Coding-Decoding

———Reasoning with Mohit Kawatra

1. In a certain code language 'ROUBST' is coded as 61. How will 'FORTUNATE' be coded in that language?
एक निश्चित कूट भाषा में 'ROUBST' को 61 से कूटबद्ध किया जाता है। उस भाषा में 'FORTUNATE' को किस प्रकार कूटबद्ध किया जाएगा?
(a) 124 (b) 114
(c) 141 (d) 142

2. In a certain code language, 'LOOK' is coded as 2330, and 'BALL' is coded as 1413. How will 'HELP' be coded in that language?
एक निश्चित कूट भाषा में, 'LOOK' को 2330 लिखा जाता है, और 'BALL' को 1413 लिखा जाता है। उस भाषा में 'HELP' को कैसे लिखा जाएगा ?
(a) 2417 (b) 3461
(c) 2415 (d) 2420

3. In a certain code language, 'BOOK' is coded as 139, and 'PEN' is coded as 302. How will 'COPY' be coded in that language?
एक निश्चित कूट भाषा में 'BOOK' को 139 लिखा जाता है और 'PEN' को 302 लिखा जाता है। उस भाषा में 'COPY' कैसे लिखा जाएगा ?
(a) 165 (b) 279
(c) 2822 (d) 2547

4. In a certain code language, 'GOLF' is Written as 60, and 'START' is Written as 117. How will 'NEST' be written in that language?
एक निश्चित कूट भाषा में, 'GOLF' को 60 के रूप में लिखा जाता है, और 'START' को 117 के रूप में लिखा जाता है। उस भाषा में 'NEST' को कैसे लिखा जाएगा?
(a) 21 (b) 78
(c) 58 (d) 87

5. In a certain code language, 'HARVEST' is Written as '22-21-7-24-20-3-10'. How will 'FARMER' be coded in that language?
एक निश्चित कूट भाषा में, 'HARVEST' को '22-21-7-24-20-3-10' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'FARMER' को कैसे कूटबद्ध किया जाएगा?
(a) 20-7-14-21-3-8
(b) 19-7-15-20-3-7
(c) 19-7-15-19-3-8
(d) 20-7-15-20-3-8

6. In a code language, 'AUSTERE' is coded as '13102595'. How will 'SETTING' be coded in that language?
एक निश्चित कूट भाषा में, 'AUSTERE' को '13102595' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'SETTING' को कैसे कूटबद्ध किया जाएगा ?
(a) 11522867 (b) 10522948
(c) 10522957 (d) 11544957

7. In a certain code language, 'BREATHER' is coded as 29512859. How will 'AVIATION' be coded in that language?
एक निश्चित कूट भाषा में, 'BREATHER' को 29512859 के रूप में कूटबद्ध किया जाता है। उस भाषा में 'AVIATION' को कैसे कूटबद्ध किया जाएगा ?
(a) 12910965 (b) 12912954
(c) 14912965 (d) 14912956

8. In a certain code language, 'POUND' is coded as 106, and 'CLEAN' is coded as 41. How will 'MAKER' be coded in that language?
एक निश्चित कूट भाषा में, 'POUND' को 106 और 'CLEAN' को 41 के रूप में कूटबद्ध किया जाता है। उस भाषा में 'MAKER' को किस प्रकार कूटबद्ध किया जाएगा?
(a) 50 (b) 54
(c) 112 (d) 78

9. In a certain code language, 'FOX' is coded as 108 and 'SOUP' is coded as 148. How will 'UPSIDE' be coded as in that language?
एक निश्चित कूट भाषा में, 'FOX' को 108 और 'SOUP' को 148 के रूप में कूटबद्ध किया जाता है। उस भाषा में 'UPSIDE' को किस प्रकार कूटबद्ध किया जाएगा?
(a) 528 (b) 590
(c) 385 (d) 494

10. In a certain code language, 'ULTERIOR' is written as '33259969'. How will 'NAVIGATION' be written in that language ?
एक निश्चित कूट भाषा में, 'ULTERIOR' को '33259969' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'NAVIGATION' को कैसे कूटबद्ध किया जाएगा ?
(a) 1412297215
(b) 5149722965
(c) 1419712915
(d) 5149712965

