLE' in the given code language?
SSC MTS 08/09/2023 (3rd Shift)
(a) VKNRMJ   (b) UKORNG
(c) TJNSMH   (d) TNOSMI

Q.30. In a certain code language, 'do it now' is coded as 'qh tr ce' and 'now or never' is coded as 'lx uk tr'. How is 'now' coded in the given language?
SSC MTS 08/09/2023 (3rd Shift)
(a) ce   (b) qh   (c) tr   (d) lx

Q.31. In a certain code language, 'yes you can' is coded as 'an cf dt' and 'you are enough' is coded as 'sk dt hw'. How is "you" coded in the given language?
SSC MTS 11/09/2023 (1st Shift)
(a) cf   (b) sk   (c) dt   (d) hw

Q.32. In a certain code language 'BACK' is coded as '17' and 'DTDC' is coded as '31' What is the code for 'JAAM' in the given code language ?
SSC MTS 11/09/2023 (1st Shift)
(a) 35   (b) 20   (c) 40   (d) 25

Q.33. In a certain code language, 'ARC' is coded as '1-18-3' and 'BOY' is coded as '2-15-25'. What is the code for 'FAD' in the given code language?
SSC MTS 11/09/2023 (2nd Shift)
(a) 7 - 2 - 5   (b) 6 - 1 - 4

(c) 5 - 2 - 6   (d) 6 - 2 - 4

Q.34. In a certain code language. 'NEAR' is coded as 4968 and 'REAP' is coded as 9865. What is the code for 'P' in the given code language?
SSC MTS 11/09/2023 (2nd Shift)
(a) 9   (b) 8   (c) 5   (d) 6

Q.35. In a certain code language. 'SCAR' is coded as '2386' and 'RACE' is coded as '8642'. What is the code for 'E' in the given code language ?
SSC MTS 11/09/2023 (3rd Shift)
(a) 8   (b) 4   (c) 2   (d) 6

Q.36. In a certain code language, 'QUALIFY' is coded as 'PTZKHYF' and 'PANTHER' is coded as 'OZMSGRE'. What is the code for 'FORCEPS' in the given code language?
SSC MTS 11/09/2023 (3rd Shift)
(a) EMOCDRQ   (b) DMQCERP
(c) DNPCDSQ   (d) ENQBDSP

Q.37. In a certain code language, 'DOMINATE' is coded as 'TANIMODE' and 'FAITHFUL' is coded as 'UFHTIAFL'. What is the code for 'HIGHWAY' in the given code language?
SSC MTS 12/09/2023 (1st Shift)
(a) AWHGIHY   (b) IGHWAYH
(c) AYWHGIH   (d) YAWHGIH

Q.38. In a certain code language, 'DRAW' is coded as '7932' and 'WEAR' is coded as '4729'. What is the code for 'E' in the given code language?
SSC MTS 12/09/2023 (1st Shift)
(a) 9   (b) 2   (c) 7   (d) 4

Q.39. In a certain code language. 'DROP' is coded as '9375' and 'POND' is coded as '7839'. What is the code for 'N' in the given code language?
SSC MTS 12/09/2023 (2nd Shift)
(a) 3   (b) 7   (c) 8   (d) 9

Q.40. In a certain code language, CRAFT' is coded as 'DSBGU' and 'FRIDAY' is coded as 'GSJEBZ'. What is the code for 'MANGO' in the given code language?
SSC MTS 12/09/2023 (2nd Shift)
(a) NBOHP   (b) MBPGQ
(c) NCOGQ   (d) MCOGP

Q.41. In a certain code language, 'just do it' is coded as 'ct ns kw' and 'do your best' is coded as 'mb kw du'. How is 'do' coded in the given language?
SSC MTS 12/09/2023 (3rd Shift)
(a) ns   (b) ct   (c) kw   (d) mb

Q.42. In a certain code language, 'TOP' is coded as '22 - 17 - 18' and 'BIZ' is coded as '4 - 11 - 28'. What is the code for 'MAR'

in the given code language?
SSC MTS 12/09/2023 (3rd Shift)
(a) 15 - 5 - 21   (b) 16 - 5 - 20
(c) 14 - 4 - 21   (d) 15 - 3 - 20

Q.43. In a certain code language. 'ENTRUST' is coded as 'FOURVTU' and 'CUSHION' is coded as 'DVTHJPO'. What is the code for 'CLEAVER' in the given code language?
SSC MTS 13/09/2023 (1st Shift)
(a) DMFAWFS   (b) DNGBWGT
(c) ENGBWT   (d) EMFBWGT

Q.44. In a certain code language, 'let it be' is coded as 'sd am ht' and 'be the change' is coded as 'vn sd ek'. How is 'be' coded in the given language ?
SSC MTS 13/09/2023 (1st Shift)
(a) sd   (b) ht   (c) ek   (d) vn

Q.45. In a certain code language, 'krishi might be coming' is written as 'gi ji hi fi' and 'prem will be going' is written as 'li mi ri hi'. How is 'be' written in the given language?
SSC MTS 13/09/2023 (2nd Shift)
(a) li   (b) ri   (c) hi   (d) mi

Q.46. In a certain code language. 'DEAF' is coded as '5718' and 'HEAD' is coded as '8137' What is the code for 'H' in the given code language?
SSC MTS 13/09/2023 (2nd Shift)
(a) 1   (b) 3   (c) 8   (d) 7

Q.47. In a certain code language, 'TUNE' is coded as '4368' and 'UNIT' is coded as '8423'. What is the code for 'I' in the given code language?
SSC MTS 13/09/2023 (3rd Shift)
(a) 4   (b) 3   (c) 2   (d) 8

Q.48. In a certain code language, 'people talk about' is written as 'ki li ni' and 'let them talk' is written as 'si ki hi'. How is 'talk' written in the given language?
SSC MTS 13/09/2023 (3rd Shift)
(a) li   (b) ki   (c) hi   (d) ni

Q.49. In a certain code language, 'NAIL' is coded as '2637' and 'LANE' is coded as '3278'. What is the code for 'E' in the given code language?
SSC MTS 14/09/2023 (1st Shift)
(a) 8   (b) 7   (c) 2   (d) 3

Q.50. In a certain code language, 'MENTOR' is coded as 'EMOUPS' and 'OCTAGON' is coded as 'COUBHPO'. What is the code for 'PENCIL' in the given code language?
SSC MTS 14/09/2023 (1st Shift)
(a) EPLICN   (b) LINCENP
(c) PLICNE   (d) EPODJM

Q.51. In a certain code language, 'DIAL' is coded as '1326' and 'IDLE' is coded as '6183'. What is the code for 'E' in the given code language?
SSC MTS 14/09/2023 (2nd Shift)
(a) 1   (b) 8   (c) 3   (d) 6

Q.52. In a certain code language, 'ENTER' is coded as 'FOTGT' and 'DICEY' is coded as 'EJCGA'. What is the code for 'CHILD' in the given code language?
SSC MTS 14/09/2023 (2nd Shift)
(a) DIINF (b) DHIME (c) EJJNE (d) EHIMF

Q.53. In a certain code language, 'how are you' is coded as 'aj ts el' and 'show them how' is coded as 'wn el pd'. How is 'how' coded in the given language"
SSC MTS 14/09/2023 (3rd Shift)
(a) pd   (b) el   (c) aj   (d) wn

Q.54. In a certain code language. 'FLOWERY' is coded as 'FYREWOL' and 'LINGUIST' is coded as 'LTSIUGNI'.What is the code for 'MANIFEST in the given code language?
SSC MTS 14/09/2023 (3rd Shift)
(a) MTSEFINA   (b) TESFINAM
(c) SEFINAMT   (d) MSTEGJMA

Answer Key :-

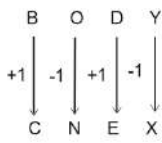| 1.(a)	2.(d)	3.(d)	4.(d)
5.(b)	6.(b)	7.(c)	8.(c)
9.(a)	10.(c)	11.(d)	12.(a)
13.(d)	14.(b)	15.(b)	16.(c)
17.(a)	18.(c)	19.(b)	20.(c)
21.(c)	22.(b)	23.(b)	24.(c)
25.(b)	26.(b)	27.(b)	28.(d)
29.(b)	30.(c)	31.(c)	32.(d)
33.(b)	34.(c)	35.(b)	36.(d)
37.(a)	38.(d)	39.(c)	40.(a)
41.(c)	42.(d)	43.(a)	44.(a)
45.(c)	46.(b)	47.(c)	48.(b)
49.(a)	50.(d)	51.(b)	52.(a)
53.(b)	54.(a)		

Solutions :-

Sol.1.(a) Given :- 'BLUE' → '1542' ....(I)
'ABLE' → '1745' ....(II)
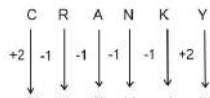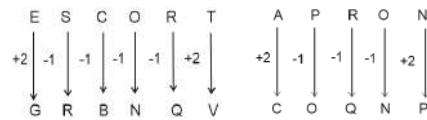From i and ii B, L ,E(1, 4, 5) are common so the code for 'A' is '7'.

Sol.2.(d)

B   O   D   Y
+1 | -1 | +1 | -1
↓   ↓   ↓   ↓
C   N   E   X

Similarly,

Sol.3.(d)

E   S   C   O   R   T   A   P   R   O   N
+2 | -1 | -1 | -1 | -1 | +2   +2 | -1 | -1 | -1 | +2
↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓
G   R   B   N   Q   V   C   O   Q   N   P

C   R   A   N   K   Y
+2 | -1 | -1 | -1 | -1 | +2
↓   ↓   ↓   ↓   ↓   ↓
E   Q   Z   M   J   A

Similarly,

Sol.4.(d) Given :- BATH → 1482 ......(I)
HALT → 8126 ......(II)
From I and II H, A and T (8, 1 and 2) are common so the code for 'L' is '6'.

Sol.5.(b)

opposite   opposite
L   E   D   B   M   W
↑   ↑   ↑   ↑   ↑   ↑
↓   ↓   ↓   ↓   ↓   ↓
O   V   W   Y   N   D
15 22 23   25 14 4

opposite
Q   U   F
↑   ↑   ↑
↓   ↓   ↓
J   F   U
10 6   21
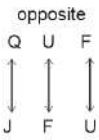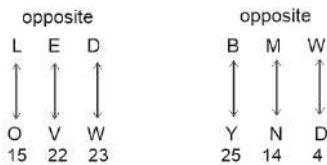
Similarly,

Sol.6.(b) Given :- DEAN → 2458 ......(I)
LEND → 8352 ......(II)
From I and II D, E and N (2, 5 and 8) are common so the code for 'L' is '3'.

Sol.7.(c) Given :- COIN → 9735.......(I)
ONCE → 3459......(II)
From I and II C, O and N (3, 5 and 9) are common so the code for 'E ' is '4'

Sol.8.(c) Logic:- (Number of letters × 6)
BLANCH → 6 × 6 = 36
ARAB → 4 × 6 = 24
Similarly, CORRECT → 7 × 6 = 42

Sol.9.(a)

25 10 13   19 15 16
Y   J   M   S   O   P
+1 | +1 | +1   +1 | +1 | +1
↓   ↓   ↓   ↓   ↓   ↓
26 11 14   ,   20 16 17
                  2   20 24
                  B   T   X
                  +1 | +1 | +1
                   ↓   ↓   ↓
Similarly,   3   21 25
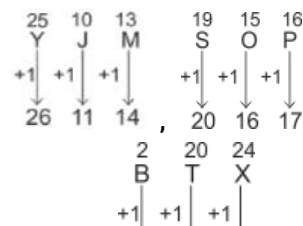
Sol.10.(c) Given :- LIAR → 5148 ......(I)
REAL → 1582......(II)
From I and II L, A and R (1, 5 and 8) are common so the code for 'E ' is '2'.

Sol.11.(d)

G   L   O   A   T   I   N   C   U   R
-2| -2| -2| -2| -2   -2| -2| -2| -2| -2
↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓   ↓
E   J   M   Y   R ,   G   L   A   S   P

P   A   N   D   A
-2| -2| -2| -2| -2|
↓   ↓   ↓   ↓   ↓
N   Y   L   B   Y
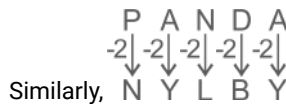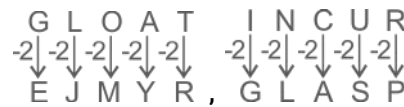
Similarly,

Sol.12.(a) Given :- MINT→ 4735......(i)
TIME → 5483......(ii)
From I and II M, I and T (4, 5 and 3) are common so the code for 'E' is '8'.

Sol.13.(d)

get (more) sleep ———→ wo   bt (gk)

less is (more) ———→ ap (gk) cm
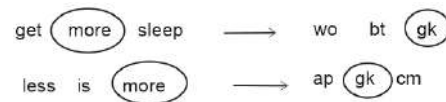
The code for 'more' is 'gk'.

Sol.14.(b) Logic : Sum of the place value of opposite letters.

opposite
P   I   N   G
↑   ↑   ↑   ↑
↓   ↓   ↓   ↓
K   R   M   T
11 18 13 20

11 + 18 + 13 + 20 = 62

opposite
H   A   Z   E
↑   ↑   ↑   ↑
↓   ↓   ↓   ↓
S   Z   A   V
19 26 1   22

19 + 26 + 1 + 22 = 68
Similarly,

opposite
G   O   A   T
↑   ↑   ↑   ↑
↓   ↓   ↓   ↓
T   L   Z   G
20 12 26 7
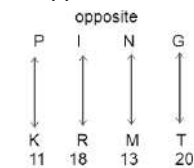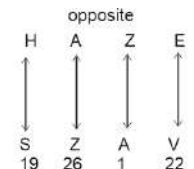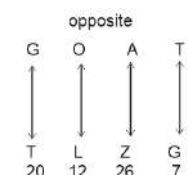
20 + 12 + 26 + 7 = 65

Sol.15.(b)
Logic :- Number of letters × 3 = Number
ETHOS → 5 × 3 = 15
CHEERFUL→ 8 × 3 = 24
Similarly,
CHIMNEY → 7 × 3 = 21

Sol.16.(c)

make   yours (life) —→ (uk) ox zt

(life) is good ———→ qr (uk) va
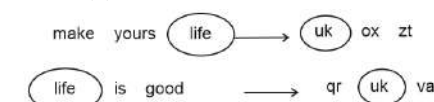
The code for 'life' is 'uk'.

Sol.17.(a)
Logic :- (Sum of the place value of letter)
CHEW :- 3 + 8 + 5 + 23 = 39
FORE :- 6 + 15 + 18 + 5 = 44
Similarly,
GLIT :- 7 + 12 + 9 + 20 = 48

Sol.18.(c) Given :- OPEN → 4582.........(i)
PORE → 2385........(ii)

From (i) and (ii)
POE and 285 are common.
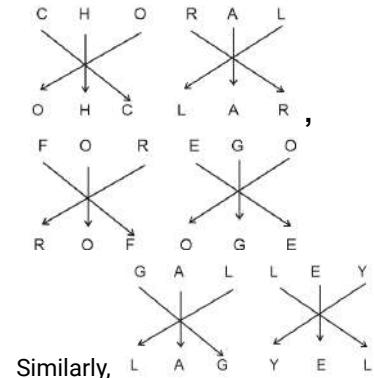The code of 'R' = 3.

Sol.19.(b) Given :- NAME → 2473..........(i)
MEND → 7642...........(ii)
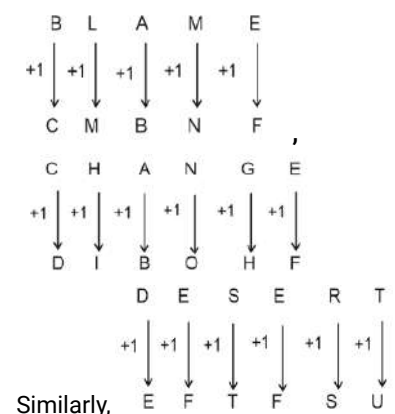From (i) and (ii)
NEM and 247 are common.
The code of 'D' = 6.

Sol.20.(c)

C   H   O   R   A   L
 ⤫   ⤫   ⤫
O   H   C   L   A   R   ,

F   O   R   E   G   O
 ⤫   ⤫   ⤫
R   O   F   O   G   E

G   A   L   L   E   Y
 ⤫   ⤫   ⤫
Similarly, L   A   G   Y   E   L

Sol.21.(c)

B   L   A   M   E
+1 | +1 | +1 | +1 | +1
↓   ↓   ↓   ↓   ↓
C   M   B   N   F   ,

C   H   A   N   G   E
+1 | +1 | +1 | +1 | +1 | +1
↓   ↓   ↓   ↓   ↓   ↓
D   I   B   O   H   F

D   E   S   E   R   T
+1 | +1 | +1 | +1 | +1 | +1
↓   ↓   ↓   ↓   ↓   ↓
Similarly, E   F   T   F   S   U

Sol.22.(b) Given :- WHAT → 5298.......... (i)
THAN → 9826........ (ii)
From (i) and (ii) we get
THA and 982 are common.
The code of 'W' = 5

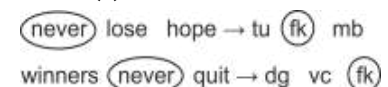**Sol.23.(b) Logic :-** (Number of letters in the given word) + 1 = Number
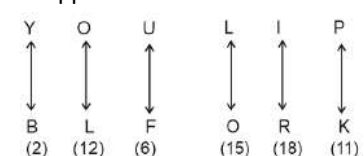MACABRE → 7 + 1 = 8
HEDONISM →8 + 1 = 9
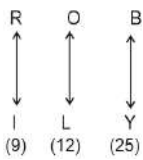Similarly,
ERUPT → 5 + 1 = 6

Sol.24.(c)

(never) lose hope → tu (fk) mb

winners (never) quit → dg vc (fk)

The code for 'never' is 'fk'.

