CH 1 ALPHABET

ANSWERS AND EXPLANATIONS

EXERCISE 1

1.. (d) After interchanging, the order of the letters in the word becomes as follows:

S G N I K R O W

Thus, the third letter to the left of R is N.

2. (b) 7th letter to the right of 3rd letter from the left $\Rightarrow$ 10th letter from the left. After changing the word becomes as follows

D E T N E D E C E R P N U

3. (e) When the letters in each of the words are arranged in alphabetical order it becomes as follows: cdeo, ackl. eemt. adef and ador. Now when the words are rearranged as in a dictionary then their respective position becomes as follows: ackl, adef, ador, cdeo and eemt.

4. (d) Clearly, we have :

COMPREHENSION $\rightarrow$ (COM) (PREHENS) (ION)

$\rightarrow$ COMIONSNEHERP

The middle letter is the seventh letter, which is S.

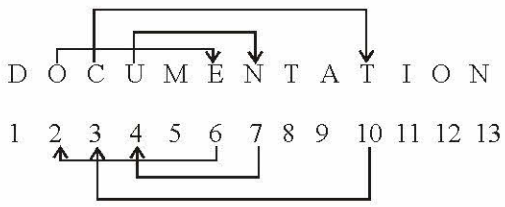
5. (d) The new letter sequence is EDRPSEISNO.

The seventh letter from the right is P.

D E P R E S S I O N

1 2 3 4 5 6 7 8 9 10

6. (c)



7. (d) The new letter sequence is

NOITARTNECNOC

The eighth letter from the end is R.

8. (a) INDIAN = 17 + 27 + 7 + 17 + 1 + 27 = 96

9. (a) Arranging English alphabet according to the instruc-tions given, we get

A D E H I L O R U X B C F G J K M N P Q S T V

W Y Z

(19 – 5 =) 14th from the left

10. (b) According to the question, the value of all the letters will be: its sequential numerical value as in English alphabet + the no. of letters before it in English alphabet.

Hence D = 4 + 3 = 7, S = 19 + 18 = 37

E = 5 + 4 = 9 K = 11 + 10 = 21

$\therefore$ Numerical value of DESK

= 7 + 9 + 37 + 21 = 74

11. (b) Arranging 'UNIVERSAL' alphabetically and assigning values from leftward, we get A E I L N R S U V

1 2 3 4 5 6 7 8 9

Now, sum of position nos. of vowels (A, E, I, U)

1+ 2 + 3 + 8 = 14

and sum of position nos. of consonants

(L N, R, S, V)

= 4 + 5 + 6 + 7 + 9 = 31

Difference = 31 – 14 = 17

12. (a) Arranging the words in alphabetical order, we have

Random, Restaurant, Restrict, Robber, Rocket.

So the work in the middle is Restrict and the correct answer is (a).

13. (b) The words are HE, ART, LESS

14. (b) Cancelling every second letter after reversing the alphabet the series becomes.

Z X V T R P N L J H F D B

The middle letter is N.

15. (a) After dropping every third letter, we get

A B D E G H J K M N P Q S T V W Y Z

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(11– 7 =) 4th from the right.

16. (b) Positions corresponding to the multiples of five are E, J, O, T, Y and that of multiples of seven are G, N and U. Hence, the total number of remaining letters in the series = 26 – 8 = 18

17. (c) After reversing the first half of the given series. the series becomes as follows:

ML **K** J I H G F E D C B A N O P Q **R** S T U V W X Y Z

There are 14 letters between K and R.

18. (a) The changed sequence becomes

T U V W X Y Z H I J K L M N O P Q R S A B C D E F G

3rd letter to the left of 18th letter from right

= (18 + 3) = 21th from right

= (26 + 1 = 21) = 6th from left = F

19. (e) 4th to the right of 13th from left

= (13 + 4 =) 17th from left = Q

Now, in the changed sequence, MNOPQR becomes RQPONM. Thus N takes the place of Q. Hence in the changed get M in the req. place.

20. (b) First letter moves + 3, + 4, + 5 places forward, second letter + 4, + 5, + 6, and third letter + 5, + 6, + 7 in consecutive terms.

21. (b) ZYXWV

22. (b) W2N1V9G2P4X6K7R1T8L3H5Q8U2J

23. (a) E X T R A

When E and A are arranged in alphabetical order then i.e. AE, E will be second.

24. (c) C R E D I B I L I T Y

25. (b) P O W E R F U L

E F L O P R U W

only U remains unchanged.

26. (d) PI, RU and ON.