11. In a certain code language, 'KITE' is written as 9, and 'MAGIC' is written as 11. How will 'FELICITATION' be written in that language?
एक निश्चित कूट भाषा में, 'KITE' को 9 और 'MAGIC' को 11 लिखा जाता है। उस भाषा में 'FELICITATION' को क्या लिखा जाएगा?
(a) 25 (b) 22
(c) 24 (d) 12

12. In a certain code language, 'GOURD' is written as '21-4-5-10-24' . How will 'BRINJAL' be written in the same code language?
एक निश्चित कूट भाषा में, 'GOURD' को '21-4-5-10-24' लिखा जाता है। उस भाषा में 'BRINJAL' को किस प्रकार लिखा जाएगा?
(a) 2-10-3-14-18-1-12
(b) 26-10-3-14-18-1-16
(c) 26-10-5-14-18-2-16
(d) 25-9-3-14-18-1-15

13. In a certain code language, if 'MOUNTAIN' is written as '46352195', then how is 'UNIVERSE' coded in the same language?
एक निश्चित कूट भाषा में, 'MOUNTAIN' को '46352195' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'UNIVERSE' को कैसे कूटबद्ध किया जाएगा ?
(a) 25945905
(b) 45945915
(c) 13594591
(d) 35945915

14. In a certain code language, 'CIRCULAR' is coded as '23-3-9-24-1-15-5-9'. How will 'VERTICAL' be coded in the same language
एक निश्चित कूट भाषा में, 'CIRCULAR' को '24-3-9-24-1-15-5-9' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'VERTICAL' को कैसे कूटबद्ध किया जाएगा ?
(a) 5-4-9-7-3-24-5-15
(b) 22-4-9-7-3-23-5-15
(c) 5-2-9-7-3-24-5-15
(d) 22-4-9-7-9-24-5-15

15. In a certain code language, 'NOISE' is wrttien as '59141519'. How will 'DORMANT' be written in that language?
एक निश्चित कूट भाषा में, 'NOISE' को '59141519' के रूप में कूटबद्ध किया जाता है। उस भाषा में 'DORMANT' को कैसे कूटबद्ध किया जाएगा ?
(a) 141314151922
(b) 141317151920
(c) 182614151820
(d) 141314151820

16. If each of the letter in the English alphabet is assigned an odd numerical value beginning A=1, B=3, and so on, what will the total value of the letters for the wrod 'HOTEL' be?
यदि अंग्रेजी वर्णमाला के प्रत्येक अक्षर को । = 1 , ठ = 3, से चिन्हित किया जाता है और आगे ऐसी ही जारी रखा जाए, तो 'HOTEL' का कुल मान क्या होगा?
(a) 95 (b) 115
(c) 125 (d) 105

17. Let J=1, K=2, L = 5, M=7, N=11, O=13, P=17.
Find the letter to the inserted in the box in the relation given:
माना J = 1 , K = 2 , L = 5 , M = 7 , N = 11 , O = 13 , P = 17
दिए गए अक्षरों के सम्बंध के बारे में बताइए :
(N× ? + M) ÷ K = 31
(a) L (b) P
(c) J (d) O

18. If BROAD means 19812, Clock means-
यदि BROAD का अर्थ 19812 है, तो CLOCK का अर्थ है –
(a) 68262 (b) 68622
(c) 26826 (d) 37836

19. If AU =21 and EGG = 245, then how will you code BAKE?
यदि AU = 21 और EGG = 245 है, तो आप BAKE को कैसे किस प्राकार कोडबद्ध करेंगे?
(a) 19 (b) 75
(c) 110 (d) 155

20. In a code language, 'OBESITY' is written as 'EBOHYTI. How will 'FIXTURE' be written in that language?
एक निश्चित कूट भाषा में, 'OBESITY' को 'EBOHYTI' लिखा जाता है। उस भाषा में'FIXTURE' को कैसे लिखा जाएगा?
(a) FIYGERU (b) XIFGERU
(c) XIFMERU (d) XIFGEUS

21. In a code language, 'PLUM' is written as 'KQOMFVNN'. How will 'BIG' be written in that language?
एक कूट भाषा में, 'PLUM' को 'KQOMFVNN' लिखा जाता है। उस भाषा में 'BIG' कैसे लिखा जाएगा?
(a) YCRJTH (b) CYTJGT
(c) YCRKTM (d) XCSJTH