Sol.25.(b) Logic :- Sum of the place value of opposite letters

Y   O   U   L   I   P
↑   ↑   ↑   ↑   ↑   ↑
↓   ↓   ↓   ↓   ↓   ↓
B   L   F   O   R   K
(2) (12) (6)   (15) (18) (11)

2 + 12 + 6 = 20,   15 + 18 + 11 = 44
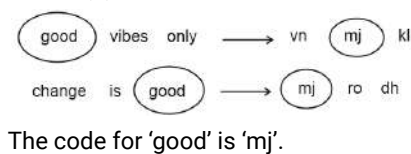
R   O   B

↓   ↓   ↑

I   L   Y

Similarly, (9) (12) (25)

9 + 12 + 25 = 46

Sol.26.(b) Given :- ATOM → 9613………(i)
BOAT→ 1938…..(ii)
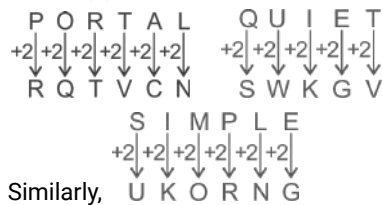From (i) and (ii) we get,
OAT and 931 are common.
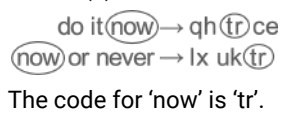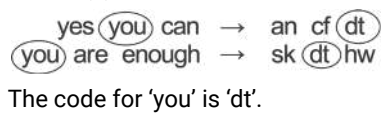The code of 'B' = 8

Sol.27.(b)

Y   O   J   D   S   P

+3 +3 +3   +3 +3 +3

B   R   M   G   V   S

Z   M   C

+3 +3 +3

Similarly, C   P   F

Sol.28.(d)

good   vibes   only ⟶ vn   mj   kl

change   is   good ⟶ mj   ro   dh

The code for 'good' is 'mj'.

Sol.29.(b)

P O R T A L   Q U I E T
+2 +2 +2 +2 +2 +2   +2 +2 +2 +2 +2
R Q T V C N   S W K G V

S I M P L E
+2 +2 +2 +2 +2 +2
U K O R N G

Similarly,

Sol.30.(c)

do it now → qh tr ce
now or never → lx uk tr

The code for 'now' is 'tr'.

Sol.31.(c)

yes you can → an cf dt
you are enough → sk dt hw

The code for 'you' is 'dt'.
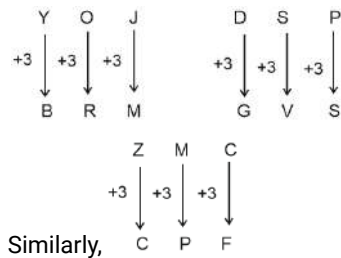
Sol.32.(d) Logic :- Sum of the place value of the letters = Number
BACK → 2 + 1 + 3 + 11 = 17
DTDC → 4 + 20 + 4 + 3 = 31
Similarly, JAAM →10 + 1 + 1 + 13 = 25

Sol.33.(b) Logic :- Letters are directly coded as their place value.
ARC : 1 - 18 - 3
BOY : 2 - 15 - 25
Similarly, FAD : 6 - 1 - 4

Sol.34.(c) Given :- NEAR → 4968………(i)
REAP → 9865……..(ii)
From (i) and (ii)
REA and 986 are common.
The code of 'P' = 5.

Sol.35.(b) Given :- SCAR → 2386 ……(I)
RACE → 8642……(II)
From I and II C, A and R (8, 6 and 2) are common so the code for 'E' is '4'.

Sol.36.(d)

Q U A L I F Y   P A N T H E R
-1 -1 -1 -1 -1 ╳   -1 -1 -1 -1 ╳
P T Z K H Y F , O Z M S G R E

F O R C E P S
-1 -1 -1 -1 -1 ╳
Similarly, E N Q B D S P

Sol.37.(a)

D O M I N A T E   F A I T H F U L
╳╳╳╳╳╳   ╳╳╳╳╳╳
T A N I M O D E , U F H T I A F L

H I G H W A Y
╳╳╳╳
Similarly, A W H G I H Y
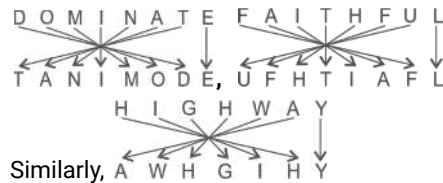
Sol.38.(d) Given :- DRAW → 7932………(i)
WEAR → 4729………….(ii)
From (i) and (ii)
WAR and 729 are common.
The code of 'E' = 4.

Sol.39.(c) Given :- DROP→ 9375……(I)
POND → 7839……(II)
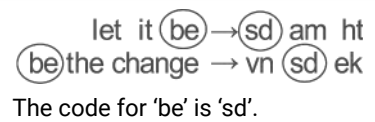From I and II P, O and D (7, 9 and 3) are common so the code for 'N' is '8'.

Sol.40.(a)

C R A F T   F R I D A Y
+1 +1 +1 +1 +1   +1 +1 +1 +1 +1 +1
D S B G U   G S J E B Z

M A N G O
+1 +1 +1 +1 +1
Similarly, N B O H P

Sol.41.(c)

Just do it → ct ns kw
do your best → mb kw du

The code of 'do' is 'kw'

Sol.42.(d)

(20) (15) (16)   (2) (9) (26)
T O P   B I Z
+2 +2 +2   +2 +2 +2
22 17 18 ,   4 11 28

(13) (1) (18)
M A R
+2 +2 +2
Similarly, 15 3 20

Sol.43.(a)

E N T R U S T   C U S H I O N
+1 +1 +1 +1 +1 +1 +1   +1 +1 +1 +1 +1 +1 +1
F O U R V T U , D V T H J P O

C L E A V E R
+1 +1 +1 +1 +1 +1 +1
Similarly, D M F A W F S

Sol.44.(a)

let it be → sd am ht
be the change → vn sd ek

The code for 'be' is 'sd'.

Sol.45.(c)

krishi might be coming→ gi ji hi fi
prem will be going→ li mi ri hi

The code of 'be' = 'hi'

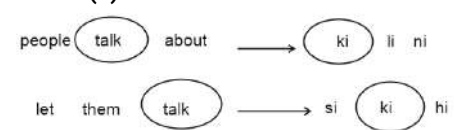**Sol.46.(b)** Given :- DEAF → 5718……….. (i)
HEAD → 8137……….(ii)
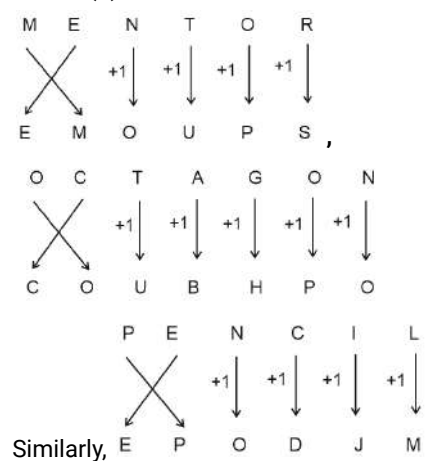From (i) and (ii)
EAD and 817 are common.
The code of 'H' = 3

Sol.47.(c) TUNE→ 4368……(I)
UNIT → 8423……(II)
From I and II U, N and T (4, 8 and 3) are common so the code for 'I' is '2'.

Sol.48.(b)
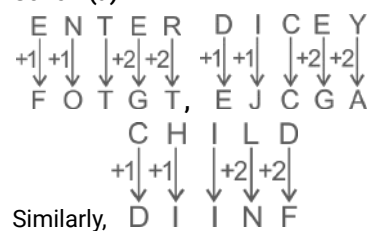
people talk about ⟶ ki li ni

let them talk ⟶ si ki hi

The code for 'talk' is 'ki'.

Sol.49.(a) Given : NAIL → 2637……….(i)
LANE → 3278………..(ii)
From (i) and (ii)
NAL and 327 are common.
The code of 'E' = 8

Sol.50.(d)

M E   N T O R
╳   +1 +1 +1 +1
E M   O U P S ,

O C   T A G O N
╳   +1 +1 +1 +1 +1
C O   U B H P O

P E   N C I L
╳   +1 +1 +1 +1
Similarly, E P   O D J M

Sol.51.(b) Given :- DIAL →1326……(I)
IDLE → 6183……(II)
From I and II D, I and L (1, 6 and 3) are common so the code for 'E' is '8'.

Sol.52.(a)

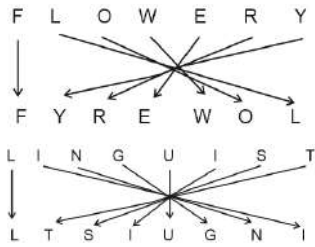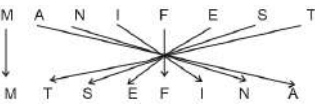E N T E R   D I C E Y
+1 +1 +2 +2 +1 +1 +2 +2
F O T G T , E J C G A

C H I L D
+1 +1 +2 +2
Similarly, D I I N F

Sol.53.(b)

how are you → aj ts el

show them how → wn el pd

The code of 'how' = 'el'

Sol.54.(a)

F L O W E R Y

F Y R E W O L

L I N G U I S T

L T S I U G N I

Similarly,

M A N I F E S T

M T S E F I N A

Syllogism

BASICS RULES OF SYLLOGISM :-
It concludes on the basis of two or more statements. In this, reasoning has to be done on the basis of inference, whether the given statement is true or not, yet the statement is concluded as true.

Some important words related to Syllogism :
(i) Term - A word used as a subject and predicate in a sentence is called a Term. i.e - Ram is a good boy.
In this sentence, Ram, good and boy are three different terms.
(ii) Subject term - The term of a sentence about which it is said is called the subject term.
i.e - Ram is a good boy.
Here, Ram is a subject term.
(iii) Predicate term - A term of a sentence that describes someone's speciality is called a predicate term.
i.e - Ram is a good boy.
Here, 'good boy' is the predicate term.
(iv) Contradictory terms - Two terms when they oppose each other are called contradictory terms. Like - true-false, speaking-silent
(v) Contrary term - Two such terms which cannot be true together but they can be untrue simultaneously, such terms are called contrary terms.
i.e- day-night, thin - fat
There is a possibility of a third term like there can be a common boy between thin and thick.
(vi) Definite term - The term which gives the sense of certainty and truth is called definite post.
i.e - sky, star, moon

(vii) Indefinite post- The post which indicates uncertainty or untruth is called indefinite post.
i.e - a house, a child
(viii) Equivocal term - Such terms which have more than one meaning, are called Equivocal terms. Defects arise in the statements of such terms because such terms express different meanings in both the statements.
i.e - Rama replied, Ram has gone north.
(ix) Catergorematic posts - The term that can become the subject and predicate of a sentence independently are called Categorematic terms.
i.e - all human beings are mortal.
Here, man and mortal are used as subjects and predicates without any-other word attached to them.
(x) Proposition - A term that shows the relationship between two terms of a statement. i.e - all cows are dogs.
(xi) Copula - A term that establishes a relationship between two terms of a sentence is called a Copula.
i.e- Ram is handsome.
(xii) Minor term - The subjective or doer of the conclusion is called the short term.
(xiii) Major term - The conclusion or predicate of incorporation is called a major term.
(xiv) Middle term - The term which establishes a relationship between the two statements and in its absence no valid conclusion can be drawn, such terms are called middle terms.

⋆**Logical sentences** have been classified in two ways on the basis of quality and quantity.
1. universal
2. Particular

Sr.	Type	Example
1	Universal +ve	**All** cow are cattle
2	Universal -ve	**No** cow are cattle
3	Particular +ve	**Some** cow are cattle
4	Particular -ve	**Some** cow are **not** cattle

⋆**Distribution of terms:**
(i) Distributed and undistributed- When such words are present in a statement from which there is a sense of completeness, it is called **Distributed** and from which there is a sense of partiality, it is called **undistributed**.
⋆**Kinds of immediate inference -**
(i) Conversion   (ii) Obversion
(iii) Contraposition

1. Conversion - A change in which the subjective present in the sentence

becomes predicate in the conclusion and the predicate becomes the subjective. And the quality of the base sentence is the same quality as the conclusion sentence. That is, conclusion will be positive if sentence is positive and conclusion will be negative if sentence is negative.

(i) Conversion of Universal Affirmative =
Statement (All) → **Conclusion** (Some)
Statement - All cows are cattle
Conclusion - Some cows are cattle

(ii) Conversion of Universal Negative =
Statement (No) → **Conclusion** (Some + not)
Statement - No cow is cattle
Conclusion- Some cow is not cattle

(iii) Conversion of Particular Affirmative =
Statement(Some) → **Conclusion**(Some)
Statement - Some cows are cattle
Conclusion- Some cattle are cows.

(iv) Conversion of Particular Negative =
Statement (Some + not) → **Conclusion** ×
Statement - Some cows are not cattle
Conclusion- × × × × ×
(Here, Nothing will come to conclusion)

2. Obversion - Assumptions whose statement of predicate is predicate of predicate sentence and both base sentence and conclusion sentence are equal in meaning.
(i) Obversion of universal affirmative =
Statement (All) → **Conclusion** (No)
Statement- All boys are tall.
Conclusion - No boy is a dwarf.

(ii) Obversion of universal negative =
Statement (No) → **Conclusion** (All)
Statement- No boys are tall.
Conclusion - All boy is a dwarf

(iii) Obversion of particular affirmative =
Statement (Some) → **Conclusion** (Some+not)
Statement - Some boys are tall.
Conclusion - Some boys are not dwarf.

(iv) Obversion of particular negative =
Statement (Some+not) → **Conclusion** (Some)
Statement - Some boys are not skilled.
Conclusion - Some boys are inefficient.

3. Contraposition - The inference in which the predicate of the predicate sentence of the base sentence is derived from the place of subjective in the conclusion and the subjective term of the base sentence in place of the

predicate sentence in the conclusion.

(i) Contraposition of Universal Affirmative →

Statement - All animals that can fly are animals with wings.

conclusion - All animals without wings are animals that cannot fly.

(ii) Contraposition of Universal negative →

Statement - No dead organisms are immortal beings. ≠

Conclusion - No mortal beings are living organisms

(iii) Contraposition of particular Affirmative →

Statement - Some persuasive arguments are illogical. ≠

Conclusion- Some logical arguments are unpersuasive.

(iv) contraposition of particular negative →

Statement - Some employed workers are not people with health insurance.

Conclusion- Some people without health insurance are not unemployed workers.

How to solve SYLLOGISM-
1. Analytical method
2. Venn-diagram

(1). Analytical method - In this method, we will first arrange in a queue. You will see that in two reasoning sentences there is always a common term which is called the middle term and with the help of that conclusion is found.

Statement -
All dogs are cats.
Some cats are goats.
Conclusion -
All dogs are goats.
Some goats are dogs.

Solution: Since both the conclusions 1 and 2 contain the middle term 'goats' , so neither of them can follow.

Statement -
All mangoes are mobile.
No mobile is lychee.
Conclusion -
All mobile are mangoes .
No mangoes are lychees.

Solution: Here, positive conclusions should not be drawn as per rules. Hence conclusion (i) is an invalid conclusion while conclusion (ii) No mangoes are lychees' is a valid conclusion.

Analytical Table

Statement	Definite Conclusion	Possible Conclusion
All A are B	•All A are B •Some A are B •Some B are A	•All B are A •Some B are not A
Some A are B	•Some A are B •Some B are A	•All A are B •All B are A •Some A are not B •Some B are not A
Some A are not B	• Some A are not B	•Some A are B •No A is B •NO B is A •Some B are not A •All B are A
No A is B	•No A is B •No B is A	•No Possibility

(2). Venn diagram :- With this method, it is very important to keep the following three points in mind for the precise solution of the questions :-
(i) Draw different diagrams of all the given statements.
(ii) join the picture together as much as possible.
(iii) Draw conclusions based on the added image. Any conclusion will be true only if it conforms to the combined picture and no picture is contradictory to the other.

TYPE-I
Statement -
All dogs are animals.
All animals are cows.
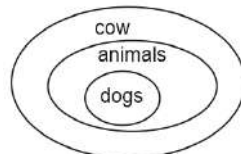
Conclusion :-
Some cows are dogs. (✓)
Some cows are animals. (✓)
All dogs are cows. (✓)
Some animals are dogs. (✓)
All animals are cows. (✓)

TYPE-II
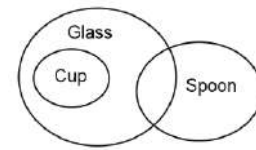**Statement -**
All toys are elephants.
All animals are elephants.
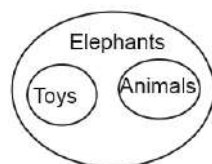
Conclusion :-
Some elephants are toys (✓)
Some elephants are animals (✓)
Some toys are animals (**Can't say**)

TYPE-III
Statement :-

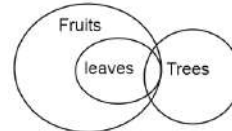All cups are glasses
Some glasses are spoons.

Conclusion :-
Some glasses are cups. (✓)
Some spoons are glass. (✓)
Some cups are spoon (**Can't say**)

TYPE-IV
Statement : -
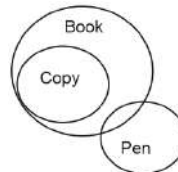Some trees are leaves.
All leaves are fruits.

Conclusion :-
Some leaves are trees. (✓)
Some fruits are leaves. (✓)
Some trees are fruits. (✓)
Some fruits are trees. (✓)

TYPE-V
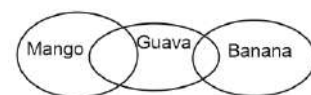**Statement :-**
All copies are books.
Some pens are books

Conclusion :-
Some books are copies. (✓)
Some books are pens. (✓)
Some copies are pens . (**Can't say**)

TYPE-VI
Statement -
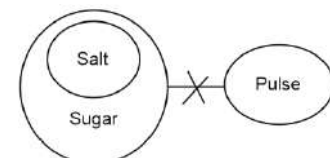Some mangoes are guava
Some guava is banana.

Conclusion :-
Some guava are mangoes. (✓)
Some bananas are guava. (✓)
Some mangoes are bananas.(**Can't say**)

TYPE -VII
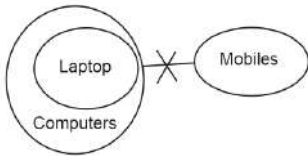**Statement :-**
All salt is sugar.
No sugar is pulse.

Conclusion :-
Some sugar is salt. (✓)
There is no Pulse , Sugar.(✓)
There is no Salt , Pulse. (✓)
There is no Pulse , salt.(✓)

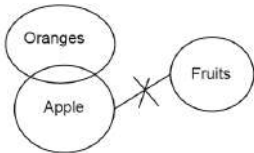**TYPE-VIII**
Statement :-
No mobiles are laptops.
All laptops are computers.

Conclusion :-
No laptop is mobile.(✓)
Some computers are laptops. (✓)
Some computers are not mobile. (✓)
Some mobiles are computers. (**Can't say**)

TYPE-IX
Statement :-
Some oranges are Apple.
No apple is fruit.

Conclusion :
Some apples are oranges. (✓)
No fruit is an apple. (✓)
Some oranges are not fruits. (✓)
Some oranges are fruit . (**Can't say**)

DIRECTION:- [Q .1. - Q .54.] Read the given statement(s) and conclusions carefully. Assuming that the information given in the statements is true even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statement(s).

Questions:-

Q.1. Statements:
All rags are carpets.
Some carpets are steel.
Some steel are bottles.
Conclusion:
(I) All carpets are rags.
(II) Some carpets are bottles.
SSC MTS 01/09/2023 (1st Shift)
(a) Only conclusion (I) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.2. Statements:
All chocolates are sweets.
Some sweets are harmful.

