BOOK-1

REASONING ABILITY

1. Choose the sequence in which they occur in the dictionary.

   A. Access B. Accelerate C. Account

   D. Accentuate E. Across

   (1) B. C, A. D, E (2) B, D, A, C, E (3) E, B, D, A, C (4) B, D, A, E, C

   (5) None of these

   (2) The correct sequence is Accelerate. Accentuate, Access, Account, Across, i.e., (2) => B, D, A, C, E

2. From the word ASTOUNDER, how many independent words can be made without changing the order of the letters and using each letter only once?

   (1) 2 (2) 5 (3) 4 (4) 3

   (5) None

   (4) The words which can be formed are

   (i) AS, TO, UNDER (ii) AT, SO, UNDER

   Hence, at most three words can be formed.

3. If the first and second letters in the word DEPRESSION were interchanged, also the third and fourth letters, the fifth and sixth letters and so on, which of the following would be the seventh letter from the right?

   (1) R (2) 0 (3) S (4) I

   (5) None of these

   (5) The word DEPRESSION, so formed after interchanging is

   E D R P S E I S N O

   1 0 9 8 7 6 5 4 3 2 1

   Hence/The letter is R i.e., (5).

4. How many pairs of letters are in the wore BRIGHTER, which have as many letters between them in the word as in the alphabet?

   (1) 1 (2) 2 (3) 3 (4) 4

   (5) More than 4

   (3) The pairs according to the given condition are

   GH, T (E) R, I (GHT) E i.e.. 3 => (3)

5. If every third letter from the following English alphabet is dropped, which letters will be the fourth of the right of fourteenth letter from your right?

ABCDEFGHIJKLMNOPQRSTUVWXYZ

(1) M (2) N (3) E (4) A

(5) None of these

(1) If every third letter is dropped the series is

ABDEGHJKMNPQSTVWYZ

Hence, fourth letter to the right of fourteenth letter from the right is tenth letter the right, i.e., M.

6. In a certain code, BACK is written as YZXP. How is NEAR written in that code?

(1) MVZI (2) LAMZ (3) XCBZ (4) KPBY

(5) None of these

(1) Here, BACK is coded as YZXP. It is seen that the alphabets B, Y; A, Z; C, X ; K, P are at reverse positions. So, in that code NEAR is coded as

N – M E – V A – Z R – I

i.e. MVZI

7. In a certain code language, EDUCATION is written as PLIHDFTCX and WOMANHOOD is written as UCODXRCCL. How is TENACE written in the same code language?

(1) MPOYZ (2) XPONY (3) FPXDHP (4) DHYFPO

(5) None of these

(3) From the given information we obtained the following codes

E D U C A T I O N W M H

P L I H D F T C X U O R

Thus, TENACE is coded as FPXDHP.

8. In a certain code, ‘ki su mo’ means ‘heart has broken’; ‘ci cu’ means ‘enjoy sight’ and ‘ki ci ho’ means ‘enjoy heart attack’. How is ‘broken’ written in that code?

(1) ic (2) heart (3) cu (4) mo

(5) None of these

(4) Here we have,

ki su mo - heart has broken

ci cu - enjoy sight

ki ci ho - enjoy heart attack

Clearly, ‘ci’ means ‘enjoy’ and ‘ki’ means ‘heart’, so ‘mo’ means ‘broken’.

9. In a certain code, ‘green’ is ‘pink’, ‘pink’ is ‘red’, ‘red’ is ‘white’ and ‘white’ is ‘yellow’; so what is the colour of blood?

(1) yellow (2) white (3) green (4) pink

(5) None of these

(2) We know the colour of blood is red and here red is white. So, the colour of blood is white.

10. Find the missing term.

125 : 5 : : ? : 8

(1) 343 (2) 64 (3) 27 (4) 216

(5) None of these

(5) First term is the cube of the second term $5^3 = 125$, so $8^3 = 512$.

11. ERID is related to DIRE in the same way as RIPE is related to

(1) EPIR (2) PERI (3) EPRI (4) PEIR

(5) IPRE

(1) Letters are decoded in reverse order.

$\therefore$ RIPE $\Rightarrow$ EPIR

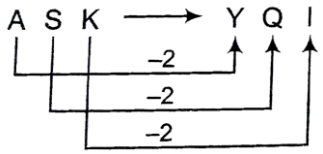
12. Find the missing term.

ASK : YQI : : NUT : ?