22. In a code language, 'TORCH' is written as 'UNPSDI', and 'BEST' is written as 'CDFTU'. How will 'MARKS' be written in that language?
एक कूट भाषा में, 'TORCH' को 'UNPSDI' लिखा जाता है, और 'BEST' को 'CDFTU' लिखा जाता है। उस भाषा में 'MARKS' कैसे लिखा जाएगा?
(a) NABSLU (b) CYTJGT
(c) OZBSMT (d) NZBSLT

23. In a code language, 'NEPOLIAN' is written as 'MCQQKGBP'. How will 'MOHANDEV' be written in that language?
एक कूट भाषा में, 'NEPOLIAN' को 'MCQQKGBP' लिखा जाता है। उस भाषा में 'MOHANDEV' कैसे लिखा जाएगा?
(a) LMICMBFX (b) LMICMBXF
(c) NQGCLBFX (d) NQICMBFX

24. In a certain code language, 'VARIOUS' is code as ''. How will '519812254418'. How will 'PENSION' be coded in that lanuage?
एक कूट भाषा में, 'VARIOUS' को '519812254418' लिखा जाता है। उस भाषा में 'PENSION' कैसे लिखा जाएगा?
(a) 16551388120513
(b) 11251388122513
(c) 16251488122812
(d)11241398122514

25. In a certain code language, 'WORKSHOP' is written as '231518118191211'. How will 'NOVEMBER' be written in that language?
एक कूट भाषा में, 'WORKSHOP' को '231518118191211' लिखा जाता है। उस भाषा में 'NOVEMBER' कैसे लिखा जाएगा?
(a) 14152251425229
(b) 13172251325229
(c) 11151251422227
(d)14142251424228

26. In a certain code language, 'BREAK' is written as '23615455'. How will 'XEROX' be writtwn in that code language?
एक निश्चित कूट भाषा में 'BREAK' को '23615455' लिखा जाता है। उस भाषा में 'XEROX' कैसे लिखा जाएगा?
(a) 2410546024
(b) 2410546012
(c) 24105460120
(d) 24154610

27. In a certain code language, 'CONVENTION' is written as 'CNOWFOUINO'. How will 'RESPONDENT' be written in that language?
एक निश्चित कूट भाषा में, 'CONVENTION' को 'CNOWFOUINO' लिखा जाता है। उस भाषामें 'RESPONDENT' को कैसे लिखा जाएगा?
(a) ERSQPOEENT
(b) RSEQNOCTNE
(c) ERSQPEONET
(d) SEROPDNETN

28. If in a certain code language, 'ALARM' is written as 'MZANQ'. Then how 'CLASH' is written in the same code language?
यदि किसी निश्चित कूट भाषा में 'ALARM' को 'MZANQ' लिखा जाता है तो उसी कूट भाषा में 'CLASH' को कैसे लिखा जाता है?
(a) MABQI (b) MBAIR
(c) MBACI (d) MABDQ

29. If in a code language, 'DESIRABLE' is written as 'JTFEQFMCB'. How will 'DIMESNION' will be written in that same language?
यदि किसी कूट भाषा में, DESIRABLE' को 'JTFEQFMCB' लिखा जाता है। उसी भाषा में 'DIMESNION' कैसे लिखा जाएगा?
(a) FNJEMTJPO
(b) FNJEOOPJT
(c) FNJEROPJO
(d) EJNFMOPJT

30. In a code language, 'DECISION' is written as 'OPJTCDBH'. How will 'COMPILED' will be written in the same code language?
एक कूट भाषा में, 'DECISION' को 'OPJTCDBH' लिखा जाता है। उसी कूट भाषा में 'COMPILED' को कैसे लिखा जाएगा?
(a) EFMJBNLO
(b) EFMJBOLP
(c) EFMJDPNQ
(d) EFOKDPNQ

31. If 58 = 6425; 69 = 8136, then 73 = ?
यदि 58 = 6425; 69 = 8136, तो 73 = ?
(a) 9435 (b) 4903
(c) 0949 (d) 9430

32. In a code language, 'SPOT' is written as '10762'. Then what should be written for 'FARM' in the same language?
एक कूट भाषा में, 'SPOT' को '10762' लिखा जाता है। फिर उसी भाषा में 'FARM' के लिए क्या लिखा जाना चाहिए?
(a) 611813 (b) 6194
(c) 6914 (d) 4691