Conclusions:
(I) All Chocolates are harmful.
(II) Some harmful are chocolates.
SSC MTS 01/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follows.
(b) Both conclusions (I) and (II) are follows.
(c) Only conclusion (II) is follows.
(d) Only conclusion (I) is follows.

Q.3. Statements :
All TVs are radios.
Some radios are dryers.
All dryers are hot.
Conclusion :
(I) Some TVs are radios.
(II) Some dryers are TVs.
SSC MTS 01/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Only conclusion (II) is follow.

Q.4. Statements :
Some cows are animals.
All animals are big.
No big is a mobile.
Conclusion :
(I) All cows are animals.
(II) No big is an animal.
SSC MTS 01/09/2023 (2nd Shift)
(a) Only conclusion (I) is follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (II) is follow.

Q.5. Statements:
Some photos are vases.
All vases are tall.
Some tall are buildings.
Conclusion:
(I) Some photos are buildings.
(II) All tall are vases.
SSC MTS 01/09/2023 (3rd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (I) is follow.
(c) Only conclusion (II) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.6. Statements:
All bed are covers.
Some covers are thick.
Some thick is juice.
Conclusion :
(I) All covers are beds.
(II) Some thick are covers.
SSC MTS 01/09/2023 (3rd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Only conclusion (II) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (I) is follow.

Q.7. Statements:
All ropes are forks.
Some forks are spoons.

Some spoons are chopsticks.
Conclusion:
(I) Some ropes are spoons.
(II) All forks are chopsticks.
SSC MTS 04/09/2023 (1st Shift)
(a) Only conclusion (II) is follow.
(b) Only conclusion (I) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.8. Statements:
All computers are laptops.
Some laptops are heavy.
All heavy is wood.
Conclusion:
(I) All laptops are computers.
(II) Some heavy are laptops.
SSC MTS 04/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow
(b) Only conclusion (I) is follow
(c) Both conclusions (I) and (II) are follow
(d) Only conclusion (II) is follow

Q.9. Statements:
All crows are sparrows.
Some sparrows are parrots.
All parrots are yellow.
Conclusion:
(I) Some crows are parrots.
(II) Some yellow are parrots.
SSC MTS 04/09/2023 (2nd Shift)
(a) Only conclusion (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.10. Statements:
All the actors are girls.
All the girls are beautiful.
Conclusions:
(I) All the actors are beautiful.
(II) Some girls are actors.
SSC MTS 04/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follows.
(b) Only conclusion (II) is follows.
(c) Only conclusion (I) is follows.
(d) Neither conclusion (I) nor (II) is follows.

Q.11. Statements:
Some doughnuts are rocks.
All rocks are papers.
Some papers are oil.
Conclusion:
(I) Some doughnuts are papers.
(II) Some rocks are oil.
SSC MTS 04/09/2023 (3rd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow
(c) Only conclusion (II) is follow
(d) Only conclusion (I) is follow.

Q.12. Statements:
Some glass are pink.
All pink are bags.

Some bags are flowers.
Conclusion:
(I) Some pink are glass.
(II) Some flowers are bags.
SSC MTS 04/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Both conclusions (I) and (II) are follow.

Q.13. Statements:
All needles are pins.
Some pins are wood.
All wood are cups.
Conclusion:
(I) Some needles are wood.
(II) All cups are pins.
SSC MTS 05/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Only conclusion (II) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (I) is follow.

Q.14. Statements :
All jars are plastic.
Some plastic are spoons.
No spoon is a fork.
Conclusion:
(I) Some plastic are jars.
(II) Some forks are spoons.
SSC MTS 05/09/2023 (1st Shift)
(a) Only conclusion (II) is follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Both conclusions (I) and (II) are follow.

Q.15. Statements:
Some walls are stone.
All stones are diamonds.
All diamonds are bricks.
Conclusion:
(I) Some stones are walls.
(II) Some stones are bricks.
SSC MTS 05/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Only conclusion (I) is follow.

Q.16. Statements:
All orchids are flowers.
Some orchids are beautiful.
Conclusions:
(I) Some flowers are beautiful.
(II) All beautiful are flowers.
SSC MTS 05/09/2023 (2nd Shift)
(a) Only conclusion (II) is follows.
(b) Both conclusions (I) and (II) are follows.
(c) Neither conclusion (I) nor (II) is follows.
(d) Only conclusion (I) is follows.

Q.17. Statement:
Some sofas are teapots.
All teapots are printers.

Some printers are vases.
Conclusion:
(I) Some teapots are sofas.
(II) Some vases are printers.
SSC MTS 05/09/2023 (3rd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Only conclusion (II) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (I) is follow.

Q.18. Statements:
All blenders are microwaves.
Some microwaves are toasters.
All toasters are lamps.
Conclusion:
(I) Some blenders are microwaves.
(II) All toasters are blenders.
SSC MTS 05/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (I) is follow.

Q.19. Statements:
All buildings are chalks.
No chalk is a toffee.
Conclusions:
(I) No building is a toffee.
(II) All chalks are buildings.
SSC MTS 06/09/2023 (1st Shift)
(a) Both conclusions (I) and (II) are follows.
(b) Only conclusion (I) is follows.
(c) Neither conclusion (I) nor (II) is follows.
(d) Only conclusion (II) is follows.

Q.20. Statements:
All cakes are biscuits.
Some biscuits are tarts.
All tarts are puddings.
Conclusion:
(I) Some biscuits are cakes.
(II) Some puddings are biscuits.
SSC MTS 06/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Only conclusion (II) is follow.

Q.21. Statements:
Some dogs are bats.
Some bats are cats
Conclusions:
(I) Some dogs are cats.
(II) Some cats are dogs.
SSC MTS 06/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follows.
(b) Only conclusion (II) is follows.
(c) Neither conclusion (I) nor (II) is follows.
(d) Only conclusion (I) is follows.

Q.22. Statements:
Some paints are cats.
All cats are dogs.
Some dogs are bananas.

Conclusion:
(I) Some paints are dogs.
(II) Some cats are bananas.
SSC MTS 06/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Only conclusion (II) is follow.

Q.23. Statements:
Some bats are curtains.
All curtains are yellow.
All yellow are pens.
Conclusion:
(I) All yellow are curtains.
(II) Some pens are curtains.
SSC MTS 06/09/2023 (3rd Shift)
(a) Only conclusion (I) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (II) is follow.

Q.24. Statements:
All flowers are orange.
Some orange is colour.
All colours are bright.
Conclusion:
(I) Some orange are flowers.
(II) All colour is orange.
SSC MTS 06/09/2023 (3rd Shift)
(a) Only conclusion (I) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.25. Statements:
All people are tall.
Some tall are buildings.
No buildings are clocks.
Conclusion :
(I) Some people are buildings.
(II) No clocks are buildings.
SSC MTS 08/09/2023 (1st Shift)
(a) Only conclusion (II) is follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (I) is follow.

Q.26. Statements :
Some combs are wood.
Some wood are tables.
Some tables are plastic.
Conclusion:
(I) Some wood are combs.
(II) All plastic are tables.
SSC MTS 08/09/2023 (1st Shift)
(a) Only conclusion (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.27. Statements :
All the pencils are pens.
All the pens are inks.

Conclusions:
(I) All the pencils are inks.
(II) Some inks are pencils.
SSC MTS 08/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follows.
(b) Both conclusions (I) and (II) are follows.
(c) Only conclusion (II) is follows.
(d) Only conclusion (I) is follows.

Q.28. Statements :
Some beds are telephones.
All telephones are pillows.
Some pillows are cupboards.
Conclusion:
(I) Some pillows are telephones.
(II) Some beds are pillows.
SSC MTS 08/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (I) is follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (II) is follow.

Q.29. Statements:
All stamps are keys.
All keys are black.
All black are grey.
Conclusion:
(I) All keys are stamps.
(II) Some keys are black.
SSC MTS 08/09/2023 (3rd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (II) is follow.
(c) Only conclusion (I) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.30. Statements:
All threads are soft.
Some soft are fruit.
All fruit is yellow.
Conclusion:
(I) Some thread is fruit.
(II) Some fruit is yellow.
SSC MTS 08/09/2023 (3rd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Only conclusion (I) is follow.

Q.31. Statements:
All phones are flowers.
Some flowers are bags.
All bags are heavy
Conclusion:
(I) Some phones are flowers.
(II) All flowers are bags.
SSC MTS 11/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow
(b) Both conclusions (I) and (II) are follow
(c) Only conclusion (II) is follow
(d) Only conclusion (I) is follow.

Q.32. Statements:
All torches are guitars.
Some guitars are bulbs.

No bulb is a stove.
Conclusion I : All bulbs are guitars
Conclusion II : No guitar is a torch
SSC MTS 11/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow
(b) Only conclusion (I) is follow
(c) Both conclusions (I) and (II) are follow
(d) Only conclusion (II) is follow

Q.33. Statements:
All dogs are cats.
Some cats are hens.
All hens are pink.
Conclusion:
(I) Some dogs are cats.
(II) Some cats are pink.
SSC MTS 11/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Only conclusion (I) is follow.

Q.34. Statements:
All clowns are bottles.
Some bottles are steel.
All steel are keys.
Conclusion :
(I) Some clowns are bottles.
(II) All steel are bottles.
SSC MTS 11/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (I) is follow.
(c) Only conclusion (II) is follow.
(d) Neither conclusion (I) nor (II) is follow

Q.35. Statements:
All trees are mobiles.
Some mobiles are small.
All small are ants.
Conclusion:
(I) Some trees are mobiles.
(II) Some ants are small.
SSC MTS 11/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Both conclusions (I) and (II) are follow

Q.36. Statements:
All apples are fire.
All fire is hot.
Some hot are crabs.
Conclusion:
(I) No apples are hot
(II) Some crabs are fire.
SSC MTS 11/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Both conclusions (I) and (II) are follow

Q.37. Statements:
All cups are books.
All books are shirts.

Conclusions:
(I) Some cups are not shirts.
(II) Some shirts are cups.
SSC MTS 12/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follows.
(b) Both conclusions (I) and (II) are follows.
(c) Only conclusion (II) is follows.
(d) Only conclusion (I) is follows.

Q.38. Statements:
Some lipsticks are foundation.
All foundation is brown.
Some brown are highlighters.
Conclusion:
(I) Some lipsticks are brown.
(II) All foundation are highlighters.
SSC MTS 12/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Only conclusion (I) is follow.

Q.39. Statements:
Some cows are crows.
Some crows are elephants.
Conclusions:
(I) Some cows are elephants.
(II) All crows are elephants.
SSC MTS 12/09/2023 (2nd Shift)
(a) Only conclusion (I) is follows.
(b) Neither conclusion (I) nor (II) is follows.
(c) Only conclusion (II) is follows.
(d) Both conclusions (I) and (II) are follows.

Q.40. Statements:
Some alphabets are chairs.
Some chairs are high.
All high are buildings.
Conclusion:
(I) Some alphabets are buildings.
(II) Some high are buildings.
SSC MTS 12/09/2023 (2nd Shift)
(a) Only conclusion (II) is follow.
(b) Only conclusion (I) is follow
(c) Both conclusions (I) and (II) are follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.41. Statements:
All clay is metal.
Some metal are bricks.
All bricks are tablets.
Conclusion:
(I) Some clay are bricks.
(II) All metal are tablets.
SSC MTS 12/09/2023 (3rd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (II) is follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (I) is follow.

Q.42. Statements:
All cars are cats.
All fans are cats.
Conclusions:

(I) All cars are fans.
(II) Some fans are cars.
SSC MTS 12/09/2023 (3rd Shift)
(a) Only conclusion (I) is follows.
(b) Only conclusion (II) is follows.
(c) Neither conclusion (I) nor (II) is follows.
(d) Both conclusions (I) and (II) are follows.

Q.43. Statements:
All shoes are leather.
Some leather are belts.
Some belts are gold.
Conclusion:
(I) Some shoes are belts.
(II) All belts are gold.
SSC MTS 13/09/2023 (1st Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Only conclusion (I) is follow.
(c) Only conclusion (II) is follow.
(d) Both conclusions (I) and (II) are follow.

Q.44. Statements:
Some leaves are old.
All old are clothes.
Some clothes are papers.
Conclusion:
(I) All leaves are old.
(II) Some old are clothes.
SSC MTS 13/09/2023 (1st Shift)
(a) Only conclusion (I) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
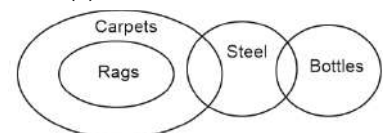(d) Neither conclusion (I) nor (II) is follow

Q.45. Statements:
All wool is crochet.
Some crochet are skirts.
All skirts are bread.
Conclusion:
(I) Some crochet is wool.
(II) Some bread is crochet.
SSC MTS 13/09/2023 (2nd Shift)
(a) Neither conclusion (I) nor (II) is follow.
(b) Only conclusion (I) is follow.
(c) Both conclusions (I) and (II) are follow.
(d) Only conclusion (II) is follow.

**Q.46. Statements:**
Some chairs are fans.
All fans are pots.
Some pots are hot.
Conclusion:
(I) Some fans are chairs.
(II) Some hot are pots.
SSC MTS 13/09/2023 (2nd Shift)
(a) Only conclusion (I) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (II) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.47. Statements:
Some laptops are pencils.
Some pencils are rulers.
All rulers are white.
Conclusion:

(I) Some pencils are laptops.
(II) All rulers are pencils.
SSC MTS 13/09/2023 (3rd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (I) is follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (II) is follow.

Q.48. Statements:
All crows are bananas.
Some bananas are pink.
All pink are white.
Conclusion:
(I) Some crows are bananas.
(II) All bananas are pink.
SSC MTS 13/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Both conclusions (I) and (II) are follow.

Q.49. Statements:
All trucks are bikes.
All bikes are carts.
Some carts are pens.
Conclusion:
(I) Some trucks are carts.
(II) No bikes are pens.
SSC MTS 14/09/2023 (1st Shift)
(a) Only conclusion (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Neither conclusion (I) nor (II) is follow
(d) Only conclusion (I) is follow

Q.50. Statements:
Some chargers are metal.
All metal are hard.
Some hard are stools.
Conclusion:
(I) All chargers are metal
(II) Some stools are hard
SSC MTS 14/09/2023 (1st Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Neither conclusion (I) nor (II) is follow.
(c) Only conclusion (I) is follow.
(d) Only conclusion (II) is follow.

Q.51. Statements:
Some schools are big.
All big are malls.
No mall is cheap
Conclusion :
(I) All big are schools.
(II) Some malls are big.
SSC MTS 14/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (II) is follow.
(c) Only conclusion (I) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.52. Statements:
All trash are rags.
Some rags are big.
All big are crabs.
Conclusion:

(I) All big are rags.
(II) Some crabs are rags.
SSC MTS 14/09/2023 (2nd Shift)
(a) Both conclusions (I) and (II) are follow.
(b) Only conclusion (I) is follow.
(c) Neither conclusion (I) nor (II) is follow.
(d) Only conclusion (II) is follow.

Q.53. Statements:
All buckets are plastic.
Some plastic are spoons.
All spoons are forks.
Conclusion:
(I) Some plastic are buckets
(II) Some plastics are forks.
SSC MTS 14/09/2023 (3rd Shift)
(a) Only conclusion (II) is follow.
(b) Both conclusions (I) and (II) are follow.
(c) Only conclusion (I) is follow.
(d) Neither conclusion (I) nor (II) is follow.

Q.54. Statements:
All the trucks are flies.
Some scooters are flies.
Conclusions:
(I) All trucks are scooters:
(II) Some scooters are trucks.
SSC MTS 14/09/2023 (3rd Shift)
(a) Neither conclusion (I) nor (II) is follows.
(b) Only conclusion (I) is follows..
(c) Both conclusions (I) and (II) are follows.
(d) Only conclusion (II) is follows.

Answer Key :-

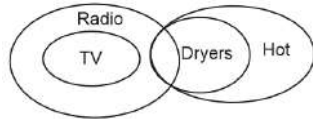| 1.(d)	2.(a)	3.(c)	4.(b)
5.(d)	6.(b)	7.(d)	8.(d)
9.(a)	10.(a)	11.(d)	12.(d)
13.(a)	14.(c)	15.(b)	16.(d)
17.(c)	18.(d)	19.(b)	20.(b)
21.(c)	22.(c)	23.(d)	24.(a)
25.(a)	26.(c)	27.(b)	28.(a)
29.(b)	30.(c)	31.(d)	32.(a)
33.(b)	34.(b)	35.(d)	36.(b)
37.(c)	38.(d)	39.(b)	40.(a)
41.(c)	42.(c)	43.(a)	44.(c)
45.(c)	46.(b)	47.(b)	48.(c)
49.(d)	50.(d)	51.(b)	52.(d)
53.(b)	54.(a)		

Solutions :-

Sol.1.(d)

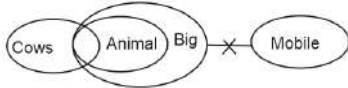Neither conclusion (I) nor (II) follow.

Sol.2.(a)
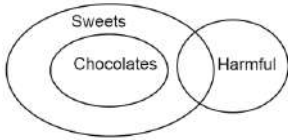
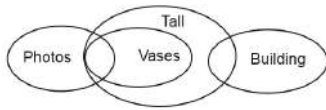Neither conclusion (I) nor (II) follow.

Sol.3.(c)

Only conclusion (I) follow.

Sol.4.(b)
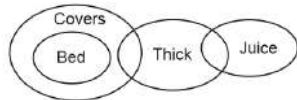

Neither conclusion (I) nor (II) follow.

Sol.5.(d)
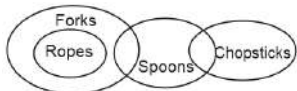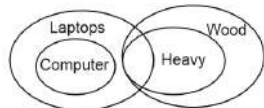

Neither conclusion (I) nor (II) follow.

Sol.6.(b)

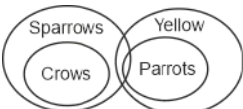Only conclusion (II) follows.

Sol.7.(d)

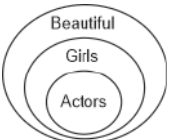Neither conclusion (I) nor (II) follow.

Sol.8.(d)

Only conclusion (II) follows.

