Contents

Coding Decoding

ANSWERS

1. (d) Letters of the word INSTITUTION have been just reversed in the coded word. Hence, PERFECTION will be coded as NOITCEFREP. So option (d) is the correct answer.

2. (b) First three letters of the word are kept as it is, sixth letter comes at fourth place   shifting fourth and fifth letters to fifth and sixth places respectively, and last two letters are exchanged.

3. (b) Letters at odd places in the coded word are one letter ahead of the letters in the basic word, and the letters at even places are one letter behind of the letters in the basic word as their positions in the alphabet.

4. (e) In the coded word, first three letters are reversed, then next two letters are reversed, then again two letters are reversed, and finally three letters are reversed. Hence, PRODUCED will be coded as ORPUDDEC.

5. (a) From the coding pattern, it is clear that code for P is 3, for I is 1, for L is 8, for E is 2, and for R it is 6. So word PILLER will be coded as 318826.

6. (b) From the coding pattern, it is clear that codes for S, E, A, R, C and H are 2, 1, 4, 6, 7 and 3 respectively as letters of the words are directly substitution.

7. (b) Each letter of the word has been written two letters back in the coded word, as their positions in the alphabets.

8. (a) It is clear from the coding pattern that codes for R, U, B and Y and 0, £, $ and · respectively.

9. (c) Similar pairs of the letters have been given the same numeric in each word. As a result pair UE in word QUEUE has been coded 2, pair CH as been coded 1 likewise pair AN has been coded 5. Hence, word BANANA is coded as B55A.

10. (b) Letters at the odd places have been written one letter back, and letters at the even places have been written two letters ahead in the coded word as their position in the alphabet.

11. (c) Letters at odd places have been written two letters back, and letters at even places have been written two letters ahead in the coded word, as their position in the alphabet. Hence, word REASON will be coded as PGYQQL.

12. (a) Letters for the basic word have been moved in forward direction in the coded word with a gap of 0, 1, 2, 3, 4 and 5 letters as their position in the alphabet. Therefore, the word DIMPLE will be coded as E K P T Q K.

13. (c) Letters of the word are written in the coded word in such a way that last and first

letters, second last and second letters, third last and third letters and so on are written together in the coded word.

14. (a) Letters at the odd places in the coded word are one letter ahead of the respective letters of the basic word, and letters at the even places in the coded word are one letter back of the respective letters as their positions in the alphabet.

15. (c) Word has been coded in such a way that last letter in the coded word is next letter of the first letter of the basic word, second letter is next of the second letter of the basic word and so on. Hence, OPIUM will be coded as NVJQP.

16. (b) There are two letters and two number common in both codes. So (E,R) is represented by (5,6). I is represented by (1,2,3,4) and (F,C) are represented by (7,8,9) – not necessarily in that order. The answer must have 3 instances of (5,6), 1 instance of (1,2,3,4) and 2 instances of (7,8,9)

17. Both codes have (C,T,H,E)=(E,A,S,T) common. (L,O,S)=(X,H,U) and (R,I)=(B,L). As SHIFT does not contain R or I, the answer cannot contain either B or L. So none of the options match.

18. (c) Only 3 letters of the given word and the word to be coded are the same. So only 3 letters from the code for PICTURE can be there in the code for PATCH.

19. (C) Every letter is replaced by both the letter before it and the letter after it.

20. (c) Each letter of the word has been coded one letter ahead as their position in the alphabet at the respective place. In the same way, STRAIGHT will be coded as TUSBJHIU.

21. (e) Letters at the odd places are one letter behind, and letters at even places are one letters ahead as their position in the alphabet at the respective places. Hence STRAIGHT will be coded as RUQBHHGU.

22. (d) Letters first and second, third and fourth, fifth and sixth and so on places are exchanged with each other. Hence, word STRAIGHT will be coded as TSARGITH.