33. In a code language, 'TOM' is written as '48' and 'JIM' is written as '36', then how 'SAB' will be written in the same code language?
एक कूट भाषा में, 'TOM' को '48' लिखा जाता है और 'JIM' को '36' लिखा जाता है, तो उसी कूट भाषा में 'SAB' को कैसे लिखा जाएगा?
(a) 40 (b) 20
(c) 6 (d) 8

34. In a code language, 'PAT' is written as '61102', and 'MAN' is written as '31141', then what should we write for 'BOW' in the same language?
एक कूट भाषा में, 'PAT' को '61102' लिखा जाता है, और 'MAN' को '31141' लिखा जाता है, तो हमें उसी भाषा में 'BOW' के लिए क्या लिखना चाहिए?
(a) 21525 (b) 25132
(c) 21523 (d) 25123

35. If 'SARITA' is called '49' in a code language, then what should we call for 'SQUARE' in that language?
यदि किसी कूट भाषा में 'SARITA' को '49' कहा जाता है, तो हमें उस भाषा में 'SQUARE' को क्या कहना चाहिए?
(a) 81 (b) 58
(c) 18 (d) 89

36. In a code language, 'nitco sco tingo' means 'softner than flower', 'tingo rho mst' means 'sweet flower frangrance' and 'mst sco tmp' means 'sweet than smile', then which is the code for fragrance?
एक कूट भाषा में, 'nitco sco tingo' का अर्थ है। 'softner than flower', 'tingo rho mst' का अर्थ है 'sweet flower fragrance' और 'mst sco tmp' का अर्थ है 'sweet than smile', तो तिंहतंदबम के लिए कोड क्या है?
(a) rho (b) mst
(c) tmp (d) sco

37. In a certain code language, the word 'HINDUISM' is written as 'VJTNIJOE'. How will the word 'MAINSTAY' be written in that lanugage?
एक निश्चित कूट भाषा में, 'HINDUISM' शब्द को 'VJTNIJOE' लिखा जाता है। उस भाषा में 'MAINSTAY' शब्द कैसे लिखा जाएगा?
(a) NBJOTUBZ (b) SUBZNBJO
(c) TUBZNBJO (d) SUBYNBJO

38. Which of the following relates to 'STRONG' in the same way as 'TGOJWP' relates to 'NOUGHT'?
निम्नलिखित में से कौन सा कथन 'STRONG' से उसी तरह संबंधित है जैसे 'TGOJWP' 'NOUGHT' से संबंधित है?
(a) GOTOTU (b) NOTPTU
(c) NOTEMR (d) GOTPTU

39. In a certain code language, 'RELATION' is written as 'BMFSOPJU'. How will 'ADVISORY' be written in that code?
एक निश्चित कूट भाषा में 'RELATION' को 'BMFSOPJU' लिखा जाता है। उस कोड में'ADVISORY' को कैसे लिखा जाएगा?
(a) JWEBTPZS
(b) JWEBZSPT
(c) BEWJZSPT
(d) BEWJTPSZ

40. In a certain code, 'MISTAKEN' is written as 'SRHLOFLB'. How is 'GROUNDED' written in that code?
एक निश्चित कोड में, 'MISTAKEN' को 'SRHLOFLB' लिखा जाता है। उस कूट भाषा में "GROUNDED" को किस प्रकार लिखा जाएगा?
(a) CDCMTNQF
(b) TNQFCDCM
(c) EFEOTNQF
(d) TNQFEFEO

41. In a certain code, 'HUMANITY' is written as 'BNVIZUJO'. How is 'EQUATION' written in that code?
एक निश्चित कोड में, 'HUMANITY' को 'BNVIZUJO' लिखा जाता है। उस कूट भाषा में "EQUATION" को किस प्रकार लिखा जाएगा?
(a) BVRFUJPQ
(b) BVRFOPJU
(c) BUVJPRFO
(d) BVJURFPO

42. In a certain code, 'LETHARGY' is written as 'ZHSBMFUI'. How is 'MANGROVE' written in that code?
एक निश्चित कोड में, 'LETHARGY' को 'ZHSBMFUI' लिखा जाता है। उस कूट भाषा में "MANGROVE" को किस प्रकार लिखा जाएगा?
(a) FUPSNBOH
(b) SPWFNBOH
(c) SPWFHOBN
(d) FWPSNBOH

43. In a certain code, 'PROBLEM' is written as 'MPERLOB'. How is 'NUMBERS' written in that code?
एक निश्चित कोड में, 'PROBLEM' को 'MPERLOB' लिखा जाता है। उस कूट भाषा में "NUMBERS" को किस प्रकार लिखा जाएगा?
(a) SNUREMB
(b) SNRUBME
(c) SNRUEMB
(d) SNRUMEB