P R O D U C T I O N

27. (c) O R I E N T A L

28. (c)

P R E S E N C E

29. (d) C O R P O R A T E

Note that we have to find the pairs keeping the sequence of the letters of pair according to their sequence in English alphabet. Therefore go for search only from left to right.

30. (a) S P O N T A N E O U S

In each shown pairs there is one letter less than the number of letters between them in English alphabet.

31. (e) Four

D R E A M L A N D

32. (b) N U R S I N G

33. (c) C R Y S T A L L I Z E

34. (b) Letter are (X, U), (L,I) and (E,C).

35. (e) H O R I Z O N T A L

So, there are four pairs :

HN, RO, RN, ON

36. (e) Here specific letters are E, M, A and L. Words formed with these letters are as follows

1. LAME 2. MALE 3. MEAL

Since, no. of words formed by the given letters is more than two, our answer is choice (e).z

37. (e) SING, SIGN

38. (e) Selected letters of the given word are R, H, A and E. By using each letter only once we can make the following words:

1. HEAR 2. HARE

This is more than one.

39. (d) The letters are: P, L, A, E. Meaningful words: PALE, LEAP, PEAL.

40. (d) The specified letters are D, I, T and E. Words formed by these letters are as follows:

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(i) EDIT (ii) DIET
(iii) TIDE (iv) TIED

41. (b) Here specified letters are: E, A, S, M and T. Words formed from these letters are as follows:
1. STEAM 2. MATES
3. TEAMS

42. (c) Here letters are: B, R, E, A and K. When the consonants are replaced by the next letter then we have C, S, E. A and L to form words. These words are as follows:
1. SCALE 2. LACES

43. (e) Here specified letters are: R, I, A and L. Words formed with these letters are:
1. RAIL 2. LIAR 3. LAIR

44. (b) The 3rd, 6th, 8th and 11th letters are
S, N, U and H
respectively. The word that can be made is SHUN.

45. (e) The specified letters are R, S, T and O. Meaningful word formed from these letters are SORT and ROTS.

46. (e) The respective letters are D, E, M and N. Of these letters, only MEND can be formed.

47. (d) A, R, D, I, Y. We can make DIARY, DAIRY

48. (d) The second, fifth and eighth letters of the word CARETAKER are A, T and E respectively. The words formed are EAT, ATE and TEA.

49. (d) The first, fourth, seventh and eleventh letters of the word INTERPRETATION are I, E, R and T respectively. The words formed are TIER, RITE and TIRE.

50. (e) The third, fifth, seventh and tenth letters of the word PROJECTION are O, E, T and N respectively. The words formed are NOTE and TONE.

51. (c) The first, third, seventh and ninth letter of the word SEPARATION are S, P, T and O respectively. The words formed are SPOT, POTS and TOPS.

52. (b) Only one meaningful word 'ALONE' can be made. O is the middle letter.

53. (b) The letters selected are S, E, L and S respectively. The word formed is LESS. The first letter is L.

54. (b). The word formed by S, R, U and E is SURE, USER.

55. (a) The new set of letters are: N, E, A, U. Hence no meaningful word can be made.

56. (c) Only two such words can be formed. The words are STAIN and LESS.

57. (a) The first four letters are D, E, C, I and only word DICE can be formed so the answer is (a).

58. (a) Letters :
A, M, L, E
Words :
MALE, MEAL, LAME

59. (b) PUMPKIN

60. (d) Clearly, the given letters, when arranged in the order 5, 1, 2, 3, 4 from the word 'TRACE'.

61. (b). Clearly the given letters, when arranged in the order
4, 5, 2, 3, 1, 6 form the word 'STRAVE'.

EXERCISE 2

1. (e) Q D T P 8 6 9 F G 7 B 4 H J 3 K 2 M N 5
(9 – 5=) 4th from right, which is 2.

2. (c) Q D T P 5 2 3 F G 4 B 7 H J 9 K 6 M N 8

3. (a) The first element of each group is two elements forward to the corresponding element of the previous group. The second element of each group is one element backward and the third element of each group is one element forward to the corresponding elements of the previous group as given in the sequence.

4. (d) We have to look for Vowel-Number and Number-Vowel sequences.
J 1 # *P* 4 *E K* 3 *A D* $ *R U M* 9 *N* 51 % *T V* * *H* 2 ÷ *F* 6 *G* 8 *Q W*
4, 3 and 5 are the required numbers.

5. (d) *D* $ *RU M* 9 *N* 5 1 % *T V* * *H* 2
7 elements 7 elements

6. (a) After the changing, the series becomes as follows;
J 1 # P 4 E K 3 A D $ R U M 9 N W Q 8 G 6 F ÷ 2 H* V T % 15
Now, ninth to the right of the eleventh element from the left→ (11 + 9 =) 20th element from the

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left, i.e., *G*.

