

### HSEM1BTECHFASTRACK0719

6.

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

7.

| _ |   |   | _ |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|   | 3 |   | 5 |   |   |   |   |   |
|   |   | 4 | 7 | 6 |   |   |   | 5 |
|   |   |   |   | 8 |   | 7 |   | 6 |
|   | 4 | 8 |   |   | 1 |   |   |   |
|   |   | 9 |   |   | 8 | 1 | 5 |   |
| 1 |   |   |   | 4 |   | 8 |   |   |
|   | 7 |   |   |   |   |   | 8 |   |
|   |   |   | 4 | 7 | 2 |   | 9 |   |
| 4 |   |   |   |   |   |   | 2 |   |

## **REASONING ABILITY**

## **SESSION - 14**

## **& ATTENTION TO DETAIL - I**

1. How many 7's are there in the following series which are not immediately following by 3 but immediately preceded by 8?

 $8\,9\,8\,7\,6\,2\,2\,6\,3\,2\,6\,9\,7\,3\,2\,8\,7\,2\,7\,7\,8\,7\,3\,7\,7\,9\,4$ 

- (a) nil
- (b) one
- (c) two

- (d) three
- (e) More than three

2. How many 8's are there in the following number series which are exactly divisible by its immediately preceding and also exactly divisible by immediately succeeding numbers?

 $8\; 2\; 4\; 5\; 1\; 7\; 2\; 8\; 4\; 8\; 4\; 2\; 2\; 8\; 2\; 6\; 9\; 8\; 4\; 5\; 4\; 8\; 3\; 2\; 8\; 4\; 3\; 1\; 8\; 3$ 

- (a) 1
- (b) 2
- (c) 3

- (d) 4
- (e) None of the above

3. Which pair of numbers has least and maximum frequency in the given sequence?

87564583867235835764765

(a) 4 and 5

(b) 2 and 6

(c) 3 and 8

(d) 2 and 5

(e) None of the above

4. Count each 7 which is not immediately preceded by 5 but is immediately followed either 2 or 3. How many much 7's are there?

57265738373257273482678

- (a) 2
- (b) 3

(c) 4

(d) 5

(e) Nil

5. In the following number sequence how many such even numbers are there which are exactly divisible by its immediate preceding number but not exactly divisible by its immediate following number?

38415728348939421582

- (a) Two
- (b) Three
- (c) Four

(d) More than four (e) One

6. 6R0T4A8%BF1E#W@9HI\$MN\*32V\$5GP7Q

How many such consonants are there in the above arrangement, each of which is immediately preceded by a consonant and immediately followed by a number?

- (a) None (l
- (b) One
- (c) Two
- (d) Three

7. 6R0T4A8%BF1E#W@9HI\$MN\*32V\$5GP7Q

How many such vowels are there in the above arrangement, each of which is immediately preceded by a letter but immediately not followed by a symbol?

- (a) None
- (b) One
- (c) Two
- (d) Three

B. 6R0T4A8%BF1E#W@9HI\$MN\*32V\$5GP7Q

Which of the following is the fourth to left of the twelfth from the left end?

- (a) 8
- (b) B
- (c) 2
- (4) 0/

9. 6R0T4A8%BF1E#W@9HI\$MN\*32V\$5GP7Q

Three of the following four are alike in a certain way based on their positive in the above arrangement and so form a group. Which is the one that does not belong to that group?

- (a) 406
- (b) F%A
- (c) @#1
- (d) \$H9

10. 6R0T4A8%BF1E#W@9HI\$MN\*32V\$5GP7Q

If all the symbols are eliminated from the above arrangement, than which of the following will be the  $5^{th}$  to the right of  $10^{th}$ element from the right end?

- (a) 4
- (b) 5
- (c) V
- (d) A

11. M 3 R # A P 4 9 @ K D 1 U H 5 \$ 2 N \$ W E Q 6 T V 7 \* 8 B X Which of the following elements is the fourth to the right of  $12^{th}$  from right end?

- (a) 9
- (b) 6
- (c) 5
- (d) \$

12. M 3R # AP 49 @ KD1UH5\$2N\$WEQ6TV7\*8BXHow many such numbers are there in the above arrangement which are immediately preceded by a symbol?

- (a) 2
- (b) 1
- (c) None
- (d) 3



#### HSEM1BTECHFASTRACK0719

| 13. | Study  | the | following | arrangement | of | digits, | letters | and |
|-----|--------|-----|-----------|-------------|----|---------|---------|-----|
|     | symbol | v:  |           |             |    |         |         |     |

#### 14KB59#DR2@7MG%HVT38\*1JA

Which of the following is exactly in the middle between the fifth from the left and the ninth from the right?