Directions (44-45): Study the following information to answer the given questions:
दिशा-निर्देश(44-45): दिए गए प्रश्नों के उत्तर देने के लिए निम्नलिखित जानकारी का अध्ययन करें:
In a certain code, 'a friend of mine' is written as '4 9 1 6', 'mine lots of metal' is written as '3 1 0 9', and 'a piece of metal' is written as '7 1 6 3'.
एक निश्चित कूट भाषा में, 'a friend of mine' को '4 9 1 6', 'mine lots of metal' को '3 1 0 9' लिखा जाता है। और 'a piece of metal' को '7 1 6 3' लिखा जाता है।

44. What is the code for 'piece'?
'piece' का कूट क्या है?
(a) 3 (b) 6
(c) 1 (d) 7

45. What does '0' stand for?
'0' का क्या दर्शाता है?
(a) mine (b) metal
(c) of (d) lots

Answer Key :-

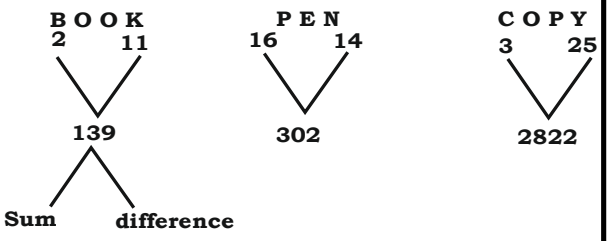
1.	(b)	2.	(a)	3.	(c)	4.	(d)	5.	(d)	6.	(c)
7.	(c)	8.	(b)	9.	(a)	10.	(d)	11.	(a)	12.	(b)
13.	(d)	14.	(a)	15.	(d)	16.	(b)	17.	(a)	18.	(c)
19.	(c)	20.	(b)	21.	(a)	22.	(d)	23.	(a)	24.	(b)
25.	(a)	26.	(c)	27.	(a)	28.	(b)	29.	(c)	30.	(a)
31.	(c)	32.	(b)	33.	(b)	34.	(b)	35.	(c)	36.	(a)
37.	(c)	38.	(d)	39.	(b)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

Solution :-

1.(b) Logic: Sum of the opposite of the place value of the letters – total number of letters.
ROUBST– 6
$\Rightarrow$ [9+12+6+25+8+7]-6 = 61
Similarly,
FORTUNATE-9
$\Rightarrow$ [21+12+9+7+6+13+26+7+22]-9 = 114

2.(a) Logic: (1st + 4th) (2nd + 3rd)
(L+K) (O+O) = (12+11) (15+15) = 2330
(H+P) (E+L) = (8+16) (5+12) = 2417

3.(c)



4.(d) (Sum of place value of alphabets)

$\times \frac{3}{2}$ = Given number

GOLF = 7+15+12+6 = 40 ; 40 × $\frac{3}{2}$ = 60

START = 19+20+1+18+20 = 78 ; 78 × $\frac{3}{2}$ =117

NEST = 14+5+19+20 = 58 ; 58 × $\frac{3}{2}$ = 87

5.(d) HARVEST is coded as 22-21-7-24-20-3-10. The pattern which follows is: the number corresponding to the alphabet in English is written in reverse order after adding 2 in it means code for
R (18+2=20) is written first then
E (5+2=7) and so on.
Similarly, FARMER will be coded as 20-7-15-20-3-8.

6.(c) Here, positional values are used. If the value of an alphabet is more than 9, then its digits are added.
AUSTERE is coded as 13102595.
A → 1
U → 21 = (2+1) = 3
S → 19 = (1+9) =10
T → 20 = (2+0) = 2
E → 5
R → 18 = (1+8) = 9
E → 5
Similarly, SETTING will be coded as
10522957.

7.(c) Logic: Sum of the digits of the place value of each alphabet.
BREATHER = 29512859
Similarly, AVIATION = 14912965
A=1, V=4 (22 $\Rightarrow$ 2+2=4), I=9, A=1, T=2 (20 $\Rightarrow$ 2+0=2), I=9,
O=6 (15 $\Rightarrow$ 1+5=6)
N=5 (14 $\Rightarrow$ 1+4=5)

8.(b) The vowels are multiplied by 2 and the consonants are multiplied by 1.