Sol.9.(a)

Only conclusion (II) follows.
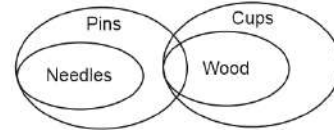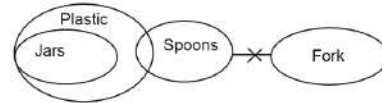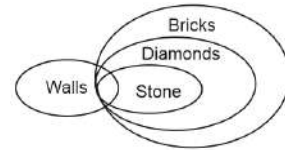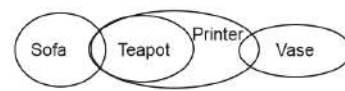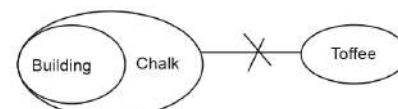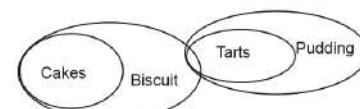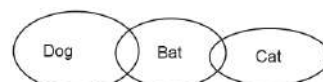
Sol.10.(a)

Both conclusions (I) and (II) follow.

Sol.11.(d)

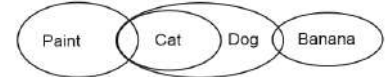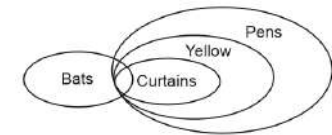Only conclusion (I) follows.

Sol.12.(d)

Both conclusions (I) and (II) follow.

Sol.13.(a)

Neither conclusion (I) nor (II) follow.

Sol.14.(c)

Only conclusion (I) follows.

Sol.15.(b)

Both conclusions (I) and (II) follow.

Sol.16.(d)
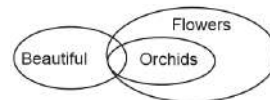
Only conclusion (I) follows.

Sol.17.(c)

Both conclusions I and II follow.

Sol.18.(d)
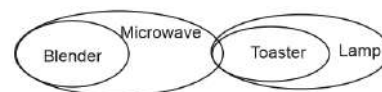
Only conclusion I follow.

Sol.19.(b)

Only conclusion I follows.

Sol.20.(b)

Both conclusions I and II follow.

Sol.21.(c)

Neither conclusion I nor II follows.
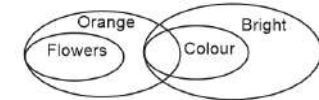
Sol.22.(c)

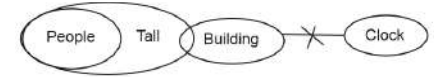Only conclusion I follows.

Sol.23.(d)

Only conclusion (II) follows.
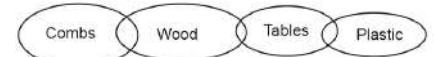
Sol.24.(a)

Only conclusion (I) follow.

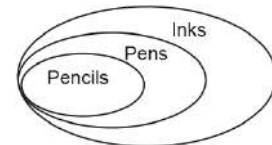**Sol.25.(a)**

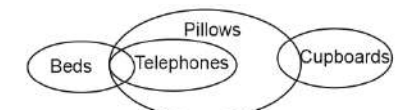Only conclusion II follows.

Sol.26.(c)

Only conclusion I follow

Sol.27.(b)

Both conclusions (I) and (II) follow.

Sol.28.(a)

Both conclusions (I) and (II) follow.

Sol.29.(b)

Only conclusion II follows

Sol.30.(c)

Only conclusion II follows.

Sol.31.(d)

Only conclusion (I) follows.

Sol.32.(a)

torches guitars bulbs ✕ stove

Neither conclusion (I) nor (II) follow.

Sol.33.(b)

Dogs Cats Hens Pink

Both conclusion I and II follow

Sol.34.(b)

clowns bottles steel keys

Only conclusion I follows.

Sol.35.(d)

trees mobiles small ants

Both conclusions (I) and (II) follow.

Sol.36.(b)

apples fire hot crabs

Neither conclusion (I) nor (II) is follow.

Sol.37.(c)

cups books shirts

Only conclusion (II) follows.

Sol.38.(d)

lipsticks foundation brown highlighters

Only conclusion (I) follows.

Sol.39.(b)

cows crows elephants

Neither conclusion (I) nor (II) follow.

Sol.40.(a)

alphabets chairs high buildings

Only conclusion (II) follows.

Sol.41.(c)

clay metal bricks tablets

Neither conclusion I nor II follows.

Sol.42.(c)

cats cars fans

Neither conclusion I nor II follows.

Sol.43.(a)

shoes leather belts gold

Neither conclusion (I) nor (II) follow.

Sol.44.(c)

leaves old clothes papers

Only conclusion (II) follows.
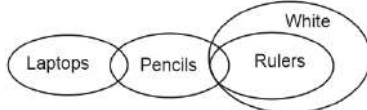
Sol.45.(c)

wool crochet skirts bread

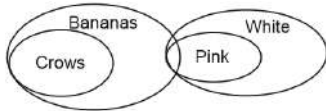Both conclusion I and II follow.

Sol.46.(b)

chairs fans pots hot

Both conclusions follow.

Sol.47.(b)

Laptops Pencils Rulers White

Only conclusion (I) follows.

Sol.48.(c)

Bananas Crows Pink White

Only conclusion (I) follows.

Sol.49.(d)

Trucks Bikes Carts Pens

Only conclusion I follow.

Sol.50.(d)

Chargers Metal Hard Stools

Only conclusion II follows.

Sol.51.(b)

schools big malls ✕ cheap

Only conclusion (II) follows.

Sol.52.(d)

trash rags big crabs

Only conclusion (II) follows.

Sol.53.(b)

Buckets Plastic Spoon Forks

Both conclusions (I) and (II) are follow.

Sol.54.(a)

Trucks Files Scooters

Neither conclusion (I) nor (II) follows.

Embedded Figure

Introduction of Embedded figure- In this chapter, a figure (X) is given, followed by four complex figures in such a way that figure (X) is embedded in one and only one of them. The student has to select such a figure in which figure (X) is embedded.

For example: In the following questions, figure (X) is embedded in any one of the four alternative figures (1), (2), (3) ,(4).Find the alternative which contains figure (X).

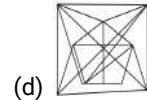**1. Example -**
Select the options figure embedded in the given figure as its part (rotation is not allowed).
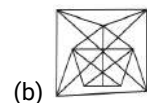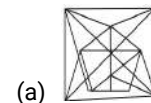
(a)   (b)
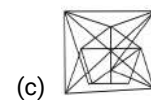
(c)   (d)

Solution : On close observation, we find that the question figure is embedded in figure **(b)** as shown below.

Direction:- [Q .1. - Q .9.] Select the option figure in which the given figure (X) is embedded as its part **(rotation is NOT allowed).**

Questions :-

Q.1.

(X)

SSC MTS 01/09/2023 (3rd Shift)

(a)   (b)

(c)   (d)

Q.2.

(X)

SSC MTS 06/09/2023 (2nd Shift)

(a)   (b)
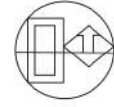
(c)   (d)

Q.3.
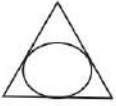
(X)

SSC MTS 06/09/2023 (3rd Shift)
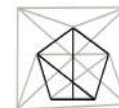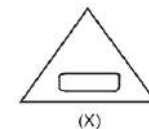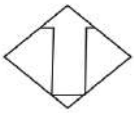
(a)   (b)

(c)   (d)

Q.4.

SSC MTS 11/09/2023 (1st Shift)

(a)   (b)

(c)   (d)

Q.5.

(X)

SSC MTS 12/09/2023 (3rd Shift)

(a)   (b)

(c)   (d)

Q.6.

SSC MTS 13/09/2023 (2nd Shift)
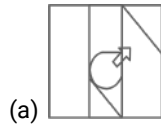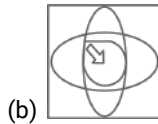
(a)   (b)
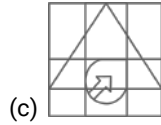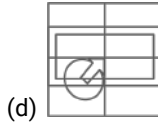
(c)   (d)

Q.7.

(X)

SSC MTS 14/09/2023 (1st Shift)
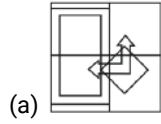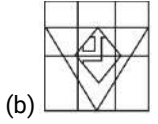
(a)   (b)
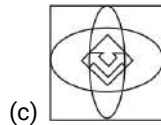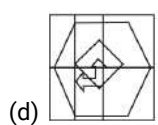
(c)   (d)

Q.8.

(X)

SSC MTS 14/09/2023 (2nd Shift)

(a)   (b)
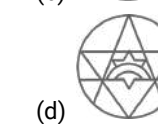
(c)   (d)

Q.9.

X

SSC MTS 14/09/2023 (3rd Shift)

(a)   (b)
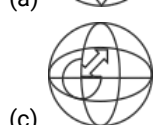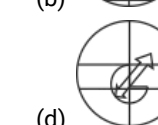
(c)   (d)

Answer Key :-

1.(c)	2.(b)	3.(b)	4.(c)
5.(d)	6.(d)	7.(b)	8.(d)
9.(c)			

Solutions:-

Sol.1.(c)

Sol.2.(b)

Sol.3.(b)
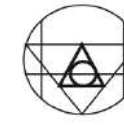
Sol.4.(c)

Sol.5.(d)
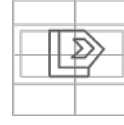
Sol.6.(d)
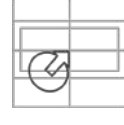
Sol.7.(b)
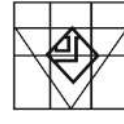
Sol.8.(d)

Sol.9.(c)

ANALOGY

HOW TO SOLVE ANALOGY-
In analogy based questions, a particular relationship is given and another similar relationship has to be identified from the alternatives provided. Analogy tests are, therefore, meant to test a students/teachers overall knowledge, power of reasoning and ability to think concisely and accurately.
Before solving the questions, you have to keep in mind the following relationship.

Some important countries and their capitals :-

COUNTRY		CAPITAL
USA	→	WASHINGTON DC
BHUTAN	→	THIMPHU
AUSTRIA	→	VIENNA
CANADA	→	OTTAWA
JAPAN	→	TOKYO
CHINA	→	BEIJING
RUSSIA	→	MOSCOW
AUSTRALIA	→	CANBERRA
UK	→	LONDON
IRAN	→	TEHRAN
EGYPT	→	CAIRO
GREECE	→	ATHENS
BANGLADESH	→	DHAKA
SRI LANKA	→	COLOMBO
KENYA	→	NAIROBI
SPAIN	→	MADRID
IRAQ	→	BAGHDAD
ITALY	→	ROME
PAKISTAN	→	ISLAMABAD
BRAZIL	→	BRASILIA
CUBA	→	HVANA
KYRGYZSTAN	→	BISHKEK
MYANMAR	→	NAY PYI TAW

Some important countries and their currency:

CAPITAL		CURRENCY
UAE	→	DIRHAM
USA	→	DOLLAR
TURKEY	→	LIRA
GERMANY	→	MARK
JAPAN	→	YEN
GREECE	→	EURO
ARGENTINA	→	PESO
RUSSIA	→	ROUBLE
BURMA	→	KYAT
CHINA	→	YUAN/RENMINBI
UK	→	POUND
KUWAIT	→	DINAR
SPAIN	→	PESETA
BANGLADESH	→	TAKA
NETHERLANDS	→	GUILDER
SWEDEN	→	KRONA
IRAN	→	RIAL/TOMAN
SPAIN	→	PESETA
THAILAND	→	BAHT

Some important quantity and their unit :-

| QUANTITY		UNIT
MASS	→	KILOGRAM
POWER	→	WATT
CURRENT	→	AMPERE
WORK	→	JULE
ANGLE	→	RADIANS
ENERGY	→	JULE
PRESSURE	→	PASCAL
FORCE	→	NEWTON
TEMPERATURE	→	DEGREE CELSIUS
MAGNETIC FIELD	→	TESLA
POTENTIAL DIFFERENCE	→	VOLT
RESISTANCE	→	OHM
VOLUME	→	CUBIC UNIT
CONDUCTANCE	→	MHO
TIME	→	SECONDS

Some important instruments and measurements:

INSTRUMENTS		MEASUREMENT
SCALE	→	LENGTH
ODOMETER	→	SPEED
AMMETER	→	CURRENT
SEISMOGRAPH	→	EARTHQUAKE
ANEMOMETER	→	WIND
THERMOMETER	→	TEMPERATURE
HYGROMETER	→	HUMIDITY
BALANCE	→	MASS
SCREW-GAUGE	→	THICKNESS
TASEOMETER	→	STRAINS

Some important animals and their young ones:

ANIMAL		YOUNG ONE
CAT	→	KITTEN
FROG	→	TADPOLE
STAG	→	FAWN
SWAN	→	CYGNET
DEER	→	FAWN
HORSE	→	COLT/FILLY
DUCK	→	DUCKLING
BUTTERFLY	→	CATERPILLAR
HEN	→	CHICK
BEAR	→	CUB
DOG	→	PUPPY
LION/TIGER	→	CUB
SHEEP	→	LAMB
INSECT	→	LARVA

Some important individual and their class

INDIVIDUAL		CLASS
BUTTERFLY	→	INSECT
FROG	→	AMPHIBIAN
OSTRICH	→	BIRD
SNAKE	→	REPTILE
HUMAN	→	MAMMAL
CUP	→	CROCKERY
WHALE	→	MAMMAL
RAT	→	RODENT
LIZARD	→	REPTILE

Some important individuals and their dwelling place:

INDIVIDUAL		DWELLING PLACE
SPIDER	→	WEB
BIRD	→	NEST
PIG	→	STY
ESKIMO	→	IGLOO
BEE	→	HIVE
NUN	→	CONVENT
LION	→	DEN
KNIGHT	→	MANSION
HARE	→	BURROW
GYPSY	→	CARAVAN
MOUSE	→	HOLE
COW	→	BYRE/PEN
PEASANT	→	COTTAGE
MONK	→	MONASTERY
EAGLE	→	EYRIE
LUNATIC	→	ASYLUM
HORSE	→	STABLE
CONVICT	→	PRISON
KING	→	PALACE
SOLDIER	→	BARRACKS
OWL	→	BARN

Some important Male and Female:

Male		Female
MASTER	→	MISTRESS
FOX	→	VIXEN
DOG	→	BITCH
DRONE	→	BEE
NEPHEW	→	NIECE
BROTHER	→	SISTER
BULL	→	COW
BULLOCK	→	HEIFER
WIZARD	→	WITCH
DRAKE	→	DUCK
COLT	→	FILLY
TUTOR	→	GOVERNESS
COCK	→	HEN
BACHELOR	→	SPINSTER
LORD	→	LADY
GANDER	→	GOOSE
COCK	→	HEN
LION	→	LIONESS
EARL	→	COUNTESS

Some important Games and Place of Playing

BADMINTON	→	COURT
BOXING	→	RING
RACE	→	TRACK
TENNIS	→	COURT
SKATING	→	RINK
ATHLETICS	→	STADIUM
HOCKEY	→	GROUND
WRESTLING	→	ARENA
CRICKET	→	PITCH
EXERCISE	→	GYMNASIUM

Some important Worker and Tool:

DOCTOR	→	STETHOSCOPE
CARPENTER	→	SAW

AUTHOR	→	PEN
GARDENER	→	HARROW
CHEF	→	KNIFE
MASON	→	PLUMBLINE
LABOURER	→	SPADE
FARMER	→	PLOUGH
TAILOR	→	NEEDLE
SOLDIER	→	GUN
SCULPTOR	→	CHISEL
WARRIOR	→	SWORD
WOODCUTTER	→	AXE
SURGEON	→	SCALPEL
BLACKSMITH	→	ANVIL

Some important Tool and Action:

KNIFE	→	CUT
CHISEL	→	CARVE
MATTOCK	→	DIG
TONGS	→	HOLD
AUGER	→	BORE
BINOCULAR	→	VIEW
SPADE	→	DIG
SWORD	→	SLAUGHTER
PEN	→	WRITE
GUN	→	SHOOT
AXE	→	GRIND
SHIELD	→	GUARD
SHOVEL	→	SCOOP
SPANNER	→	GRIP
LOUDSPEAKER	→	AMPLIFY
MICROSCOPE	→	MAGNIFY

Some important Study and Topics

ANTHROPOLOGY	→	MAN
PHYCOLOGY	→	ALGAE
CRANIOLOGY	→	SKULL
ASTROLOGY	→	FUTURE
PATHOLOGY	→	DISEASES
ENTOMOLOGY	→	INSECTS
PHYSIOLOGY	→	BODY
PEDOLOGY	→	SOIL
OOLOGY	→	EGGS
ICHTHYOLOGY	→	FISHES
VIROLOGY	→	VIRUSES
MYCOLOGY	→	FUNGI
NEPHROLOGY	→	KIDNEY
HAEMATOLOGY	→	BLOOD
ECCRINOLOGY	→	SECRETIONS
PALAEOGRAPHY	→	WRITINGS
ONOMATOLOGY	→	NAMES
ARCHEOLOGY	→	ARTIFACTS
SELENOLOGY	→	MOON
CARDIOLOGY	→	HEART
ZOOLOGY	→	ANIMALS

In **Number analogy** questions the first term is related to the second term in so many ways like:- difference b/w the numbers, prime no,square, cube , digit sum, divisibility, and addition, subtraction, multiplication, division of the numbers.

Example: 1 Select the option that is related to the fifth number in the same way as the second number is related to the first number and the fourth number is related to the third number.

13 : 120 : : 17 : 152 : : 21 : ?

Solution:-

In 13 : 120,

13 : (13 + **2**) × **8** = 13 : 15 × 8 = 13 : 120

In 17 : 152,

17 : (17 + **2**) × **8** = 17 : 19 × 8 = 17 : 152

In 21 : (?),

21 : (21 + **2**) × **8** = 21 : 23 × 8 = 21 : **184**

Example:2 Select the option in which the two numbers are related in the same way as are the two numbers of the following number-pair.

25 : 343

(a) 24 : 216   (b) 29 : 121

(c) 34 : 510   (d) 30 : 729

Solution:-

Logic : (Sum of digits) : (number)³

⇒   25   :   343

⇒ (5 + 2) = 7 :   (7)³

Similarly,

⇒   24   ::   216

⇒ (4 + 2) = 6 ::   (6)³

In **alphabetical analogy** questions the first term is related to the second term in so many ways like:- same difference b/w alphabet , Reverse of the alphabet, and add, subtract, multiply, divide the same number,and on the basis of vowel & consonant.

Example : 1 Select the option that is related to the fifth letter- cluster in the same way as the second letter - cluster is related to the first letter - cluster and the fourth letter - cluster is related to the third letter - cluster.

ROSE : IVQS :: SUIT : XLWT :: TIME : ?