7. (b) We have to look for Symbol Consonant – Consonant sequence and Symbol–Consonant–Symbol sequences.

J I # P 4 E K 3 A D $ R U M 9 N 51 % T V H 2 ÷ F 6 G 8 Q W

Only *T* is such a consonant.

8. (e) See the difference between each two successive element.

(a) $A + 2\ \$ - 5\ E$; $A + 2 = \$ - 5 = E$

(b) $\% + 2V - 5\ N$; $\% + 2 = V - 5 = N$

(c) $2 + 2\ F - 5\ V$; $2 + 2 = F - 5 = V$

(d) $4 + 2\ K - 51$; $4 + 2 = K - 5 = 1$

(e) $6 + 3\ Q - 5\ \div$; $6 + 2 = 8 - 5 = 2$

Note that the difference between two successive elements in 5 is not similar to others.

9. (a) There are 21 elements in the series. Among them, there are only 5 digits. Since, s y m b o l s replaced by letters and digits are replaced by symbols, ultimately there will be (21 – 5 =) 16 letters in the series.

10. (d) We have to search for Letter-Digit-Letter sequence. Note the bold digits given in the series below.

A **B 7 C D 9 Z** Y * **P 2 M** © K S 3 ↑ 5 N T @

11. (c) The letters falling between C and 5 are as follows: DZYPMKS. Hence, P is the required letter.

12. (b) Note that there are already five digits (7, 9, 2, 3, 5,) in the series. If the four symbols are replaced by the remaining digits from 1 to 9 (1, 4, 6, 8) then sum of the digits = 1 + 2 + ...

$$+ 9 = \frac{9 \times 10}{2} = 45$$

$$\left[\text{Sum of } \mathbf{n} \text{ natural numbers } = \frac{n \times (n+1)}{2}\right]$$

13. (d) Seventh to the left of eighth element from right = (7 + 8 =) 15th element from the right.

In original series 'Z' occupies the 15th place from right but after the changes 'Z' interchanges its position with 'C'.

14. (a) D F J T **$ #** P R Z Q * C M A B @ H **K** L S + ?

only $ # P is the required answer.

15. (e) * Q Z R P # $ T J **F** D C M A B @ H K L S + ?

16. (d) Number of total symbols = 6;

Number of total letters = 16.

Since, all the symbols are denoted by 7 and all letters are denoted by 5, sum of the elements of the sequence = 6 × 7 + 16 × 5 = 122

17. (b) When all the symbols are dropped the series becomes as follows:

D F J T P R Z Q C M A **B** H K L S

Now, seventh to the right of twelfth letter from the right = (12 – 7 =) 5th letter from the right, i.e., B.

18. (d) Compare 'DJ' and '?S'. 'D' is the first element from left end of the series and '?' is the first element from right end. Similarly, 'J' and 'S' are third elements from left and right end respectively. Hence, 'FT' is related to' + L'.

19. (b) D F J T $ # P R ZQ * C **M** A B @ H K L S + ?

A B C D E F G H I J K L M N O P Q R S T U V

20. (e) Except it there is only one element between first and second letter of each group of words when the position of the letters in the series is taken into consideration.

21. (c) Eighth element from right = (22 + 1 – 8 =)15th element from left.

Hence, the required element which is exactly midway between 5th element from left and 15th element from left, is $\left(\frac{15+5}{2} =\right)$ 10th element from left, i.e., Q.

22. (d) After changing the series becomes as follows :

I D 7 1 J P $ 3 E R T 5 £ M 2 N A 4 F H 6 H U 9 # V B @ W

Now, twenty-second element from the right end is 3.

23. (c) We have to look for

Vowel-number-consonant sequence.

M £ 5 T R E 3 $ P J 1 7 D I 2 N A 4 F H 6 H U 9 # V B @ W

Only 2 and 4 are such numbers.

24. (e) D 2 J

R	+4	P	+4	D	+4A
3	+4	1	+4	2	+4F
£	+4	E	+4	J	+4I

25. (d) M £ 5 T R E 3 $ P J 1 7 D I 2 N A 4 F H 6 ★ U 9 # V B @ W

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26. (b) Fifth element towards right of the seventeenth element from the right end implies twelfth element from the right end. Hence, the required element is 4.

27. (a) If the numbers from the first half of the sequence are dropped, the series becomes as follows:

W H J Q T G K F P T 6 L B E 9 4 D M R 8 2 V

Hence, 5th to the right of the sixth letter/number from the left ⇒ 11th element from the left, ie 6.