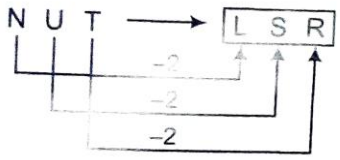
(1) LRS (2) RSL (3) SLR (4) LSR

(5) None of these

(4) As



Similarly,

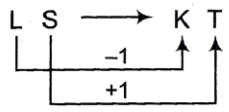


13. Find the missing term.

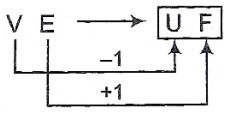
LS : KT : : VE : ?

(1) UF (2) FU (3) UG (4) $\therefore$

(5) None of these



Similarly,



14. ‘Furniture’ is related to ‘Table’ in the same way as ‘Stationery’ is related to

(1) Store (2) Chair (3) Office (4) Pencil

(5) None of these

(4) As ‘Table’ comes under the ‘Furniture’, similarly ‘Pencil’ comes under the ‘Stationery’

15. Find the missing term.

Lion : Cub : : Horse : ?

(1) Kitten (2) Calf (3) Foal (4) Duckling

(5) None of these

(3) As, ‘Cub’ is the young one of ‘Lion’, similarly ‘Foal’ is the young one of ‘Horse’.

16. M is shorter than P but taller than B. G is taller than M. R is shorter than B. Who among the following is the tallest?

(1) M (2) P (3) G (4) Either G or P

(5) None of these

(4) (G, P) > M > B > R

Hence, either G or P is the tallest among them.

17. In a group of six children T, K, V, O, M and W. T is fatter than M but not as fat as W. K is not the fattest no is W whereas V is the thinnest. Who is the fattest among them all?

(1) O (2) T (3) M (4) Data inadequate

(5) None of these

(1) O > (K, W) > T > M > V

Hence, O is the fattest among them.

18. Among A, B, C, D and E, A is taller than B but shorter than C, B is taller than only E. C is not the tallest, who among them will be in the middle if they stand in the order of their height?

(1) B (2) C (3) A

(4) Cannot be determined (5) None of these

(3) D > C > A > B > E

Hence, A will be in the middle among them.

19. In a class of 64 students Sandeep ranks 19^{th} from top. What would be his rank from the bottom?

(1) 45^{th} (2) 46^{th} (3) 44^{th} (4) Data inadequate

(5) None of these

(2) Sandeep's rank from the bottom

= (Total number of students)

- (Sandeep's rank from the top) + 1

= 64 – 19 + 1 = 65 – 19 = 46^{th}

20. Madhu is 18^{th} from the left end Sandhu is 11^{th} from the right end of row of 40 children. How many children are there between Madhu and Sandhu in the row?

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

(5) None of these

(4) Madhu's position from the right end

= 40 – 18 + 1

= 41 – 18

= 23

Given, Sandhu's position from the right end = 11^{th}.

Hence, total number of children between Madhu and Sandhu

= (23 – 11) – 1.

21. Today is Thursday. The day after 59 days will be

(1) Tuesday (2) Monday (3) Wednesday (4) Sunday

(5) None of these

(4) Every day of the week is repeated after 7 days. Hence, after 56 days it would be Thursday again and after 59 days it would be Sunday.

22. Mohit correctly numbers that his father's birthday is after 17th but before 23rd. His sister correctly remembers that their father's birthday is after 20^{th} but before 24th on which date is their father's birthday?

(1) 20^{th} (2) 21^{st} (3) 22^{nd} (4) 21^{st} or 22nd

(5) None of these

(4) According to Mohit,

Father's birthday $\Rightarrow$ 18, 19, 20, 21, 22

According to sister

Father's birthday $\Rightarrow$ 21, 22, 23

Hence, father's birthday $\Rightarrow 21^{st}$ or 22^{nd}

23. How many times do the hands of a clock coincide in a day?

(1) 24 (2) 22 (3) 21 (4) 20

(5) None of these

(2) From the properties of the clock, we know that hands of a clock coincide once in every hour but between 11 o'clock and 1 o'clock they coincide only once. Therefore, the hands of a clock coincide 11 times in every 12 h. Hence, they will coincide (11 x 2) 22 times in 24 h.

24. How many times are the hands of a clock at right angle in a day?

(1) 24 (2) 48 (3) 22 (4) 44

(5) None of these

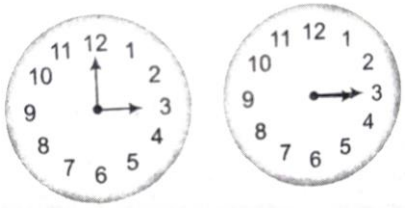
(4) We know that hands of a clock are at right angle twice every hour. But two positions of the hands of clock is 3 o'clock and 9 o'clock are identical. So, they are at right angles 22 times in 12 h and therefore, in 24 h in a day they are at right angles 44 times.