Solution :-
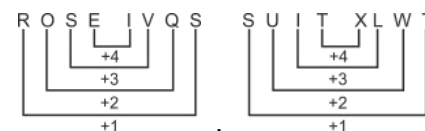
Similarly,

Questions :-

Q.1. 287 is related to 398 following a certain logic. Following the same logic, 378 is related to 489. To which of the following is 852 related to, following the same logic ?
SSC MTS 01/09/2023 (1st Shift)
(a) 643 (b) 963 (c) 346 (d) 543

Q.2. 38 is related to 49 following a certain logic. Following the same logic, 64 is related to 75. To which of the following is 83 related to, following the same logic ?
SSC MTS 01/09/2023 (1st Shift)
(a) 93   (b) 95   (c) 92   (d) 94

Q.3. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Reflection : Light
SSC MTS 01/09/2023 (1st Shift)
(a) Sentiment : Feeling (b) Echo : Sound
(c) Iris : Sight   (d) Movie : Scene

Q.4. FKQN is related to LQWT in a certain way based on the English alphabetical order. In the same way, CHOJ is related to INUP. To which of the following is DOSG related to, following the same logic ?
SSC MTS 01/09/2023 (2nd Shift)
(a) JSWM (b) JUYM (c) IUVL (d) HQWK

Q.5. 284 is related to 142 following a certain logic. Following the same logic, 612 is related to 306. To which of the following is 522 related to, following the same logic?
SSC MTS 01/09/2023 (2nd Shift)
(a) 262   (b) 261   (c) 263   (d) 264

Q.6. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(Note : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(5, 24)
(12, 143)
SSC MTS 01/09/2023 (2nd Shift)
(a) 27, 345   (b) 14, 195
(c) 18, 652   (d) 21, 126

Q.7. HM 12 is related to FK 17 in a certain way. In the same way, EK 18 is related to CI 23. To which of the following is GU 14 related to following the same logic?
SSC MTS 01/09/2023 (3rd Shift)
(a) ES 19 (b) IW 20 (c) ER 18 (d) FS 19

Q.8. Select the set in which the numbers are related in the same way as are the

numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(5, 35, 7)
(9, 27, 3)
SSC MTS 01/09/2023 (3rd Shift)
(a) 16, 50, 7   (b) 6, 42, 7
(c) 4, 10, 5   (d) 6, 17, 9

Q.9. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
16 : 95
6 : 35
SSC MTS 01/09/2023 (3rd Shift)
(a) 8 : 48 (b) 13 : 77 (c) 2 : 13 (d) 17 : 23

Q.10. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
8 : 50
4 : 30
SSC MTS 04/09/2023 (1st Shift)
(a) 20 : 40 (b) 6 : 20 (c) 7 : 45 (d) 5 : 8

Q.11. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
5, 128
9, 732
SSC MTS 04/09/2023 (1st Shift)
(a) 5, 50 (b) 3, 30 (c) 4, 46 (d) 2, 13

Q.12. 'DKJE' is related to 'IPOJ' in a certain way based on the English alphabetical order. In the same way, GTSM is related to LYXR. To which of the following is RBNF related to, following the same logic?
SSC MTS 04/09/2023 (1st Shift)
(a) WGSK (b) XERJ (c) WEQK (d) VGQI

Q.13. 2 is related to 40 following a certain logic. Following the same logic, 5 is related to 250. To which of the following is 7 related to, following the same logic?
SSC MTS 04/09/2023 (2nd Shift)
(a) 470 (b) 490 (c) 450 (d) 400

Q.14. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
65, 74
87, 96
SSC MTS 04/09/2023 (2nd Shift)
(a) 75, 123   (b) 63, 157
(c) 81, 156   (d) 92, 101

Q.15. Select the word-pair that best represents the same relationship expressed in the pair of words given below.
(The words should be treated as meaningful Hindi words and should not be related to each other on the basis of number of letters/consonants/vowels in the word.)
Appreciate : praise
SSC MTS 04/09/2023 (2nd Shift)
(a) To Treat : Serving
(b) To persuade : to reject
(c) To beautify : to refresh
(d) Teach : learn

Q.16. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(4, 55, 7)
(2, 35, 5)
SSC MTS 04/09/2023 (3rd Shift)
(a) 41, 156, 7   (b) 12, 346, 9
(c) 32, 175, 3   (d) 19, 122, 8

Q.17. DK 18 is related to EM 22 in a certain way. In the same way, ME 25 is related to NG 29. To which of the following is UL14 related to following the same logic ?
SSC MTS 04/09/2023 (3rd Shift)
(a) VM 19 (b) WN 18 (c) XO 17 (d) VN 18

Q.18. 13 is related to 174 following a certain logic. Following the same logic, 15 is related to 230. To which of the following is 17 related to, following the

same logic ?
SSC MTS 04/09/2023 (3rd Shift)
(a) 291   (b) 292 (c) 293 (d) 294

Q.19. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
11 : 60
13 : 70
SSC MTS 05/09/2023 (1st Shift)
(a) 19 : 90   (b) 15 : 80
(c) 17 : 85   (d) 21 : 100

Q.20. KGTO is related to HDQL in a certain way based on the English alphabetical order. In the same way, YFSH is related to VCPE. To which of the following is GUMS related to, following the same logic?
SSC MTS 05/09/2023 (1st Shift)
(a) JXOU (b) DSKP (c) ESKU (d) DRJP

Q.21. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(2, 14, 28)
(7, 11, 77)
SSC MTS 05/09/2023 (1st Shift)
(a) 4, 7, 23   (b) 6, 9, 54
(c) 1, 7, 45   (d) 8, 6, 98

Q.22. JR 11 is related to KT 16 in a certain way. In the same way, VM 22 is related to WO 27. To which of the following is DS 18 related to following the same logic?
SSC MTS 05/09/2023 (2nd Shift)
(a) CQ 24 (b) EU 23 (c) FU 23 (d) FT 22

Q.23. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
12 : 144
13 : 169
SSC MTS 05/09/2023 (2nd Shift)
(a) 9 : 80   (b) 10 : 90
(c) 15 : 225   (d) 14 : 182

Q.24. 5 is related to 19 following a certain logic. Following the same logic, 8 is related to 31. To which of the following is 13 related to, following the same logic?
SSC MTS 05/09/2023 (2nd Shift)
(a) 51   (b) 52   (c) 53   (d) 50

Q.25. 21 is related to 147 following a certain logic, Following the same logic, 32 is related to 224, To which of the following is 52 related to, following the same logic ?
SSC MTS 05/09/2023 (3rd Shift)
(a) 356   (b) 364 (c) 365   (d) 346

Q.26. Select the word-pair that best represents the same relationship expressed in the pair of words given below.
(The words should be treated as meaningful Hindi words and should not be related to each other on the basis of number of letters/consonants/vowels in the word)
stammer: conversation
SSC MTS 05/09/2023 (3rd Shift)
(a) Astigmatism: Sight (b) noise : hearing
(c) Aroma: Smell   (d) Novocaine: touch

Q.27. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
11, 110
19, 190
SSC MTS 05/09/2023 (3rd Shift)
(a) 31, 310   (b) 22, 440
(c) 91, 190   (d) 51, 150

Q.28. LCNT is related to NEPV in a certain way based on the English alphabetical order. In the same way, HBER is related to JDGT. To which of the following is OSCF related to, following the same logic?
SSC MTS 06/09/2023 (1st Shift)
(a) PUDJ (b) RVEH (c) QVEI (d) QUEH

Q.29. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(8, 720, 9)
(16, 800, 5)
SSC MTS 06/09/2023 (1st Shift)
(a) 7, 125, 8   (b) 13, 169, 5

(c) 14, 238, 5   (d) 18, 1260, 7

Q.30. 8 is related to 40 following a certain logic. Following the same logic, 3 is related to 15. To which of the following is 52 related to, following the same logic?
SSC MTS 06/09/2023 (1st Shift)
(a) 261   (b) 262   (c) 260   (d) 263

Q.31. 21 is related to 86 following a certain logic. Following the same logic, 33 is related to 134. To which of the following is 25 related to, following the same logic?
SSC MTS 06/09/2023 (2nd Shift)
(a) 100   (b) 103   (c) 102   (d) 101

Q.32. BJTI is related to EMWL in a certain way based on the English alphabetical order. In the same way, HDRL is related to KGUO. To which of the following is OCGM related to, following the same logic?
SSC MTS 06/09/2023 (2nd Shift)
(a) RFIO (b) SEKO (c) RFJP (d) QEIR

Q.33. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(14, 13, 32)
(21, 13, 39)
SSC MTS 06/09/2023 (2nd Shift)
(a) 15, 7, 18   (b) 19, 12, 36
(c) 5, 19, 88   (d) 11, 14, 43

Q.34. CZMB is related to NNAM in a certain way based on the English alphabetical order. In the same way, LKQD is related to WRLO. To which of the following is HNTF related, following the same logic ?
SSC MTS 06/09/2023 (3rd Shift)
(a) SQOU (b) SUOQ (c) SOUQ (d) SUQO

Q.35. 27 is related to 36 following a certain logic. Following the same logic, 69 is related to 78. To which of the following is 53 related to, following the same logic ?
SSC MTS 06/09/2023 (3rd Shift)
(a) 63   (b) 64   (c) 62   (d) 61

Q.36. 28 is related to 12 following a certain logic. Following the same logic, 42 is related to 19.To which of the following is 52 related to, following the same logic ?
SSC MTS 06/09/2023 (3rd Shift)
(a) 23   (b) 25   (c) 24   (d) 22

Q.37. In the following number-pairs, the

second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
7, 13
18, 35
SSC MTS 08/09/2023 (1st Shift)
(a) 77, 98 (b) 22, 43 (c) 32, 64 (d) 44, 76

Q.38. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Cricket : Pitch
SSC MTS 08/09/2023 (1st Shift)
(a) Wrestling : Track   (b) Ship : Dock
(c) Boxing : Ring   (d) Boat : Harbour

Q.39. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
53, 90
79, 116
SSC MTS 08/09/2023 (1st Shift)
(a) 47, 84 (b) 31, 94 (c) 59, 98 (d) 42, 59

Q.40. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters / number of consonants / vowels in the word)
Correspond : Letters
SSC MTS 08/09/2023 (2nd Shift)
(a) Barter : Commodities
(b) Trespass : Boundaries
(c) Arbitrate : Controversies
(d) Debate : Problems

Q.41. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of following sets.

(Note: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
2, 7
5, 16
SSC MTS 08/09/2023 (2nd Shift)
(a) 14, 45 (b) 11, 23 (c) 20, 58 (d) 15, 46

Q.42. 16 is related to 29 following a certain logic. Following the same logic, 85 is related to 98. To which of the following is 53 related to, following the same logic?
SSC MTS 08/09/2023 (2nd Shift)
(a) 66   (b) 62   (c) 64   (d) 68

Q.43. 17 is related to 52 following a certain logic. Following the same logic, 42 is related to 127. To which of the following is 29 related to, following the same logic?
SSC MTS 08/09/2023 (3rd Shift)
(a) 84   (b) 88   (c) 86   (d) 82

Q.44. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(5, 11, 80)
(6, 12, 90)
SSC MTS 08/09/2023 (3rd Shift)
(a) 4, 19, 148   (b) 9, 11, 67
(c) 7, 17, 120   (d) 2, 16, 123

Q.45. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Scissors : Cloth
SSC MTS 08/09/2023 (3rd Shift)
(a) Pen : Ink   (b) Razor : Beard
(c) Nail : Hammer (d) Furnace : Smoke

Q.46. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Legend : Map
SSC MTS 11/09/2023 (1st Shift)
(a) Volume : Guidebook
(b) Glossary : Text

(c) Column : Essay
(d) Profession : Biography

Q.47. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
8,128
9,162
SSC MTS 11/09/2023 (1st Shift)
(a) 11, 124   (b) 14, 392
(c) 12, 149   (d) 13, 170

Q.48. in the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
16 : 41
11 : 26
SSC MTS 11/09/2023 (1st Shift)
(a) 7 : 28 (b) 5 : 15 (c) 21 : 84 (d) 12 : 29

Q.49. 5 is related to 24 following a certain logic. Following the same logic, 9 is related to 80. To which of the following is 14 related to, following the same logic?
SSC MTS 11/09/2023 (2nd Shift)
(a) 197   (b) 195   (c) 196   (d) 198

Q.50. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(2, 8, 32)
(5, 7, 70)
SSC MTS 11/09/2023 (2nd Shift)
(a) 7, 12, 84   (b) 3, 5, 15
(c) 6, 11, 56   (d) 4, 12, 96

Q.51. EH 11 is related to CF 16 in a certain way. In the same way. JV 15 is related to HT 20. To which of the following is FN 13 related to following the same logic?
SSC MTS 11/09/2023 (2nd Shift)
(a) DK 19 (b) CL 18 (c) EM 17 (d) DL 18

Q.52. 22 is related to 198 following a certain logic. Following the same logic, 41 is related to 369. To which of the

following is 54 related to, following the same logic ?
SSC MTS 11/09/2023 (3rd Shift)
(a) 286   (b) 486   (c) 268   (d) 468

Q.53. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Bacteria : Decomposition
SSC MTS 11/09/2023 (3rd Shift)
(a) Oxygen : Treatment
(b) Yeast : Fermentation
(c) Volcano : Eruption
(d) Antibiotic : Injection

Q.54. 11 is related to 123 following a certain logic. Following the same logic, 20 is related to 402. To which of the following is 13 related to, following the same logic?
SSC MTS 11/09/2023 (3rd Shift)
(a) 171   (b) 172   (c) 173   (d) 174

Q.55. 18 is related to 54 following a certain logic. Following the same logic, 21 is related to 63. To which of the following is 72 related to, following the same logic ?
SSC MTS 12/09/2023 (1st Shift)
(a) 222   (b) 220   (c) 218   (d) 216

Q.56. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(25, 49, 73)
(34, 23, 12)
SSC MTS 12/09/2023 (1st Shift)
(a) 5, 35, 17   (b) 11, 9, 18
(c) 18, 22, 26   (d) 13, 15, 19

Q.57. MEOP is related to KCMN in a certain way based on the English alphabetical order. In the same way, LTDG is related to JRBE. To which of the following is UNTF related to, following the same logic?
SSC MTS 12/09/2023 (1st Shift)
(a) SMRE (b) SLRD (c) VPUH (d) TOSG

Q.58. 2 is related to 5 following a certain logic. Following the same logic, 6 is related to 37. To which of the following is 9 related to, following the same logic?
SSC MTS 12/09/2023 (2nd Shift)
(a) 81   (b) 83   (c) 82   (d) 84

Q.59. PD 17 is related to TH 19 in a certain way. Similarly, HK 23 is related to LO 29. Following the same logic FJ 11 is related to which of the following?
SSC MTS 12/09/2023 (2nd Shift)
(a) IM 13 (b) HL 17 (c) IN 15 (d) JN 13

Q.60. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(32, 99, 67)
(22, 77, 55)
SSC MTS 12/09/2023 (2nd Shift)
(a) 53, 98, 33   (b) 23, 87, 64
(c) 35, 87, 12   (d) 12, 45, 14

Q.61. 78 is related to 69 following a certain logic. Following the same logic, 57 is related to 48. To which of the following is 94 related to, following the same logic ?
SSC MTS 12/09/2023 (3rd Shift)
(a) 83   (b) 85   (c) 82   (d) 84

Q.62. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
12 : 44
 8 : 28
SSC MTS 12/09/2023 (3rd Shift)
(a) 9 : 32 (b) 7 : 28 (c) 15 : 35 (d) 10 : 38

Q.63. DTGB is related to FVID in a certain way based on the English alphabetical order. In the same way, VRCK is related to XTEM. To which of the following is JAHM related to, following the same logic?
SSC MTS 12/09/2023 (3rd Shift)
(a) KBJP (b) LDKO (c) MCKP (d) LCJO

Q.64. 8 is related to 59 following a certain logic. Following the same logic, 9 is related to 76. To which of the following is 25 related to, following the same logic?
SSC MTS 13/09/2023 (1st Shift)
(a) 620   (b) 635   (c) 630   (d) 625

Q.65. TDWP is related to RBUN in a certain way based on the English alphabetical order. In the same way, FJMH is related to DHKF. To which of the following is SENP related to, following the same logic?

SSC MTS 13/09/2023 (1st Shift)
(a) PDKN (b) QCLN (c) RCMN (d) QDKO

Q.66. 8 is related to 88 following a certain logic. Following the same logic, 11 is related to 121. To which of the following is 15 related to, following the same logic?
SSC MTS 13/09/2023 (1st Shift)
(a) 163   (b) 165   (c) 164   (d) 162

Q.67. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Lava: Volcano
SSC MTS 13/09/2023 (2nd Shift)
(a) Avalanche : Ice
(b) Ice : Glass
(c) Steam : Geyser
(d) Cascade : Precipice

Q.68. 10 is related to 97 following a certain logic. Following the same logic, 12 is related to 141. To which of the following is 14 related to, following the same logic ?
SSC MTS 13/09/2023 (2nd Shift)
(a) 193   (b) 191   (c) 194   (d) 192

Q.69. 12 is related to 59 following a certain logic. Following the same logic, 17 is related to 84. To which of the following is 19 related to, following the same logic ?
SSC MTS 13/09/2023 (2nd Shift)
(a) 91   (b) 94   (c) 93   (d) 92

Q.70. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Horse : Mare
SSC MTS 13/09/2023 (3rd Shift)
(a) Fox : Vixen   (b) Duck : Geese
(c) Donkey : Pony (d) Dog : Puppy

Q.71. 4 is related to 14 following a certain logic. Following the same logic, 7 is related to 26. To which of the following is 9 related to, following the same logic?
SSC MTS 13/09/2023 (3rd Shift)
(a) 37   (b) 36   (c) 34   (d) 35

Q.72. 2 is related to 7 following a certain

logic. Following the same logic, 4 is related to 63. To which of the following is 9 related to, following the same logic?
SSC MTS 13/09/2023 (3rd Shift)
(a) 730   (b) 728   (c) 731   (d) 729

Q.73. RN 12 is related to PL 16 in a certain way. In the same way, EJ 17 is related to CH 21. To which of the following is FL 15 related to following the same logic?
SSC MTS 14/09/2023 (1st Shift)
(a) DJ 19 (b) HN 18 (c) CI 20 (d) DK 19

Q.74. 428 is related to 317 following a certain logic. Following the same logic, 285 is related to 174. To which of the following is 597 related to, following the same logic?
SSC MTS 14/09/2023 (1st Shift)
(a) 386   (b) 368   (c) 468   (d) 486

Q.75. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(14, 42, 7)
(12, 34, 5)
SSC MTS 14/09/2023 (1st Shift)
(a) 43, 144, 29   (b) 17, 102, 5
(c) 25, 131, 2   (d) 36, 702, 2

Q.76. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(Note : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
7, 50
15, 226
SSC MTS 14/09/2023 (2nd Shift)
(a) 21, 445   (b) 11, 131
(c) 14, 162   (d) 17, 290

Q.77. OE 13 is related to MC 17 in a certain way. In the same way, FL 16 is related to DJ 20. To which of the following is RD 15 related to following the same logic ?
SSC MTS 14/09/2023 (2nd Shift)
(a) SF 18 (b) QE 18 (c) PB 19 (d) PC 19

Q.78. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)

3 : 7
5 : 23
SSC MTS 14/09/2023 (2nd Shift)
(a) 6 : 34 (b) 8 : 64 (c) 9 : 80 (d) 4 : 18

Q.79. 14 is related to 57 following a certain logic. Following the same logic, 22 is related to 89. To which of the following is 52 related to, following the same logic?
SSC MTS 14/09/2023 (3rd Shift)
(a) 209   (b) 208   (c) 206   (d) 204

Q.80. BNFT is related to FRJX in a certain way based on the English alphabetical order. In the same way, JOEA is related to NSIE. To which of the following is HERK related to, following the same logic?
SSC MTS 14/09/2023 (3rd Shift)
(a) LJVP   (b) JHVP   (c) LIVO (d) KHUN

Q.81. 5 is related to 20 following a certain logic. Following the same logic, 7 is related to 26. To which of the following is 2 related to, following the same logic?
SSC MTS 14/09/2023 (3rd Shift)
(a) 11   (b) 13   (c) 10   (d) 12

Answer Key :-

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

Solutions :-

Sol.1.(b) Logic : (2nd num - 1st num) = 111
(287 - 398) → 398 - 287 = 111
(378 - 489) → 489 - 378 = 111
Similarly,
(852 - x) → x - 852 = 111
⇒ x = 852 + 111 = 963

Sol.2.(d) Logic : (2nd num - 1st num) = 11
(38 - 49) → 49 - 38 = 11
(64 - 75) → 75 - 64 = 11
Similarly,
(83 - x) → x - 83 = 11 ⇒ x = 83 + 11 = 9

Sol.3.(b) As Reflection is a property of light similarly Echo is a property of Sound.