28. (d) Here, we have to find out letter-letter-number sequence. Bold letters in the sequence given below represent those letters:

W 3 7 H J Q **T** 5 1 2 G **K** 4 F P **T** 6 L B **E** 9 4 D M 1 8 2 V

29. (b) Following is the common property found in others: If first element of each group occupies nth position in the given sequence then the last element of the corresponding group occupies (*n* + 3)th position in the given sequence.

30. (e) M K 3 $ R E 5 **F** % T U **J** * 8 **P** H B N 2 I **S** # A 3 7 **D** 4

31. (e) Here the rule followed is: All the groups consist of three elements. Where, 1st element + 2 = 2nd element and 2nd element + 3 = 3rd element.

32. (b) After re-arrangement the new arrangement will be

M K 3 $ R E 5 B % T A J * 8 P H F N 2 I S # U 3 7 D 4

33. (e) B A 5 D % R I * F H ⑥ # V [9] $ 3 Ⓔ 7 G 1 ÷ 2 M K X 8 U F W Z N

Hence, the required element is '9'.

34. (b) See the difference between each two successive elements.

(a) E + 2 G – 4 $

(b) **R + 3 F – 5 D**

(c) 1 + 2 2 – 4 7

(d) X + 2 U – 4 M

(e) H + 2 # – 4 *

Note that the difference between two successive elements in (b) is not similar to others.

35. (b) We have to look for Consonant-Number-Letter and Consonant-Number-Number sequences.

B A 5 D % R I * F H 6 # V 9 $ 3 E 7 G 1 ÷ 2 M K X 8 U F W Z N

Hence, only one such number (8) exists in the above series.

36. (c)

A	D	I	F	6	9	3	7	÷
+2	+3	+2	+2	+3	+2	+2	+3	

Hence, the missing group will be MXF

37. (e) We have to look for the sequences Letter-Consonant-Consonant, and Symbol-Consonant-Consonant in the given series.

B A 5 D % R I * F H 6 # V 9 $ 3 E 7 G

↑

1 ÷ 2 M K X 8 U F W Z N

↑ ↑ ↑

There are four such consonants as shown above.

38. (b) Here, the given numbers are:

517 325 639 841 792

After reversing the numbers become as follows:

715 523 936 148 297

When arranged in descending order the numbers become as follows:

936 715 523 297 148

Now, the third number from top is 523. Hence, the last digit of 523 is 3.

39. (d) After interchanging the first and the second digits, numbers become as follows;

157 235 369 481 972

When arranged in descending order the numbers become as follows;

972 481 369 235 157

Here, the second lowest number is 235.

Hence, middle digit of 235 is 3.

40. (a) If the positions of only the second and the third digits within each number are interchanged, the numbers become as follows.

571 352 693 814 729

Now, when the numbers are arranged in descending order, we get

814 729 693 571 352

Here, 729 is the second highest number

Hence, the first digit of 729 is 7.

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41. (a) 2 6 7 5 4 3 7 4 8 9 4 3 2 5 4 7 9 8 6 8 7 1 2 5 3 7 6 8 9 3 6

42. (d) 8th to the right of 13th from left = (8 + 13) = 21st from left

= (21–16 =) 5th from left in the last 15 numbers [In all, there are 31 numbers.]

But this is the required position in the altered sequence. In original sequence, this will be the number which is 5th from right, i.e. 6.

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

44. (b) Here, given number is 95137248. When the number is arranged in ascending order number becomes as follows 12345789. Now, look at the pairs: 35. What do you observe? These pairs are those pairs each of which has as many digits between them in the number as when they are arranged in ascending order.

45. (e) As same no. is subtracted from them, it will not change their relative position, when they are arranged in descending order. So, only reversing them and arranging as directed, we get 984, 451, 263 245, 172.

46. (e) Interchanging, we get 749, 376, 985, 798, 839, 765. Rearranged in descending order, this becomes 985, 839, 798, 765, 749, 376

47. (d) Arrangement without symbols and numbers :

H P K E F R U W G M I B Q Z N V J

Now, 14th from right end = E

48. (a)

$$P \xrightarrow{+7} R \xrightarrow{+7} M \xrightarrow{+7} ©$$

$$K \xrightarrow{+7} U \xrightarrow{+7} 5 \xrightarrow{+7} N$$

$$\% \xrightarrow{+7} W \xrightarrow{+7} Q \xrightarrow{+7} 8$$

49. (b) Z 6 ©

50. (a) 7th to the left of 20th from the left end means (20 – 7 =) 13th from the left end is U.

51. (e) H9, FR1, WG2, QZ6

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