25. At what time between 3 and 4 o'clock will the hands of a clock coincide?

(1) 15 min past 3 (2) $15\frac{10}{11}$ min past 3

(3) $10\frac{12}{11}$ min past 3 (4) $13\frac{4}{11}$ min past 3

(5) None of these



(5) At 3 o'clock both the hands of the clock are 15 min apart. Hence in order to be together, minute hand will have to cover the distance of 15 min in order to find a position as shown in diagram.

Now, 55 min are gained in 60 min.

15 min will be gained in $\left(\frac{60}{55}\times 15\right)$ min.

$= \left(\frac{12}{11}\times 15\right)\text{min} = \frac{180}{11}$

or $16\frac{4}{11}\text{min}$

Therefore, the hands will coincide at $16\frac{4}{11}$ min past 3.

26. How many 5's are there in the following number sequence which are preceded by 7 and followed by 6?

7 5 5 9 4 5 7 6 4 5 9 8 7 5 6 7 6 4 3 2 5 6 7 8

(1) 1 (2) 2 (3) 3 (4) 4

(5) None of these

(1) Here,

7 5 5 9 4 5 7 6 4 5 9 8 7 [5] 6 7 6 4 3 2 5 6 7 8

↑

Preceded by 7 and followed by 6

So, there is only one such 5.

27. How many even numbers are there in the following series of numbers, each of which is preceded by an odd number, but not followed by an even number?

5 3 4 8 9 7 1 6 5 3 2 9 8 7 3 5

(1) Nil (2) 1 (3) 2 (4) 3

(5) None of these

(4) 5 3 4 8 9 7 1 [6] 5 3 [2] 9 [8] 7 3 5

There are three such even numbers 6, 2 and 8 each of which is preceded by an odd number and not followed by an even number.

Directions : (Examples __ and __) Each of following questions are based on the five three digit numbers given below

519 364 287 158 835

28. If the positions of the first and the third digits within each number are interchanged, which of the following will be the third digit of the second lowest number?

(1) 9 (2) 5 (3) 7 (4) 8

(5) None of these

(2) According to the question, after the position of the first and third digits interchanged, new numbers are 519 $\Rightarrow$ 915, 364 $\Rightarrow$ 463, 287 $\Rightarrow$ 782, 158 $\Rightarrow$ 851, 835 $\Rightarrow$ 538. So, second lowest number = 538 and it is actually 835. Hence, third digit of the second lowest number = 5.

29. Which of the following is the difference between the second digit of the lowest and the highest of these numbers?

(1) 3 (2) 1 (3) 2 (4) 0

(5) None of these

(3) According to the question,

Highest number = 835

Lowest number = 158

Difference between the second digit of the lowest and the highest number = 5 – 3 = 2.

30. The positions of how many digits in the number 351462987 will remain unchanged after the digits are rearranged in ascending order within the number?

(1) Four (2) One (3) Two (4) Three

(5) None of these

(3) Given number 3 5 1 **4** 6 2 9 **8** 7

After rearrangement 1 2 3 **4** 5 6 7 **8** 9

Hence, there are two numbers, 4 and 8 remain unchanged after the rearrangement

31. The positions of the first and the sixth digit in the number 5109238674 are interchanged. Similarly, the positions of the second and the seventh digit are interchanged and so on. Which of the following will be the third digit from the right end after the rearrangement?

(1) 9 (2) 0 (3) 6 (4) 3

(5) None of these

(2) Given number = 5109238674

According to the condition given in question, After interchanging the digits, new number = 3867451092. Hence, third digit from the right end = 0.

Directions (Examples __ and __) Each of the following questions is based on the following alphabet series.

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

32. Which letter will be eight to the right of the third letter of the second half of the English alphabet?

(1) V (2) T (3) U (4) Y

(5) X

(5) Second half has letters from N to Z. The third letter of second half = P

Now, 8^{th} letter to the right of P = X.

33. If only the first half of the given alphabet is reversed. How many letters will be there between K and R.

(1) 6 (2) 10 (3) 14 (4) 16

(5) None of these

(3) Reversing only the first 13 letters, we obtain the following letter-series.

Hence, there are fourteen letters between K and R.

34. What should come next in the following series of numbers?

2 2 3 2 3 4 2 3 4 5 2 3 4 5 6 2 3 4 5 6 7 2 3 4 5 6 7

(1) 2 (2) 3 (3) 4 (4) 7

(5) 8