- (a) #
- (h) 2
- (c)7

- (d) # or 7
- (e) None of these
- Study the following arrangement of digits, letters and symbols and answer the questions given below:

## 14KB59#DR2@7MG%HVT38\*1JA

How many such symbols are there in the above arrangement each of which both immediately preceded and immediately followed by a digit?

- (a) None
- (b) One
- (c) Two

- (d) Three
- (e) None of these
- Study the following arrangement of digits, letters and symbols and answer the questions given below:

### 14KB59#DR2@7MG%HVT38\*1JA

How many such digits are there in the above arrangement each of which immediately preceded as well as immediately followed by a letter?

- (a) None
- (b) One
- (c) Two

- (d) Three
- (e) None of these
- Answer these questions referring to the symbols-letternumber sequence given below:

#### EG4BH75@K8DN£QZ\$W3C19\*LB2S6

How many such consonants are there in the above sequence which are immediately preceded by a symbol and immediately followed by a digit?

- (a) One
- (b) Two
- (c) None

- (d) Three
- (e) More than three
- Use the following series of elements (alpha-numbersymbol) to answer these questions. Every two-digit number (given in brackets) is to be treated as single number.

#### 2 \* 8 56 B 9 \$ Q 3 E 1 7 R D 4 £ (13) U . K (18) A (14) P

If each of the letters in the above series of elements is given a value equivalent to its serial number in the English alphabet, what will be the difference between the sum of the consonants and the sum of the vowels used in the series?

- (a) 109
- (b) 41
- (c)82

- (d) 27
- (e) None of these
- Study the following arrangement of digits, letters and symbols and answer the questions given below:

#### MK3\$RE5F%TUI\*8PHBN2IS#A37D4

How many such consonants are there each of which is either immediately preceded by a number and/or immediately followed by a symbol?

- (a) None
- (b) One
- (c) Two

- (d) Three
- (e) None of these

Study the following arrangement of digits, letters and symbols and answer the questions given below:

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

Four of the following five are alike in a certain way based on the above arrangement and form a group. Which is the one that does not belong to that group?

- (a) 3RF
- (b) %U8
- (c) 8H2

- (d) 1#7
- (e) H8U

20. Answer these questions referring to the letter sequence given below:

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

If letter of above given series are written in reverse order then which letter will be third to the left of eighteenth letter from your right?

- (a) Z
- (b) F
- (c) I

- (d) L
- (e) None of these
- In the following number series how many such 7's are 21. there which are immediately preceded by a pair of numbers whose product is more than the product of pair of numbers immediately following 7?

22713948765428357465978643974652

- (a) 1
- (b) 4
- (c)2

- (d) 3
- (e) None of these
- 22. Study the following letter/number series to answer these questions:

#### F6Z71T3UXR529P4BA78D46FGH2P3QR

How many letters are there in the series which are immediately preceded as well as immediately followed by a number?

- (a) 2
- (b) 3
- (c) 5

- (d) 4
- (e) None of these
- Study the following letter/number series to answer these questions:

#### F6Z71T3UXR529P4BA78D46FGH2P3QR

How many numbers are there in the series which are immediately preceded by a number and immediately followed by a letter?

- (a) 4

- (d) 5
- Study the following letter-symbol-number series and answer the questions given below:

#### 58#BFL \ 4 \* M J 9 G N 2 W 3 + S 4 \ P Q 6 R 7 . H T

If the positions of the first and the sixteenth element, second and seventeenth element and so on up to the fifteenth and the last element are interchanged, which letter/number/symbol will be sixteenth to the right of twentieth letter/numbers/symbol from the right?

- (a) 9
- (b) B

- (d) #
- (e) None of these



#### HSEM1BTECHFASTRACK0719

25. Study the following arrangement carefully and answer the questions given below:

R J 3 D # T M 9 % P E \$ K 2 H A \* N 5 I \* 4 6 U 7 B I V 8 F

How many such consonants are there in the above arrangement, each of which is immediately preceded by a symbol but not immediately followed by a vowel?

- (a) None
- (b) One

- (d) Three
- (e) More than three

#### REASONING ABILITY

#### SESSION - 15

### & ATTENTION TO DETAIL - II

Directions for Q1 to Q5: Follow the directions given below to answer the questions that follow. Your answer for each question below would be

- (A) If ALL THREE items given in the question are exactly ALIKE.
- (B) If only the FIRST and SECOND items are exactly ALIKE.
- (C) If only the FIRST and THIRD items are exactly ALIKE.
- (D) If only the SECOND and THIRD items are exactly ALIKE.
- (E) If ALL THREE items are DIFFERENT.
- 0452-9858762, 0452-9858762, 0452-9858762 1.
  - (a) A
- (b) B
- (c) C
- (d) D
  - (e) E
- 2. NIINIININN, NIININNINN, NIINIININN
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- LLMLLLKLMPUU, LLMLLLKLMPUU, LLMLLLKLMPUU
  - (a) A
- (c) C

(d) D

- (e) E
- 4665.8009291, 4665.7999291, 4665.8009291
- (b) B
- (c) C

(c) C

- (e) E
- 808088080.8080, 808008080.8080, 808088080.8080 5.
  - (a) A
- (b) B

- (d) D (e) E

Directions for Q6: Select one of the options from the given choices.