P O U N D
↓×1 ↓×2 ↓×2 ↓×1 ↓×1
16 + 30 + 42 + 14 + 4 ⇒ 106
C L E A N
↓×1 ↓×1 ↓×2 ↓×2 ↓×1
3 + 12 + 10 + 2 + 14 ⇒ 41

Similarly,
M A K E R
↓×1 ↓×2 ↓×1 ↓×2 ↓×1
13 + 2 + 11 + 10 + 18 ⇒ 54

9.(a) Logic: The letters are reversed first and then the sum of all the reverse letters is multiplied by the number of letters in each word.

F O X
↕ ↕ ↕
U L C
21 + 12 + 3 = 36×3 = 108

S O U P
↕ ↕ ↕ ↕
H L F K
8 + 12 + 6 +11 = 37×4 = 148

Similarly,
U P S I D E
↕ ↕ ↕ ↕ ↕ ↕
F K H R W V
6 + 11 + 8 + 18 + 23 + 22
= 88×6 = 528

10.(d)
ULTERIOR is coded as '33259969'.
1+2=3 5 9 1+8=9
↑ ↑ ↑ ↑
U L T E R I O R
21 12 20 5 18 9 15 18
↓ ↓ ↓ ↓
2+1=3 2+0=2 1+8=9 1+5=6

This is the pattern being followed to code the given word.
Similarly, NAVIGATION will be coded as
1 9 1 9
1+4=5
↑ ↑ ↑ ↑
↑
N A V I G A T I O
N
14 1 22 9 7 1 20 9 15
14
↓ ↓ ↓ ↓ ↓
1+4=5 2+2=4 7 2+0=2
1+5=6
'5149712965'.

11.(a) Logic: (Number of letters × 2)+1
KITE has 4 letters so, 4×2 = 8+1 = 9
MAGIC has 5 letters so, 5×2 = 10+1 = 11
Similarly, FELICITATION has 12 letters,
So, 12×2 = 24+1 = 25

12.(b) Logic: Consonant = Reverse alphabetical order +1
Vowel = numerical order.
A=1, E=2, I=3, O=4, U=5
GOURD is coded as '21-4-5-10-24'
Similarly, BRINJAL = '26-10-3-14-18- 1-16'

13.(d) Logic: Sum of digits of alphabetical positions
MOUNTAIN is coded as '46352195'
i.e, M=13 = 1+3 = 4 ; O=15 = 1+5 = 6 and so on.
Similarly, the code for UNIVERSE will be '35945915'.

14. (a)Logic: Consonant is coded in reverse alphabetical order and vowel is coded as the reverse alphabetical position of the vowel (A=5, E=4, I=3, O=2, U=1)
CIRCULAR is coded as '24-3-9-24-1- 15-5-9'
Similarly, VERTICAL will be coded as '5-4-9-7-3-24-5-15'

15.(d)Here, alphabets are coded according to their positional values.
NOISE → EINOS → 59141519
Similarly,
DORMANT → ADMNORT →
141314151820.

16.(b)A ⇒ 1×2-1 = 1
B ⇒ 2×2-1 = 3
Therefore,
H ⇒ 8×2-1 = 15
O ⇒ 15×2-1 = 29
T ⇒ 20×2-1 = 39
E ⇒ 5×2-1 = 09
L ⇒ 12×2-1 = 23
⇒ 15+29+39+09+23 = 115

17.(a)(N × ? + M) ÷ K = 31
⇒ (11 × ? + 7) ÷ 2 = 31
⇒ (11 × 5 +7) ÷ 2 = 31
⇒ (55+7) ÷ 2 = 31
⇒ 62 ÷ 2 = 31
5 ⇒ L

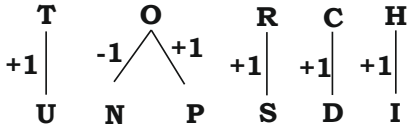
18.(c) Logic: Two consecutive letters are given the same number in ascending order.
A, B=1; C,D=2; E,F= 3;
G,H=4; I,J=5; K,L=6;
M,N=7; O,P=8; Q,R=9;
S,T=10; U,V=11; W,X=12; Y,Z=13
B R O A D
↓ ↓ ↓ ↓ ↓
1 9 8 1 2
Therefore,
C L O C K
↓ ↓ ↓ ↓ ↓
2 6 8 2 6

19.(c) If,
A U
↓ ↓ = 1×21 =21
1 21
E G G
↓ ↓ ↓ = 5×7×7 = 245
5 7 7
Then
B A K E
↓ ↓ ↓ ↓ = 2×1×11×5 = 110
2 1 11 5

20.(b) OBE is written as EBO, ITY is written as YTI, and S is written as H (S & H are opposite pairs)
Similarly, FIXTURE is written as XIFGERU.