23. (a) Letters of the basic word have been moved in forward direction in the coded word with a gap of 0, 1, 2, 3, 4 and 5 letters as their position in the alphabet. Therefore, the word STRAIGHT will be coded as TVUENMOB.

24. (b) Letters have been reversed. Hence, STRAIGHT will be coded as THGIARTS.

25. (c) Letters at the odd places have been moved one place back, and letters at the even places have been moved one place ahead regarding the position of codes given in the table.

26. (a) Codes for the letters have been moved forward direction with the gap of 0, 1, 2, 3, 4 and 5 positions, regarding position of their codes in the given table.

27. (a) Codes for the respective letters are per table have been reversed in the coding.

28. (c) In the word MAIDEN codes for MA, ID and EN have been replaced.

29. (a) In both the words DEER and TOSS, codes for each letters have been used from just below the letter in the table except for the letter that has been written twice i.e. E and S. For these letters, codes have been used just on position ahead in the table too only once. Therefore, codes for D, O and T will be V, 6 and r respectively.

30. (c) The first and fourth letter are replaced by the word that is to the left of the letter below it in the grid. The second and fifth are replaced by the letter below them. The third and sixth are replaced by the letter to the right of the letter below them in the grid.

31. (b) Each letter is replaced by the two letters which are to the left and the right of the letter below the given letter in the grid.

32. (b) The first three are replaced by the letter to the right, the next three by the letter to the left.

33. (d) Each letters have been coded on position in forward direction.

34. (c) First and fourth letter have been coded directly, second and fifth one position is backward direction, and third and sixth one position is in forward direction.

35. (d) Codes for first and second, third and fourth, and fifth and sixth letters have been exchanged.

36. (b) As per table, code for Q is r, but in coded word it is next letter of the alphabet. Similarly, code for U is P, but in the coded word it is one letter back of the alphabet. And the same method is applied for the rest of the letters.

37. (a) First three letters of the word CEMENT have been coded one position ahead and last three letters one position back in the in the coding order as their position in the table.

38. (c) Each letter is replaced by the one below it in the grid.

39. Next letter in the grid

40. Except for the middle letter, take the corresponding letter of the letter in the word from the grid and then replace it with the next letter of the alphabet.

41. Same as before, except, replace with previous letter of the alphabet.

42. ERRATA – The word to be coded is EQUATION.

(a) The letters in odd places are replaced by the letter below them in the grid. The letters in the even places are replaced by the letter to the right of the letter below them in the grid.

43. (b) Replace first letter by the next, second by the previous, third by the next, fourth by the previous...

44. (c) Replace every letter by the next and then reverse the entire word

45. (a) Replace every letter by the letter 2 placed before it in the alphabet

46. (d) Skip four letters and replace by the next, skip three letters and replace by the next, skip two letters and replace by the next...

47. (d) S should be coded by 6 as there are two S in BRASS and two 6 in the code. The common letters in both words are S, R and I is present in BRASS but not SIR. So the code must have one 6, one number from (1,3,5) and one number from (2, 4, 7, 8, 9, 0)

48. (b) Each letter is replaced by the 6th letter before it in the alphabet.

49.(b) The word is split in half and then turned around.

50. (a) Every letter of GURUS is in SUGAR.