Sol.4.(b)

Sol.5.(b) Logic : (2nd num × 2) = 1st num
(284 - 142) → 142 × 2 = 284
(612 - 306) → 306 × 2 = 612
Similarly, (522 - y) → y × 2 = 522
⇒ y = (522 ÷ 2) = 261

Sol.6.(b) Logic : (1st num)^2 - 1 = 2nd num
 (5, 24) → 5^2 - 1 ⇒ 25 - 1 = 24
(12, 143)→12^2 - 1 ⇒ 144 - 1 = 143
Similarly,
(14,195) →14^2 - 1 ⇒ 196 - 1 = 195

Sol.7.(a)

Sol.8.(b)
Logic : (1st num × 3rd num) = 2nd num
(5, 35, 7) → 5 × 7 = 35
(9, 27, 3) → 9 × 3 = 27
Similarly, (6, 42, 7) → 6 × 7 = 42

Sol.9.(b)
Logic : (1st num × 6) - 1 = 2nd num
16 : 95 → (16 × 6) - 1⇒ 96 - 1 = 95

6 : 35 → (6 × 6) - 1 ⇒ 36 - 1 = 35
Similarly,
13 : 77 →(13 × 6) - 1 ⇒ 78 - 1 = 77

Sol.10.(c)
Logic : (1st num × 5) + 10 = 2nd num
8 : 50 →(8 × 5) + 10 ⇒ 40 + 10 = 50
4 : 30 →(4 × 5) + 10 ⇒ 20 + 10 = 30
Similarly,
7 : 45 → (7 × 5) + 10 ⇒ 35 + 10 = 45

Sol.11.(b)
Logic : (1st num)^3 + 3 = 2nd num
5, 128 → 5^3 + 3 ⇒ 125 + 3 = 128
9, 732 → 9^3 + 3 ⇒ 729 + 3 = 732
Similarly, 3, 30 → 3^3 + 3 ⇒ 27 + 3 = 30

Sol.12.(a)

Similarly,

Sol.13.(b)
Logic : (1st num)^2 × 10 = 2nd num
2 : 40 → 2^2 × 10 ⇒ 4 × 10 = 40
5 : 250 →5^2 × 10 ⇒ 25 × 10 = 250
Similarly,
7 : 490 →7^2 × 10 ⇒ 49 × 10 = 490

Sol.14.(d) Logic : (2nd num - 1st num) = 9
(65, 74) → 74 - 65 = 9
(87, 96) → 96 - 87 = 9
Similarly, (92, 101) → 101 - 92 = 9

Sol.15.(a) Just as appreciation and praise are synonyms, similarly giving a treat and serving are synonyms.

Sol.16.(c) Logic : (1st num + 3rd num) × 5 = 2nd num
(4, 55, 7) → (4 + 7) × 5 ⇒ 11 × 5 = 55
(2, 35, 5) →(2 + 5) × 5 ⇒ 7 × 5 = 35
Similarly,
(32, 175, 3) →(32 + 3) × 5 ⇒ 35 × 5 = 175
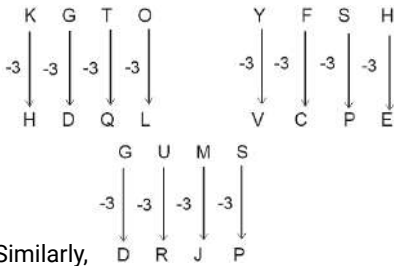
Sol.17.(d)

Similarly,

Sol.18.(d)
Logic : (1st num)^2 + 5 = 2nd num
(13 : 174) →(13)^2 + 5 ⇒ 169 + 5 = 174
(15 : 230) →(15)^2 + 5 ⇒ 225 + 5 = 230

Similarly,
(17 : ?) →(17)² + 5 ⇒ 289 + 5 = 294

Sol.19.(b)
Logic : (1st num × 5) + 5 = 2nd num
11 : 60 → (11 × 5) + 5 ⇒ 55 + 5 = 60
13 : 70 → (13 × 5) + 5 ⇒ 65 + 5 = 70
Similarly,
15 : 80 → (15 × 5) + 5 ⇒ 75 + 5 = 80

Sol.20.(d)

Similarly,   D   R   J   P

Sol.21.(b)
Logic : (1st num × 2nd num) = 3rd num
(2, 14, 28) → 2 × 14 = 28
(7, 11, 77) → 7 × 11 = 77
Similarly,
(6, 9, 54) → 6 × 9 = 54

Sol.22.(b)
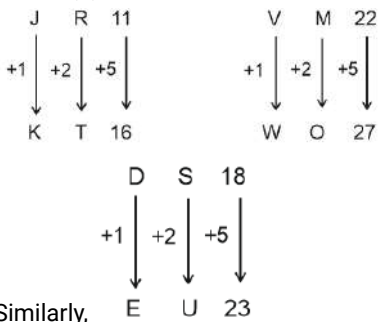
Similarly,   E   U   23

Sol.23.(c)
Logic : (1st number)² = 2nd number
12 : 144 →12² = 144
13 : 169 →13² = 169
Similarly, 15 : 225→15² = 225

Sol.24.(a)
Logic : (1st num. × 4) - 1 = 2nd num.
5 : 19 → (5 × 4) - 1 ⇒ 20 - 1 = 19
8 : 31 →(8 × 4) - 1 ⇒ 32 - 1 = 31
Similarly,
13 : ? →(13 × 4) - 1 ⇒ 52 - 1 = 51

Sol.25.(b)
Logic :- (1st number × 7) = (2nd number)
(21, 147) :- (21 × 7) = 147
(32, 224) :- (32 × 7) = 224
Similarly, (52, 364) :- (52 × 7) = 364

Sol.26.(a) As stammer is antonym of conversation similarly , astigmatism is an antonym of vision.

Sol.27.(a)
Logic : (1st number × 10) = 2nd number
(11, 110) :- (11 × 10) = 110

(19 , 190) :- (19 × 10) = 190
Similarly, (31, 310) :- (31 × 10) = 310

Sol.28.(d)
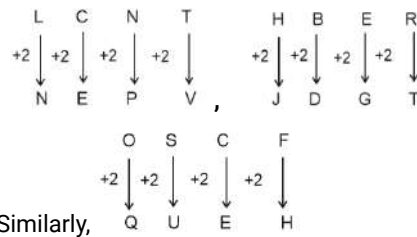
Similarly,   Q   U   E   H

Sol.29.(d) Logic :- (1st number × 3rd number) × 10 = 2nd number
(8 , 720, 9) :-
(8 × 9) × 10 ⇒ (72 × 10) = 720
(16, 800, 5) :-
(16 × 5) × 10 ⇒ (80) × 10 = 800
Similarly,
(18, 1260, 7) :-
(18 × 7) × 10 ⇒ (126) × 10 = 1260

Sol.30.(c)
Logic :- (1st number × 5) = 2nd number
(8, 40) :- (8 × 5) = 40
(3, 15) :- (3 × 5) = 15
Similarly, (52, ?) :- (52 × 5) = 260

Sol.31.(c) Logic :- (1st number × 4) + 2 = 2nd number
(21 , 86) :- (21 × 4) + 2 ⇒ 84 + 2 = 86
(33 , 134) :- (33 × 4) + 2 ⇒ 132 + 2 = 134
Similarly,
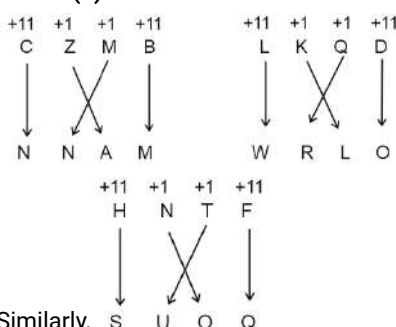(25, ?) :- (25 × 4) + 2 ⇒ 100 + 2 = 102

Sol.32.(c)
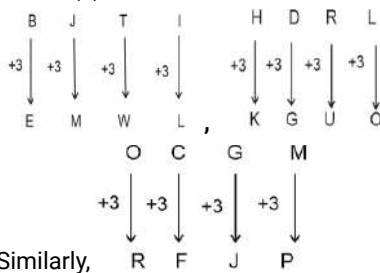
Similarly,   R   F   J   P

Sol.33.(b) Logic : (1st number + 2nd number) + 5 = 3rd number
(14, 13, 32) :- (14 + 13) + 5 ⇒ 27 + 5 = 32
(21, 13, 39) :- (21 + 13) + 5 ⇒ 34 + 5 = 39
Similarly,
(19, 12, 36) :- (19 + 12) + 5 ⇒ 31 + 5 = 36

Sol.34.(b)

Similarly, S   U   O   Q

Sol.35.(c) Logic : (2nd num - 1st num) = 9
(27 : 36) → 36 - 27 = 9
(69 : 78) → 78 - 69 = 9
Similarly,
(53 : ?) → ? - 53 = 9 ⇒ ? = 53 + 9 = 62

Sol.36.(c)
Logic : (2nd num × 2) + 4 = 1st num
28 : 12 →(12 × 2) + 4 ⇒ 24 + 4 = 28
42 : 19 →(19 × 2) + 4 ⇒ 38 + 4 = 42
Similarly,
52 : ? →(24 × 2) + 4 ⇒ 48 + 4 = 52

Sol.37.(b) Logic :- (1st number × 2) - 1 = 2nd number
(7, 13) :- (7 × 2) - 1 = 13
(18, 35) :- (18 × 2) - 1 = 35
Similarly, (22, 43) :- (22 × 2) - 1 = 43

Sol.38.(c) As cricket is played on the pitch similarly boxing occur in the ring.

Sol.39.(a)
Logic :- (2nd number - 1st number) = 37
(53, 90) :- (90 - 53) = 37
(79, 116) :- (116 - 79) = 37
Similarly, (47, 84) :- (84 - 47) = 37

Sol.40.(a) As Correspond means to engage in an exchange of letters similarly Barter is the exchange of goods or services for other goods or services without using money

Sol.41.(d)
Logic : (1st num × 3) + 1 = 2nd num
2, 7 → (2 × 3) + 1 ⇒ 6 + 1 = 7
5, 16→ (5 × 3) + 1 ⇒ 15 + 1 = 16
Similarly,
15, 46 → (15 × 3) + 1 ⇒ 45 + 1 = 46

Sol.42.(a) Logic: (2nd num - 1st num) = 13
16 : 29 →29 -16 = 13
85 : 98 →98 - 85 = 13
Similarly,
53 : ? → x - 53 = 13 ⇒ x = 53 + 13 = 66

Sol.43.(b) Logic :- (1st number × 3) + 1 = 2nd number
(17, 52) :- (17 × 3) + 1 = 52
(42 , 127) :- (42 × 3) + 1 = 127
Similarly, (29, ?) :- (29 × 3) + 1 = 88

Sol.44.(c) Logic :- (1st number + 2nd number) × 5 = 3rd number
(5, 11, 80) :- (5 + 11) × 5 ⇒ (16 × 5) = 80
(6 , 12, 90) :- (6 + 12) × 5 ⇒ (18 × 5) = 90
Similarly,
(7, 17, 120) :- (7 + 17) × 5 ⇒ (24 × 5)= 120

Sol.45.(b) Just as clothes are cut with scissors, a beard is shaved with a razor.

Sol.46.(b) As a legend is a list of symbols that appear on the map similarly a glossary is a collection of words

pertaining to a specific topic.

Sol.47.(b)
Logic : (1st number)^2 × 2 = 2nd number
8, 128 → 8^2 × 2 ⇒ 64 × 2 = 128
9, 162 → 9^2 × 2 ⇒ 81 × 2 = 162
Similarly,
14, 392 → 14^2 × 2 ⇒ 196 × 2 = 392

Sol.48.(d)
Logic : (1st num × 3) - 7 = 2nd num
16 : 41 → (16 × 3) - 7 ⇒ 48 - 7 = 41
11 : 26 → (11 × 3) - 7 ⇒ 33 - 7 = 26
Similarly,
12 : 29 → (12 × 3) - 7 ⇒ 36 - 7 = 29

Sol.49.(b)
Logic :- (1st number)^2 - 1 = 2nd number
(5, 24) :- (5)^2 - 1 = 24
(9, 80) :- (9)^2 - 1 = 80
Similarly, (14, ?) :- (14)^2 - 1 = 195

Sol.50.(d) Logic :- (1st number × 2nd number) × 2 = 3rd number
(2, 8, 32) :- (2 × 8) × 2 ⇒ (16) × 2 = 32
(5, 7, 70) :- (5 × 7) × 2 ⇒ (35) × 2 = 70
Similarly,
(4, 12, 96) :- (4 × 12) × 2 ⇒(48) × 2 = 96

Sol.51.(d)

E H 11   J V 15
-2 | -2 | +5   -2 | -2 | +5
C F 16,   H T 20
        F N 13
        -2 | -2 | +5
Similarly, D L 18

Sol.52.(b)
Logic : (1st num × 9) = 2nd num
22 : 198 → 22 × 9 = 198
41 : 369 → 41 × 9 = 369
Similarly, 54 : ? → 54 × 9 = 486

Sol.53.(b) As Bacteria are the major microbes that help in the decomposition process similarly Yeast is the major microbes that help in the fermentation process.

Sol.54.(a)
Logic : (1st num)^2 + 2 = 2nd num
11 : 123 →11^2 + 2 ⇒ 121 + 2 = 123
20 : 402 →20^2 + 2 ⇒ 400 + 2 = 402
Similarly,
13 : ? →13^2 + 2 ⇒ 169 + 2 = 171

Sol.55.(d)
Logic :- (1st number × 3) = 2nd number
(18, 54) :- (18 ×3) = 54
(21, 63) :- (21 × 3) = 63
Similarly, (72, 216) :- (72 × 3) = 216

Sol.56.(c) Logic :- (1st number + 3rd number) ÷ 2 = (2nd number)

(25, 49, 73) :- (25 + 73)÷ 2
⇒ (98) ÷ 2 = 49
(34, 23, 12) :- (34 + 12)÷ 2
⇒ (46) ÷ 2 = 23
Similarly, (18, 22, 26) :- (18 + 26) ÷ 2
⇒ (44) ÷ 2 = 22

Sol.57.(b)

M E O P   L T D G
-2 -2 -2 -2   -2 -2 -2 -2
K C M N   J R B E
        U N T F
        -2 | -2 | -2 | -2
Similarly, S L R D

Sol.58.(c)
Logic : (1st number)^2 + 1 = 2nd number
2 : 5 → 2^2 + 1 ⇒ 4 + 1 = 5
6 : 37 → 6^2 + 1 ⇒ 36 + 1 = 37
Similarly, 9 : ? → 9^2 + 1 ⇒ 81 + 1 = 82

Sol.59.(d)

P D 17   H K 23
+4 +4 Next prime no.   +4 +4 Next prime no.
T H 19   L O 29
        F J 11
        +4 +4 Next prime no.
Similarly, J N 13

Sol.60.(b) Logic : (2nd number - 1st number) = 3rd number
(32, 99, 67) → 99 - 32 = 67
(22, 77,55) →77 - 22 = 55
Similarly, (23, 87, 64) → 87 - 23 = 64

Sol.61.(b)
Logic : (1st number - 2nd number) = 9
(78, 69) : (78 - 69) = 9
(57, 48) : (57 - 48) = 9
Similarly, (94, 85) : (94 - 85) = 9

Sol.62.(a)
Logic : (1st number × 4) - 4 = 2nd number
12 : 44 ⇒ (12 × 4) - 4 ⇒ 48 - 4 = 44
8 : 28 ⇒ (8 × 4) - 4 ⇒ 32 - 4 = 28
Similarly,
9 : 32 ⇒ (9 × 4) - 4 ⇒ 36 - 4 = 32

Sol.63.(d)

D T G B   V R C K
+2 +2 +2 +2   +2 +2 +2 +2
F V I D   X T E M
        J A H M
        +2 +2 +2 +2
Similarly, L C J O

Sol.64.(a)
Logic : (1st num)^2 - 5 = 2nd num
(8 : 59) →(8)^2 - 5 ⇒ 64 - 5 = 59
(9 : 76) →(9)^2 - 5 ⇒ 81 - 5 = 76
Similarly,
(25 : ?) →(25)^2 - 5 ⇒ 625 - 5 = 620

Sol.65.(b)

T D W P   F J M H
-2 -2 -2 -2   -2 -2 -2 -2
R B U N   D H K F
        S E N P
        -2 -2 -2 -2
Similarly, Q C L N

Sol.66.(b)
Logic :- (1st num) × 11 = 2nd num
(8, 88) → 8 × 11 = 88
(11, 121) →11 × 11 = 121
Similarly, (15, ?) →15 × 11 = 165

Sol.67.(c) As lava emits from volcanoes similarly steam emits from geysers.