21.(a) Logic: Replacing P with 2 alphabets one is the opposite of P and the other
one is Increasing P by +1 and same logic will be followed in other alphabets also.
PLUM is coded as 'KQOMFVNN'
Similarly, BIG will be coded as 'YCRJTH'.

22.(d) Logic: +1 for each letter and -1 for the second letter from left



Similarly,
MARKS will correspond to
M+1 = N;(A-1 = Z, A+1 = B);
R+1 = S; K+1 = L; S+1 = T
'NZBSLT'

23. (a)

N	E	P	O	L	I	A	N
↓-1	↓-2	↓+1	↓+2	↓-1	↓-2	↓+1	↓+2
M	C	Q	Q	K	G	B	P

Similarly,

M	O	H	A	N	D	E	V
↓-1	↓-2	↓+1	↓+2	↓-1	↓-2	↓+1	↓+2
L	M	I	C	M	B	F	X

24.(b) While coding, the alphabet number of vowels is squared and Consonants are getting an opposite number of alphabet series. For example, vowels in VARIOUS are A, I, O, and U and while coding their alphabet number is squared. Similarly, For PENSION ⇒ vowels are E, I, and O and their alphabet number are 5,9, and 15 respectively, Therefore, an option that has the square of these numbers will eventually be the answer. Only option (b) satisfies the condition.

25.(a)

W	O	R	K	S	H	O	P
↓	↓	↓	↓	↓	↓	↓	↓
23	15	18	11	8	19	12	11

reverse alphabetical order

Similarly

N	O	V	E	M	B	E	R
↓	↓	↓	↓	↓	↓	↓	↓
14	15	22	5	14	25	22	9

reverse alphabetical order

26.(c)The place value of 1st letter is multiplied by 1, 2nd letter by 2, 3rd letter by 3, and so on.
BREAK is coded as '23615455'

B = 2×1 = 2 ; R = 18×2 = 36 ; E = 5×3 = 15 ; A = 1×4 = 4 ; K = 11×5 = 55

Similarly,

XEROX will be coded as '24105460120'

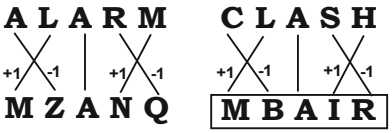
X = 24×1 = 24 E = 5×2 = 10
R = 18×3 = 54 O = 15×4 = 60
X = 24×5 = 120

27.(a)Logic: First and Last 3 letters are arranged in alphabetically ascending order,middle four letters are increasing by +1.
CONVENTION is written as 'CNOWFOUINO'

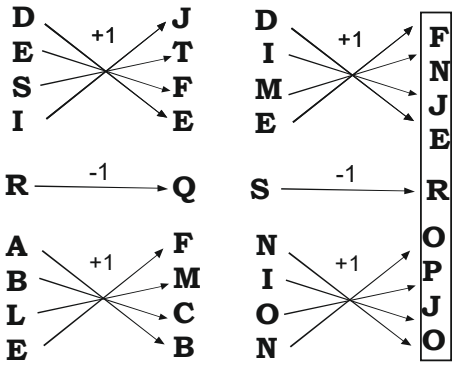
(1) (2) (3)
CON / VENT / ION
CNO / WFOU / INO

Similarly, RESPONDENT can be written as 'ERSQPOEENT'.