Relations
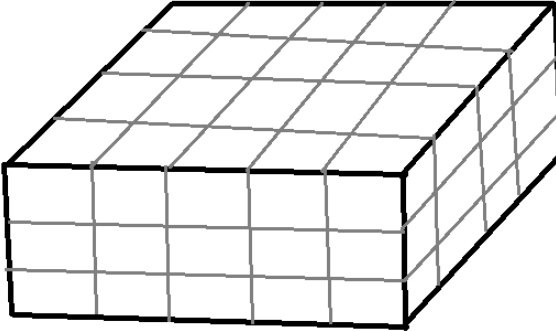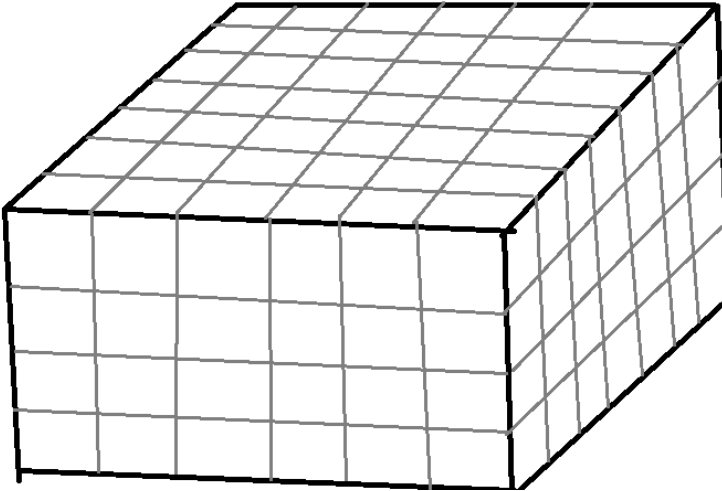
1	B	2	A	3	B	4	A	5	A	6	C	7	C	8	E	9	A	10	B
11	B	12	B	13	C	14	B	15	E	16	C	17	C	18	A	19	C	20	E
21	E	22	D	23	E	24	E	25	C	26	C	27	C	28	B	29	C	30	C
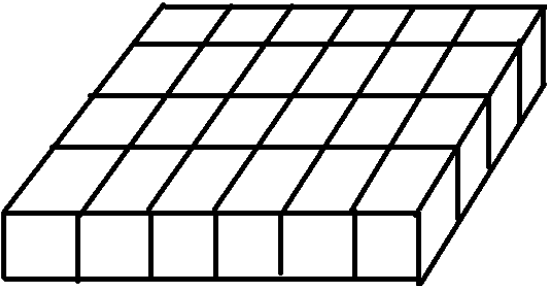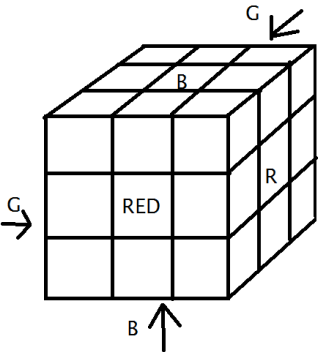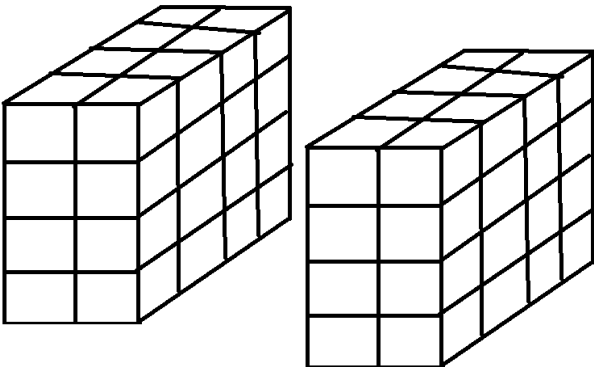
Seating Arrangements

1	B	2	D	3	A	4	C	5	C	6	B	7	A	8	A	9	A	10	B
11	C	12	D	13	A	14	A	15	B	16	D	17	B	18	B	19	C	20	A
21	D	22	A	23	C	24	B	25	E	26	E	27	A	28	B	29	D	30	A