Sol.68.(a)
Logic :- (1st number)^2 - 3 = 2nd number
(10, 97) :- (10)^2 - 3 = 97
(12, 141) :- (12)^2 - 3 = 141
Similarly, (14, ?) :- (14)^2 - 3 = 193

Sol.69.(b) Logic :- (1st number × 5) - 1 = 2nd number
(12, 59) :- (12 × 5) - 1 = 59
(17, 84) :- (17 × 5) -1 = 84
Similarly, (19, 94) :- (19 × 5) - 1 = 94

Sol.70.(a) As the feminine gender of Horse is Mare, similarly the feminine gender of Fox is Vixen.

Sol.71.(c) Logic : (1st number × 4) - 2 = 2nd number
(4 : 14) → (4 × 4) - 2 ⇒ 16 - 2 = 14
(7 : 26) → (7 × 4) - 2 ⇒ 28 - 2 = 26
Similarly,
(9 : ?) → (9 × 4) - 2 ⇒ 36 - 2 = 34

Sol.72.(b)
Logic : (1st number)^3 - 1 = 2nd number
(2 : 7) →(2)^3 - 1 ⇒ 8 - 1 = 7
(4 : 63) →(4)^3 - 1 ⇒ 64 - 1 = 63
Similarly, (9 : ?) →(9)^3 - 1 ⇒ 729 - 1 = 728

Sol.73.(a)

R N 12   E J 17
-2 | -2 | +4   -2 | -2 | +4
P L 16   C H 21
        F L 15
        -2 | -2 | +4
Similarly, D J 19

Sol.74.(d) Logic :- (First number - second number) = 111
(428, 317) → (428 - 317) = 111
(285, 174) → (285 - 174) = 111
Similarly,
(597, 486) → (597- 486) = 111

Sol.75.(a) Logic :- (1st number + 3rd number) × 2 = 2nd number
(14, 42, 7)→ (14 + 7) × 2 ⇒ (21) × 2 = 42
(12, 34, 5) → (12 + 5) × 2 ⇒ (17) × 2 = 34
Similarly,
(43, 144, 29) :-
→ (43 + 29) × 2 ⇒ (72) × 2 = 144

Sol.76.(d) Logic : (1st number)^2 + 1 = 2nd number
(7 : 50) →(7)^2 + 1 ⇒ 49 + 1 = 50
(15 : 226) →(15)^2 + 1 ⇒ 225 + 1 = 226
Similarly,
(17 : 290) →(17)^2 + 1 ⇒ 289 + 1 = 290

Sol.77.(c)

```
O  E  13        F  L  16
-2 -2 +4        -2 -2 +4
↓  ↓  ↓         ↓  ↓  ↓
M  C  17        D  J  20
              R  D  15
              -2 -2 +4
              ↓  ↓  ↓
Similarly,    P  B  19
```

Sol.78.(a)
Logic : (1st number)^2 - 2 = 2nd number
(3 : 7) →(3)^2 - 2 ⇒ 9 - 2 = 7
(5 : 23) →(5)^2 - 2 ⇒ 25 - 2 = 23
Similarly, (6 : 34) →(6)^2 - 2 ⇒ 36 - 2 = 34

Sol.79.(a) Logic :- (1st number × 4) + 1 = 2nd number
(14, 57) :- (14 × 4) + 1 ⇒ 56 +1 = 57
(22, 89) :- (22 × 4) + 1 ⇒ 88 +1 = 89
Similarly,
(52, ?) :- (52 × 4) + 1 ⇒ 208 + 1 = 209

Sol.80.(c)

```
B  N  F  T      J  O  E  A
+4 +4 +4 +4     +4 +4 +4 +4
↓  ↓  ↓  ↓      ↓  ↓  ↓  ↓
F  R  J  X,     N  S  I  E
        H  E  R  K
        +4 +4 +4 +4
        ↓  ↓  ↓  ↓
Similarly,  L  I  V  O
```

Sol.81.(a) Logic :- (1st number × 3) + 5 = 2nd number
(5, 20) :- (5 × 3) + 5 = 20
(7, 26) :- (7 × 3) +5 = 26
Similarly, (2, ?) :- (2 × 3) + 5 = 11

Mirror / Water Image

BASICS OF MIRROR IMAGE-
The image that is formed in the mirror of an object is called the mirror image of the object. In this, the image of the object which is near the mirror is formed first in the mirror and the image which is away from the mirror is formed later in the mirror.
i.e -

and
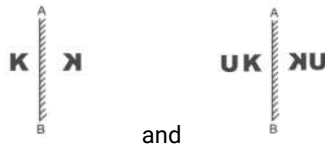
English Alphabet in mirror image:

Letters	Mirror Image	Letters	Mirror Image	Letters	Mirror Image
A	A	J	L	S	Ƨ
B	প	K	⋊	T	T
C	Ɔ	L	⅃	U	U
D	ᗡ	M	M	V	V
E	Ǝ	N	И	W	W
F	ꟻ	O	O	X	X
G	Ꭾ	P	ꟼ	Y	Y
H	H	Q	Ọ	Z	Ƹ
I	I	R	Я		

Numbers in mirror image:

Numbers	Mirror Image	Numbers	Mirror Image	Numbers	Mirror Image
1	ƚ	4	ᔈ	7	Γ
2	Ƨ	5	ꙅ	8	8
3	Ɛ	6	∂	9	⁄

Now, see the above table carefully and solve the questions:

BASICS OF WATER IMAGE-
A water image is the reflection of an object in water, and it is the inverted image of an object turned over on its side. Using a horizontal mirror at the bottom of a figure's water image creates a mirror image of that figure.

English Alphabet in water image:
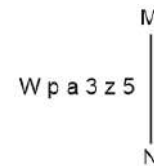
ABCDEFGHIJKLM
∀BCDEⱯGHIⱢKⱢW

NOPQRSTUVWXYZ
ИOԀԚᴚꙄꓕɄᴧMXʎZ

Water Images of Numbers:

123456789
ƖᏕ3ᔈ20Ɫ89

Direction:- [Q .1. - Q .27.] Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

Questions :-

Q.1.

```
            M
            |
Wpa3z5     |
            |
            N
```
SSC MTS 01/09/2023 (1st Shift)
(a) 5z3ɒפW   (b) z53ɒפM
(c) Ɔz3ɒפM   (d) Wɒ3z5

Q.2.

```
            M
            |
Gk27hA     |
            |
            N
```
SSC MTS 01/09/2023 (2nd Shift)
(a) AʜٽƧ⋊פ   (b) ∀ʜٽƧ⋊פ
(c) Aʜ27⋊פ   (d) A⋔ٽƧ⋊פ

Q.3.

```
            M
            |
Eph7a2     |
            |
            N
```
SSC MTS 01/09/2023 (3rd Shift)
(a) a2ٽʜꟼƎ   (b) Ƨɒٽʜꟼꓯ
(c) ƧɒٽʜꟼƎ   (d) ƸɒᘞʜꟼⱯ

Q.4.

```
            M
            |
yR46hKa    |
            |
            N
```
SSC MTS 04/09/2023 (1st Shift)
(a) ꙅK⋔∂ᔈᴚƳ   (b) aX⋔∂ꓯᴚⱱ
(c) ꙅXʜ∂ᔈᴚɒ   (d) ɒⱭʜ∂ᔈᴚⱱ

Q.5.

```
            M
            |
RhG9na     |
            |
            N
```
SSC MTS 04/09/2023 (2nd Shift)
(a) aᴜℓƏʜᴚ   (b) ᴚʜℓᴜ∂⋔ᴚ
(c) aᴜℓGʜᴚ   (d) ꙅⵔℓƏʜᴚ

Q.6.

```
            M
            |
Mda37gf    |
            |
            N
```
SSC MTS 04/09/2023 (3rd Shift)
(a) ⱦℓٽƐ ɒ b M   (b) ℊꞙٽƐ ɒ פ M
(c) ⱦℓᘞƐꙺbW   (d) ⱦℓᴦƐ ɒ bM

Q.7.

M

Lew273a

N
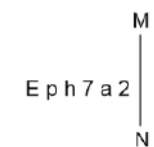
SSC MTS 05/09/2023 (1st Shift)

(a) Lew273a (b) Lew273a
(c) aе273weℓ (d) Lew273a

Q.8.

M

7dBwPe3

N
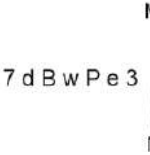
SSC MTS 05/09/2023 (2nd Shift)

(a) 7dBwPe3 (b) 7dBwPe3
(c) 7dBwPe3 (d) 7dBwPe3

Q.9.

M

Fd3z9ma

N

SSC MTS 05/09/2023 (3rd Shift)

(a) Fd3z9ma (b) ma9z3dF
(c) Fd3z9ma (d) Fd3z9ma

Q.10.

M

Fe3P7g

N
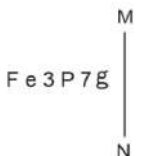
SSC MTS 06/09/2023 (1st Shift)

(a) Fe3P7g (b) Fe3P7g
(c) Fe3P7g (d) Fe3P7g

Q.11.

M

Gr37m2s

N

SSC MTS 06/09/2023 (2nd Shift)

(a) Gr37m2s (b) Gr37m2s
(c) Gr37m2s (d) Gr37m2s
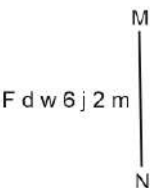
Q.12.

M

Fdw6j2m

N

Q.13.

SSC MTS 06/09/2023 (3rd Shift)

(a) Fdw6j2m (b) 2mj6wbF
(c) mSj6wbF (d) Fdw6j2m

M

Ybz4km

N

SSC MTS 08/09/2023 (1st Shift)

(a) mk4zqY (b) Yqz4km
(c) wk4zbY (d) mk4zqY

Q.14.

M

QaMr57p

N

SSC MTS 08/09/2023 (2nd Shift)

(a) QaMr57p (b) QaMr57p
(c) QaMr57p (d) QaMr57p

Q.15.
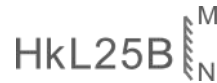
HkL25B ⟩M N

SSC MTS 08/09/2023 (3rd Shift)

(a) HkL25B (b) HKS15B
(c) HkL25B (d) 5BL25B

Q.16.

Kd27z4r ⟩M N

SSC MTS 11/09/2023 (1st Shift)

(a) Kd27z4r (b) Kb27z4r
(c) Kd27z4bK (d) rd27z4r

Q.17.

Md5pa2 ⟩M N

SSC MTS 11/09/2023 (2nd Shift)

(a) a25pbM (b) Md5pa2
(c) Sad5bM (d) Md5pa2

Q.18.

Ye5g7dp ⟩M N

SSC MTS 11/09/2023 (3rd Shift)

(a) Ye5g7dp (b) qb7g5eY
(c) qb7g5eY (d) dbg7z5Y

Q.19.

Ld26Am ⟩M N

SSC MTS 12/09/2023 (1st Shift)

(a) Ld26Am (b) Jd26Am
(c) Lb6Am (d) Ld26Am

Q.20.

Lf5N2q2 ⟩M N

SSC MTS 12/09/2023 (2nd Shift)

(a) Lf5N2q2 (b) q2SN2fL
(c) SpSN2fL (d) Sp2N5q2
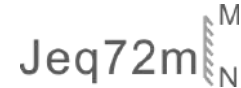
Q.21.

Jeq72m ⟩M N

SSC MTS 12/09/2023 (3rd Shift)

(a) wS7bel (b) Jed72m
(c) mS7pel (d) m72pel

Q.22.

KtP47F ⟩M N

SSC MTS 13/09/2023 (1st Shift)

(a) Kd74zF (b) Fd747F
(c) KtP47F (d) KtP47F

Q.23.

Trw2g5s ⟩M N

SSC MTS 13/09/2023 (2nd Shift)

(a) Trw2g5s (b) Trw2g5s
(c) Trw2g5s (d) Trw2g5s

Q.24.

M

Tdq62n

N

SSC MTS 13/09/2023 (3rd Shift)

(a) Tdq62n (b) Tdq62n
(c) Tdq62n (d) Tdq62n

Q.25.

M

Kg4b2a

N
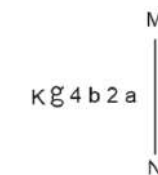
SSC MTS 14/09/2023 (1st Shift)

(a) Kg4b2a (b) Kg4b2a

(c) Kᙠ4�813 (d) 8Sd4ᖠ8

Q.26.

Rkh29a⌐ᴹ⌐ᴺ

SSC MTS 14/09/2023 (2nd Shift)
(a) ᙠ9Shᖘ8 (b) ᙠ⍴h283
(c) 9aᙠRh3ᖘ (d) ᙠᖘh283

Q.27.

⌐ᴹ
R p 7 F 2 b a |
⌐ᴺ

SSC MTS 14/09/2023 (3rd Shift)
(a) a d b 2 F 7 p R (b) R p 7 F 2 b a
(c) R b F 7 F 2 b a (d) a d b 7 F 2 p R

Answer Key :-

1.(d)	2.(a)	3.(c)	4.(c)
5.(d)	6.(d)	7.(b)	8.(c)
9.(d)	10.(c)	11.(c)	12.(c)
13.(d)	14.(d)	15.(b)	16.(b)
17.(b)	18.(c)	19.(a)	20.(c)
21.(b)	22.(c)	23.(c)	24.(b)
25.(d)	26.(b)	27.(b)	

Solutions :-

Sol.1.(d) Wpa325

Sol.2.(a) GK27hA

Sol.3.(c) EPh7a2

Sol.4.(c) yR46hKa

Sol.5.(d) RhG9na

Sol.6.(d) Mda37gt

Sol.7.(b) Lew273a

Sol.8.(c) 7dBwPe3

Sol.9.(d) Fd329ma

Sol.10.(c) Fe3P7g

Sol.11.(c) Gr37m2s

Sol.12.(c) mSi9wb2

Sol.13.(d) mYb24kM

Sol.14.(d) QaM157p

Sol.15.(b) HkL25B

Sol.16.(b) Kd27S4r

Sol.17.(b) MdSpa2

Sol.18.(c) Yeqg7dp

Sol.19.(a) mA9SbL

Sol.20.(c) Lt5N2q2

Sol.21.(b) meq7m2L

Sol.22.(c) KtP47F

Sol.23.(c) Trw2g5s

Sol.24.(b) Tdq62n

Sol.25.(d) Kg4b2a

Sol.26.(b) Rkh29a

Sol.27.(b) Rp7F2ba

Word Arrangement

Introduction of WORD ARRANGEMENT -
In this type of questions, certain inter-related words and numbers are given , followed by various sequences of the numbers denoting them, as alternatives. The student is required to arrange these words in logical sequences based on a common property and then choose the correctly graded sequences from the given alternatives.

Example - 1
Arrange the following words in a logical and meaningful order.
1. Family   2. Community   3. Member
4. Locality   5. Country

Solution :- Clearly, a **member** is part of a **family**, which in turn is a part of **community**. The community lives in a **locality** which lies within a **Country**.
Thus, the correct order is 3,1,2,4,5

Example - 2
Arrange the following words in a logical and meaningful order.
1. Phrase   2. Letter
3. Word   4. Sentence

Solution :- Clearly, A group of **letters** makes a **word**. A group of **words** make a **phrase**. A group of **phrases** makes a **sentence**.
Thus, the correct order is 2 ,3, 1, 4

Example - 3
Arrange the given words according to dictionary order.
1. Deceive   2. Deceptive   3. Decapitate
4. Decency   5. Decamp

Solution :- Correct order is 5 - 3 - 1 - 4 - 2
Decamp → Decapitate → Deceive → Decency → Deceptive.

Questions :-

Q.1. The position of how many letters will remain unchanged if each of the letter in the word 'FINGER' is arranged in alphabetical order ?
SSC MTS 01/09/2023 (1st Shift)
(a) Two (b) One (c) Three (d) Four

Q.2. The position of how many letters will remain unchanged if each of the letter in the word 'BACHELOR' is arranged in alphabetical order?
SSC MTS 04/09/2023 (1st Shift)
(a) One (b) Five (c) Four (d) Two

Q.3. The position of how many letters

will remain unchanged if each of the letter in the word 'CATEGORY' is arranged in alphabetical order?
SSC MTS 04/09/2023 (2nd Shift)
(a) Three (b) Two (c) None (d) One

Q.4. The position of how many letters will remain unchanged if each of the letter in the word 'TIMES' is arranged in alphabetical order?
SSC MTS 05/09/2023 (3rd Shift)
(a) Two (b) None (c) Four (d) One

Q.5. The position of how many letters will remain unchanged if each of the letter in the word 'GRAPES' is arranged in alphabetical order?
SSC MTS 06/09/2023 (2nd Shift)
(a) One (b) None (c) Four (d) Two

Q.6. The position of how many letters will remain unchanged if each of the letter in the word 'POCKET' is arranged in alphabetical order?
SSC MTS 08/09/2023 (1st Shift)
(a) Two (b) Five (c) Three (d) One

Q.7. The position of how many letters will remain unchanged if each of the letter in the word 'DURATION' is arranged in alphabetical order ?
SSC MTS 08/09/2023 (2nd Shift)
(a) Four (b) None (c) Five (d) One

Q.8. The position of how many letters will remain unchanged if each of the letter in the word 'ABSOLUTE' is arranged in alphabetical order ?
SSC MTS 08/09/2023 (3rd Shift)
(a) Five (b) Two (c) Three (d) Four

Q.9. The position of how many letters will remain unchanged if each of the letter in the word "CHILDREN" is arranged in alphabetical order ?
SSC MTS 11/09/2023 (1st Shift)
(a) One (b) Four (c) Three (d) Two

Q.10. The position of how many letters will remain unchanged if each of the letters in the word COMPUTER is arranged in alphabetical order ?
SSC MTS 12/09/2023 (3rd Shift)
(a) two (b) none (c) one (d) three

Answer Key :-

1.(b)	2.(c)	3.(d)	4.(a)
5.(d)	6.(d)	7.(b)	8.(c)
9.(a)	10.(a)		

Solutions :-
Sol.1.(b) The given word : FINGER

The new word formed after arranging the letters in alphabetical order : EFGINR
Hence the position of one letter (R) will remain unchanged.

Sol.2.(c) The given word : BACHELOR
The new word formed after arranging the letters in alphabetical order : ABCEHLOR
Hence the position of **four** letters (C , L , O and R) will remain unchanged.

Sol.3.(d) The given word : CATEGORY
The new word formed after arranging the letters in alphabetical order : ACEGORTY
Hence the position of One letter 'Y' will remain unchanged.

Sol.4.(a) Given :- TIMES
After arranging the letters alphabetically we get : E**IM**ST
The position of two letters will remain unchanged (I , M)

Sol.5.(d) Given :- GRAPES
After arranging the letters in alphabetical order we get,
AEG**PRS**
The position of two letters remains unchanged.

Sol.6.(d) Given :- POCKET
After arranging the letters alphabetically we get,
CEKOP**T**
The position of only one letter remains unchanged.