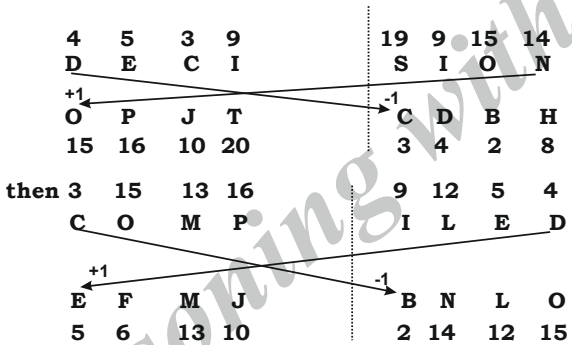
28.(b)



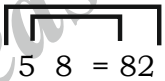
29. (c) As given



30.(a)



31.(c)



5 8 = 82 52 = 6425

Similarly,

69 = 92 62 = 8136,

73 = 32 72 = 0949

32.(b)

19	16	15	20
S	P	O	T
10	7	6	2
(1+9)	(1+6)	(1+5)	(2+0)

Similarly,

6	1	18	13
F	A	R	M
6	1	9	4
6	1	(1+8)	(1+3)

33.(b) T O M

20 15 13 =(2+0)×(1+5)×(1+3)= 48

J I M

10 9 13 =(1+0)×(9)×(1+3)= 36

Similarly,

S A B

19 1 2 =(1+9)×(1)×(2)= 20

34.(b) 16 1 20

P A T = 61102

Their reverse sequences are given.

13 1 14

M A N = 31141

Similarly,

2 15 23

B O W = 25132

35.(c) The reverse alphabetical order of the words are summed and the digits of the answer found and then reversed.

S A R I T A

8 26 9 18 7 26 = 94

Reverse of 94 = 49

Similarly,

S Q U A R E

8 10 6 26 9 22 = 81

Reverse of 81 = 18

36.(a)

nitco sco tingo – softner than flower

tingo rho mst – sweet flower fragrance

mst sco tmp – sweet than smile

rho = fragrance

37.(c) All the letters are coded as one letter forward as in English alphabet but the second half of the letters interchange with the first half of letters.

38.(d) From NOUGHT to TGOJWP: The first, third, and fifth letters from the right become first, second and third from the left respectively. Also, after adding two letters to the second, fourth, and sixth letters

from the right, we get the fourth, fifth, and sixth from the left respectively.

39.(b) Here the given word is RELATION,
(i) Split the word into two halves:
RELA TION
(ii) Reverse the letters of each half:
ALER NOIT
(iii) Add 1 to each letter in the first and second halves both:
BMFS OPJU
(iv) Combine the two halves:
BMFSOPJU.
Similarly, for the word ADVISORY, we have,

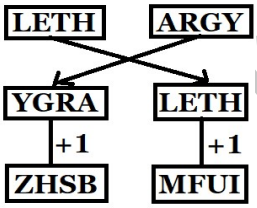
(i) ⇒ ADVI SORY
(ii) ⇒ IVDA YROS
(iii) ⇒ JWEB ZSPT
(iv) ⇒ JWEBZSPT

40.(d) (i) Dividing the word into two halves, we get
MIST AKET
(ii) Now, code the letters of the first half one letter backward and those of the second half one letter forward. We get
LHRS BLFO
(iii) Reversing the letters in each half, we get
SRHL OFLB
Hence the final code is SRHLOFLB
Now, let us apply the same steps to GROUNDED.
(i) GROU NDED
(ii) FQNT OEFE
(iii) TNQF EFEO

Hence the final code is TNQFEFEO

41.(b) First, reverse the letters of each half. Thus HUMANITY becomes AMUHYTIN. Now, write each letter one place forward in the alphabet: BNVIZUJO
Similarly,
EQUATION ⇒ AUQENOIT ⇒ BVRFOPJU

42.(d)



Hence, the code of LETHARGY becomes ZHSBMFUI.
Similarly, the code for MANGROVE can be obtained in the following way:
MANGROVE → EVORMANG → FWPSNBOH

43. (c) For its coding, the first three letters shift at the second, fourth, and sixth positions respectively while the last four fill the blanks from the right.

(44 - 45)
a friend of mine ⇒ 4 9 1 6...(i)
mine lots of metal ⇒ 3 1 0 9...(ii)
a piece of metal ⇒ 7 1 6 3 ...(iii)
From (i), (ii) and (iii), of ⇒ 1...(iv)
From (i), (iii), and (iv), a ⇒ 6...(v)
From (i), (ii), and (iv), mine ⇒ 9...(vi)
From (i), (iv), (v) and (vi), friend ⇒ 4...(vii)
From (i), (iii), and (iv), metal ⇒ 3...(viii)
From (ii), (iv), (vi) and (viii), lots ⇒ 0...(ix)
From (i), (iv), (v) and (viii), piece ⇒ 7...(x)

44.(d) The code for "piece" is '7'.

45.(d) "0" stands for 'lots'.