Cubes

1.	(3x4x5)/(1x1x1) = 60 cubes in total 3 sides = 8 2 sides = 10 top layer + 10 bottom layer + 4 middle layer = 24 1 side = 18 0 sides = 6
2.	(8x12x14)/(2x2x2) = (4x6x7)/(1x1x1) = 168 cubes in total 3 sides = 8 2 sides = 18 top layer + 18 bottom layer + (4x2) (4 per middle layer) = 44 1 side = 38 x 2 = 76 0 sides = 40
3.	$343 = 7^3$ 3 sides = 8 2 sides = 20 top layer + 20 bottom layer + (4 x 5) (4 per mid layer) = 60 1 side = 6 x (5 x 5) = 150 0 sides = 5^3 = 125
4.	$64 = 4^3$ 3 sides = 8 2 sides = 8 top layer + 8 bottom layer + (4 x 2) (4 per mid layer) = 24 1 side = 6 x (2x2) = 24 0 sides = 2^3 = 8

5.	(6x4x1)/(1x1x1) = 24 4 sides = 4 3 sides = 12 2 sides = 8 1 side = 0 0 sides = 0
6 - 10	 6. 1 7. 8 8. 3 9. 4 10. 2
11 - 15	 11. 0 12. 16 13. 32 14. 16 15. 24

Odd Man Out

1. (a) Types of bags
2. (d) believers in God
3. (a) Synonyms
4. (b) Synonyms
5. (d) Synonyms
6. (d) Synonyms
7. © Synonyms
8. (d) Synonyms
9. (b) Others are expressions
10. (d) related to space
11. (c) Synonyms
12. (d) pieces form a collage which is an art form
13. (d) related to lions
14. (c) negative traits
15. (d) Synonyms
16. (c) economic groups
17. (d) related to horse
18. (a) largest in their category
19. (c) philosophers
20. (d) Synonyms
21. (d) Synonyms
22. (d) Synonyms
23. (b) Synonyms
24. (d) positive groups
25. (b) Synonyms
26. (d) Synonyms
27. (a) Synonyms
28. (d) Synonyms
29. (a) Synonyms
30. (b) Synonyms
31. (a) Synonyms
32. (c) Synonyms
33. (a) Synonyms
34. (d) Synonyms
35. (a) money related slang
36. (d) adjectives
37. (a) Synonyms
38. (d) mental illnesses
39. (d) Synonyms
40. (d) Synonyms

Solutions

1. D Gap of one letter as in the alphabet between the first and third letter
2. C Gap of two letters as in the alphabet between second and third letter
3. C Gap of one letter between first and third letter
4. B Gap of one letter between second and third letter
5. B Gap of one letter between first and second letter
6. E Gap of two letters between third and fourth letter
7. E First and second letters occupy the same number of position from beginning and end respectively in the alphabet as mentioned at the third place
8. D Number in between is the sum of the position of first and second letters
9. A Gap of two letters between the second and third letter
10. B Gap of one letter between second and third letter
11. C Gap of one letter between second and third letter
12. E gap of one letter between second and third letter
13. B Gap of one letter between second and third letter
14. C No gap between 1st and 2nd letters, gap of 1 letter between 2nd and 3rd letter, gap of 2 letters between 3rd and 4th letters
15. D First and second letters are equidistant from the beginning and end respectively in the alphabetical series
16. D Gap of one letter between first and fourth letter
17. C Gap of two letters between first and second, second and third letters
18. E Number in between the 1st and 2nd letter is the sum of positions of the first and last letter they occupy in the alphabet
19. C Gap of three letters between the two letters
20. D Gap of one letter between first and second letter and gap of two letters between second and third letter
21. C First and second letters are equidistant from the start and end
22. A Gap of one letter between first and third letters
23. E Gap of two letters between second and third letters
24. E Number is twice the sum of the positions of first and last letters
25. C Number is double the number of letters between the first and second letter

1	D	2	B	3	D	4	D	5	C	6	D	7	D	8	B	9	A	10	D
11	D	12	A	13	E	14	C	15	E	16	C	17	B	18	C	19	D	20	B
21	B	22	E	23	E	24	D	25	C										

Artificial Language

Set 1									
1	D	2	D	3	C	4	D	5	D
6	C	7	A	8	A	9	B	10	A

Set 2									
1	A	2	B	3	A	4	D	5	A
6	B	7	D	8	B	9	C	10	C