Sol.7.(b) The given word : DURATION
The new word formed after arranging the letters in alphabetical order : ADINORTU
Hence the position of none of the letters are the same.

Sol.8.(c) Given :- ABSOLUTE
After arranging the letters in alphabetically we get,
ABELOS**T**U
The position of three letters remains unchanged**.**

Sol.9.(a) The given word : CHILDREN
The new word formed after arranging the letters in alphabetical order : CDEHILNR
Hence the position of one letter (C) will remain unchanged.

Sol.10.(a) Given :- COMPUTER
After arranging the letters alphabetically we get
**C**E**M**OPRTU
The position of two letters remains unchanged.

Sitting Arrangement

Sitting arrangement - To solve this, some conditions are given based on which the questions have to be solved. In this, questions are asked mainly related to seating of people or arrangement of items. To solve such questions, it is necessary to have knowledge of the left and right of a person and an item. If many people are sitting on a circular path and all of them are sitting facing the center, then the sequence of rotation to their left is clockwise and the order of rotation to the right is anti-clockwise.
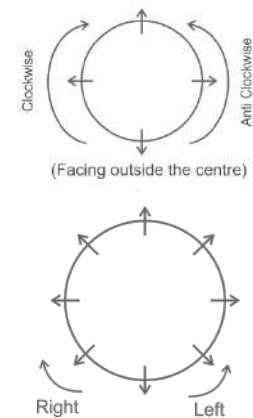
Type - 1
Circular Arrangement :-
(i) When facing toward Centre →
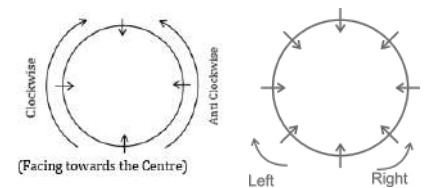
If they are facing towards Inside then their left hand will be in the clockwise direction and the right-hand side will be in the anticlockwise direction..

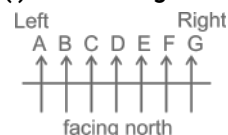**(ii) When facing toward Outside →**

If they are facing outside from the center then their left hand will be in the anticlockwise direction and the right-hand side will be in the clockwise direction.
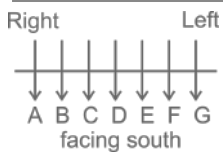
Type - 2
Linear Arrangement :-
(i) When facing toward North →

In the case of facing north, simply the left hand becomes the left side and the right hand becomes the right side.
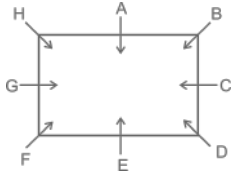
(ii) When facing toward South →

In case of **facing south**, then the **left hand** becomes the **right side** and the **right hand** becomes the **left side.**
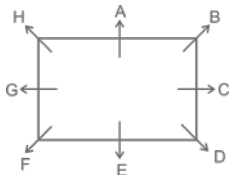
Type - 3
Rectangle / Square Arrangement :-
(i) When facing toward Inside →

In case of all people facing **toward the center** then **A** is the **Left** from **H** and **Right** from **B** and similarly **E** is the **left** from **D** and **right** from the **F** .

(ii) When facing toward Outside →

In the case of all people facing **outside from center** then **A** is to the **righ**t from **H** and **left** from **B** and similarly **E** is to the **right** from **D** and **left** from **F** .

Questions :-

Q.1. Six people, P, Q, R, S, T and U are sitting in a straight line, facing north. U sits fourth to the right of R. R is not sitting at the extreme end of the line. T is the immediate neighbour of U and S. Q sits third to the left of S . Who is sitting immediately to the right of R ?
SSC MTS 01/09/2023 (1st Shift)
(a) S   (b) T   (c) Q   (d) P

Q.2. F, G, H, I, J, K, L and M are sitting around a square table facing the centre. Some of them are sitting at the corners of the table while some are sitting at the exact centre of the sides. G, I, H and J are not sitting in any of the corners. G is sitting to the immediate left of K and immediate right of L. I is sitting to the immediate right of K. F is sitting to the immediate right of I and immediate left of H. J is sitting to the immediate right of M and immediate left of L. Who is sitting to the immediate left of M?
SSC MTS 01/09/2023 (2nd Shift)
(a) I   (b) H   (c) J   (d) G

Q.3. Seven people, S, T, U, V, W, X and Y are sitting in a straight line, facing north. Only two people sit to the right of W. Only three people sit between S and W. U is the immediate neighbour of T and X. X is not the immediate neighbour of W. V sits third to the right of T.
Who is sitting between W and V ?
SSC MTS 01/09/2023 (3rd Shift)
(a) T   (b) Y   (c) U   (d) X

Q.4. Six people, Karan, Dilip, Rahul, Prabhat, Alok and Sandeep are sitting in a straight line, facing north. Karan sits 2nd from the left end. Dilip sits 3rd to the right of Karan. Rahul sits 2nd to the left of Dilip. Prabhat sits 3rd to the right of Rahul. Sandeep sits 2nd to the left of Prabhat. Who sits 2nd to the right of Karan ?
SSC MTS 04/09/2023 (1st Shift)
(a) Rahul   (b) Sandeep
(c) Prabhat   (d) Alok

Q.5. J, K, P, Q, R and M are sitting around a circular table facing the centre. J is sitting to the immediate left of M. R is sitting 2nd to the left of J. K is sitting 3rd to the right of J. P sits to the immediate right of R. Who sits 2nd to the left of K?
SSC MTS 04/09/2023 (2nd Shift)
(a) R   (b) Q   (c) M   (d) P

Q.6. Q, R, S, T, U, V, W and X are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. X sits second to the left of W. W sits in one of the corners. V is the immediate neighbour of T and U. R sits third to the left of T. U does not sit in one of the corners. U is neither the neighbour of X nor W. Q is not the neighbour of X.
How many people sit between S and V, when counted from the left of S ?
SSC MTS 04/09/2023 (3rd Shift)
(a) One (b) Three (c) Four (d) Two

Q.7. N, O, P, Q, R, S, T and U are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. N sits third to the left of U. U sits in any of the corners. O sits third to the right of T. T sits in one of the corners. Q is the immediate neighbour of P and U. P is not the neighbour of N. R is not T's neighbour.
How many people sit between P and R. when counted from the right of P ?
SSC MTS 05/09/2023 (1st Shift)
(a) Two (b) Four (c) One (d) Three

Q.8. Manu, Ram, Gaurav, Shivam, Umesh and Veer are sitting around a circular table facing the centre. Manu is sitting 2nd to the left of Ram. Gaurav is sitting 3rd to the right of Ram. Shivam is sitting 3rd to the left of Manu. Umesh is sitting 2nd to the left of Shivam.
Who is sitting 2nd to the left of Manu ?
SSC MTS 05/09/2023 (2nd Shift)
(a) Gaurav (b) Ram (c) Veer (d) Umesh

Q.9. Six people, C, D, E, F, G and H are sitting in a straight line, facing north. Only three people sit to the right of G. Only Two people sit between G and E. C sits to the immediate right of F and to the immediate left of G. H is not the immediate neighbor of E.
Who are sitting between G and E?
SSC MTS 05/09/2023 (3rd Shift)
(a) F and C   (b) C and D
(c) H and E   (d) H and D

Q.10. E, F, G, H, I and J are sitting around a circular table facing the center. J sits immediate left of I. G sits second to the right of I. E sits second to the right of G. H sits second to the left of F. Who sits third to the right of E ?
SSC MTS 06/09/2023 (1st Shift)
(a) F   (b) H   (c) I   (d) J

Q.11. Seven people, C, F, D, K, O, L, and V are sitting in a straight line, facing south. V sits second to the right of F. Only three people sit to the right of O. K is an immediate neighbour of O and D. Only three people sit between L and V. F is not an immediate neighbour of L.
Who sits to the extreme left of the line?
SSC MTS 06/09/2023 (2nd Shift)
(a) C   (b) F   (c) V   (d) D

Q.12. R, S, T, U, V, W, X and Y are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. R is the immediate neighbour of X and Y. X sits in any of the corners. W sits third to the right of T. T does not sit in any of the corners. U is the immediate neighbour of Y and W.V is not the neighbour of W.
How many people sit between W and T, when counted from the right of W ?
SSC MTS 06/09/2023 (3rd Shift)
(a) Four (b) Five (c) Two (d) Three

Q.13. Seven people, U, M, K, G, B, R and D are sitting in a straight line, facing south. Only two people sit to the left of B. M sits third to the right of G. U is the immediate neighbour of M and B. D sits to the immediate left of K. Total how many people sit between D and G ?
SSC MTS 08/09/2023 (1st Shift)
(a) Two (b) Three (c) One (d) Four

Q.14. Abeer, Bela, Deepa, Farheen, Heera

and Girish are sitting around a circular table facing the centre. Girish sits 2nd to the right of Deepa. Farheen sits to the immediate left of Girish. Bela sits 2nd to the right of Farheen. Heera is an immediate neighbour of Deepa.

Who sits to the immediate right of Bela?
SSC MTS 08/09/2023 (2nd Shift)
(a) Girish (b) Deepa (c) Heera (d) Abeer

Q.15. Seven people, B, N, M, O, P, Y and S are sitting in a straight line, facing south. Only two people sit between P and S. N is the immediate neighbour of S and M. Only one person sits to the right of P. N sits second to the left of O. Y is an immediate neighbour of P.
Total how many people sit between P and M ?
SSC MTS 08/09/2023 (3rd Shift)
(a) Two (b) Four (c) Three (d) One

Q.16. Six people, Deepak. Gauri, Babita. Ira, Farheen and Hema are sitting in a straight line, facing north Deepak sits 2nd from the left end. Gauri sits 2nd to the right of Deepak. Ira sits 2nd to the right of Gauri. Farheen sits 3rd to the left of Ira. Babita sits 2nd to the left of Farheen.
Who sits 3rd to the right of Deepak?
SSC MTS 11/09/2023 (1st Shift)
(a) Farheen (b) Hema (c) Babita (d) Ira

Q.17. Shagun, Pragya, Yati, Lovey, Savi and Frooti are sitting around a circular table facing the centre. Shagun sits 2nd to the left of Pragya. Yati sits 2nd to the left of Shagun. Lovey sits 3rd to the left of Yati .Savi sits 2nd to the left of Lovey.
Who sits 3rd to the left of Shagun?
SSC MTS 11/09/2023 (2nd Shift)
(a) Pragya (b) Lovey (c) Savi (d) Frooti

Q.18. Seven people, V, F, D, S, R, C, and P are sitting in a straight line, facing south. Only two people sit between V and P. Only two people sit to the right of V. D sits third to the left of S. P is an immediate neighbour of D and F. C is an immediate neighbour of S.
Total how many people sit between S and P?
SSC MTS 11/09/2023 (3rd Shift)
(a) Four (b) One (c) Three (d) Two

Q.19. Six people, Vijay, Harsh, Golu, Satish, Karan and Awadhi are sitting in a straight line, facing north. Vijay sits 3rd from the right end. Harsh sits 3rd to the left of Vijay. Satish is an immediate neighbour of Harsh. Golu sits 3rd to the right of Satish. Awadhi is an immediate neighbour of Golu.

Who sits 2nd to the right of Vijay ?
SSC MTS 12/09/2023 (1st Shift)
(a) Golu (b) Awadhi (c) Karan (d) Satish

Q.20. Ranjan, Pari, Yash, Charu, Reetu and Gunjan are sitting around a circular table facing the centre. Ranjan sits 3rd to the left of Pari. Yash sits 2nd to the left of Ranjan. Charu sits 2nd to the right of Ranjan. Reetu is an immediate neighbour of Charu.
Who sits 2nd to the right of Pari?
SSC MTS 12/09/2023 (2nd Shift)
(a) Yash (b) Reetu (c) Gunjan (d) Charu

Q.21. A, B, C, D, E, F, G and H are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. H sits third to the left of B. H does not sit in any of the corners. C sits third to the right of F. C sits in one of the corners. H is the immediate neighbour of D and E. A is not the neighbour of B. E sits immediate next to A.
How many people sit between A and H, when counted from the left of A ?
SSC MTS 12/09/2023 (3rd Shift)
(a) Three (b) Six (c) Four (d) Five

Q.22. D, E, F, G, H, I, J and K are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. K sits third to the right of I. K sits at one of the corners. E sits second to the left of G. G sits at any of the corners. E is an immediate neighbour of I and D. F sits third to the right of J. H is the immediate neighbour of F and K.
How many people sit between I and F, when counted from the left of I ?
SSC MTS 13/09/2023 (1st Shift)
(a) Two (b) Four (c) One (d) Three

Q.23. K, L, M, N, O, P, Q and R are sitting around a square table facing the center of the table. Some of them are sitting at the corners while some are sitting at the exact center of the sides. R sits second to the right of Q . Q sits in one of the corners. M sits third to the left of N. M does not sit in any of the corners. O is the immediate neighbour of Q and R. K is not the neighbor of N. L sits third to the left of R.
How many people sit between K and Q, when counted from the right of K?
SSC MTS 13/09/2023 (2nd Shift)
(a) Two (b) One (c) Three (d) Four

Q.24. Seven people, W, D, J, S, H, G and Y are sitting in a straight line, facing south.

G sits second to the left of S. G is the immediate neighbour of D and H. Y sits third to the right of D. Only two people sit to the right of W. Who sits at the extreme right end of the line?
SSC MTS 13/09/2023 (3rd Shift)
(a) W (b) Y (c) J (d) G

Q.25. Kiran, Pihu, Siya, Leens, Reena and Jiya are sitting around a circular table facing the centre. Kiran sits 3rd to the right of pihu. Siya sits 2nd to the right of Kiran. Leena sits 3rd to the left of Siya, Reena is an immediate neighbour of Leena. Who sits to the immediate left of Jiya?
SSC MTS 14/09/2023 (1st Shift)
(a) Leena (b) Siya (c) Pihu (d) Kiran

Q.26. Six people, Kajal, Neetu, Lovey, Omar, Meenu and Jay are sitting in a straight line, facing north. Lovey sits 3rd from the left end. Neetu sits 2nd to the right of Lovey. Omar sits to the immediate right of Neetu. Meenu sits 2nd to the left of Omar. Kajal sits 2nd to the left of Meenu. Who sits to the immediate left of Lovey?
SSC MTS 14/09/2023 (2nd Shift)
(a) Kajal (b) Meenu (c) Omar (d) Jay

Q.27. Meena, Saroj, Goldy, Priti. Poonam and Baby are sitting around a circular table facing the centre. Meena sits to the immediate left of Saroj. Goldy sits 3rd to the right of Saroj. Priti sits 2nd to the left of Goldy. Poonam sits to the immediate right of Goldy.
Who sits 2nd to the left of Baby?
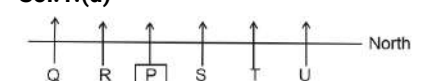SSC MTS 14/09/2023 (3rd Shift)
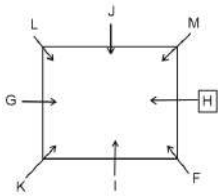(a) Saroj (b) Goldy (c) Priti (d) Poonam

Answer Key :-

1.(d)	2.(b)	3.(b)	4.(b)
5.(c)	6.(d)	7.(d)	8.(c)
9.(d)	10.(b)	11.(b)	12.(a)
13.(b)	14.(d)	15.(b)	16.(b)
17.(d)	18.(c)	19.(b)	20.(c)
21.(d)	22.(a)	23.(c)	24.(c)
25.(d)	26.(a)	27.(a)	

Solutions :-

Sol.1.(d)

Sol.2.(b)
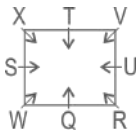
Sol.3.(b)
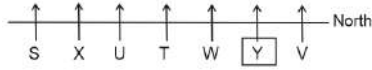
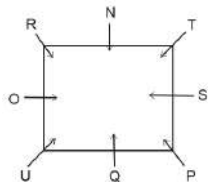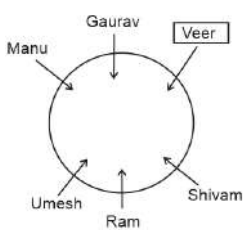**Sol.4.(b)**
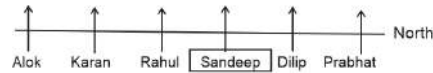
Sol.5.(c)
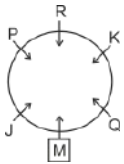
Sol.6.(d)

Two people sit between S and V when counted from the left of S.

Sol.7.(d)

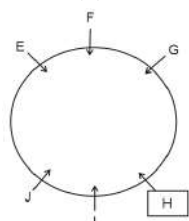Three people sit between P and R when counted from the right of P.

Sol.8.(c)
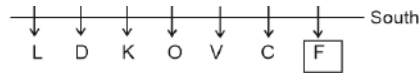
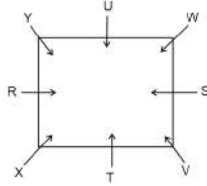

Sol.9.(d)

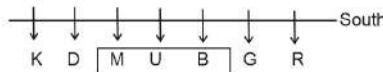H and D are sitting between G and E.
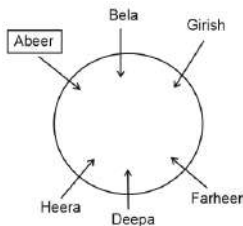
Sol.10.(b)

Sol.11.(b)

Sol.12.(a)

When counted from the right of W four people sit between W and T.

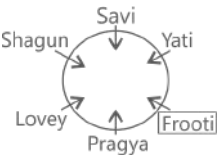**Sol.13.(b)**

Three people sit between D and G.

Sol.14.(d)

Sol.15.(b)

Four people sit between P and M

Sol.16.(b)

Babita Deepak Farheen Gauri Hema Ira North↑

Sol.17.(d)

Sol.18.(c)

C S V R D P F South ↓
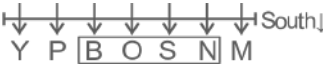
Three people sit between S and P.

Sol.19.(b)

Harsh Satish Karan Vijay Golu Awadhi North↑

Sol.20.(c)

Sol.21.(d)

Sol.22.(a)
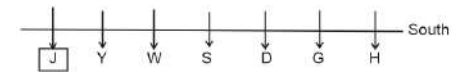

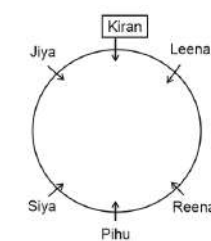When counted from the left of I, two people sit between I and F.

Sol.23.(c)
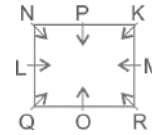
Three people sit between K and Q when counted from the right of K.

Sol.24.(c)

Sol.25.(d)

Sol.26.(a)

Jay Kajal Lovey Meenu Neetu Omar

Sol.27.(a)

At the top of the third column:

Five people sit between A and H when counted from left of A.