- (A) If ALL THREE items in the given question are ALIKE.
- (B) If only the FIRST and the SECOND items are exactly ALIKE.
- (C) If only the FIRST and THIRD items are exactly ALIKE.
- (D) If only the SECOND and THIRD items are exactly ALIKE.
- (E) If all THREE Items are DIFFERENT.
- MNMNNNMM, MNMMNMNNN, MNMNNNMM
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E

- If \* stands for / 7.
  - / stands for -
  - + stands for \*
  - and stands for +
  - Then 9/8\*7+5-10=?
  - (a) 13.3
- (b) 10.8
- (c) 10.7
- (d) 11.4

- If \* stands for /
  - / stands for -
  - + stands for \*
  - stands for +

Then 9/15\*9+2-9 = ?

- (a) 14.7
- (b) 15.3
- (c) 14.1
- (d) 16.2

- If \* stands for /
  - / stands for -
  - + stands for \*
  - and stands for +
  - then 36/12\*4+50-8 = ?
  - (a) -106
- (b) -189
- (c) -1909
- (d) None of these
- 10. In the following question, the following letters indicate mathematical operations as indicated below:
  - A: Addition
  - V: Equal to
  - S: Subtraction
  - W: Greater than
  - M: Multiplication
  - X: Less than
  - D: Division

Out of the four alternatives given to this question, only one is correct according to the above letter symbols. Identify the correct one.

- (a) 6 S 7 A 2 M 3 W 0 D 7
- (b) 6 A 7 S 2 M 3 W 0 A 7
- (c) 6 S 7 M 2 S 3 W 0 M 7
- (d) 6 M 7 S 2 A 3 X 0 D 7
- 11. If \* stands for -
  - / stands for +
  - + stands for / and - stands for \*

Then which of the following is TRUE?

- (a) 16/8\*6+90-12 = 23.2
- (b) 8\*12/6+90-12=7.2
- (c) 16\*6/8+16-12 = -4.1
- (d) 12\*16/6+90-12 = 8

## HSEM1BTECHFASTRACK0719

12. If \* stands for -

/ stands for +

+ stands for /

and - stands for \*

Then which of the following is TRUE?

- (a) 16\*4/18+16-8 = -10.1
- (b) 18\*8/4+40-8 = -2.8
- (c) 16/18\*4+40-8 = 33.2
- (d) 8\*16/4+40-8 = -2
- 13. Which of the following matches the pattern AS%T88%43?
  - (a) AS%T88&53
- (b) AS%T88%43
- (c) AS%t88%43
- (d) AS<sup>^</sup>%<sup>7834</sup>
- 14. Find out the number of times letter 's' occurs in the given sentence:

"I saw Susie sitting in a shoe shop. Where she sits she shines, and where she shines, she sits"

15. Which of the given options can be formed using the letters of the following set only once?

{o, m, t, d, b, a, z, i, t, e, k}

- (a) Cobra
- (b) Kitten
- (c) Toddle
- (d) Zombie

## Directions for Q16 to 20:

- (A) All three are same
- (B) Only 1 and 2 same
- (C) Only 1 and 3 same
- (D) None of these
- 16. GGGGMMMGG, GGGGMMMGGG, GGGGMGMGGG
  - (a) A
- (b) B
- (c) C
- 17. 7765.878762342, 7765.878762342, 7765.878762342
  - (a) A
- (b) B
- (c) C
- (d) D
- 18. 5364.1980886, 5364.1980786, 5364.1979886
  - (a) A
- (b) B
- (c) C
- (d) D
- 19. papanicolaou, papanicolaou, papanicolaou
  - (a) A
- (b) B
- (c) C
- (d) D
- 20. skeptic should, skeptick should, sckeptic should
  - (a) A
- (b) B
- (c) C
- (d) D

**Directions for Q21 to Q25:** Follow the directions given below to answer the questions that follow. Your answer for each question below would be:

- (A) If ALL THREE items given in the question are exactly ALIKE.
- (B) If only the FIRST and SECOND items are exactly
  ALIKE
- (C) If only the FIRST and THIRD items are exactly ALIKE.
- (D) If only the SECOND and THIRD items are exactly ALIKE.
- (E) If ALL THREE items are DIFFERENT.

- 21. 0427-4567324, 0427-4567154, 0427-4567324
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- 22. HHMKKKJKNOII, HHMKKKJKNOII, HHMKKKJKNOII
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- 23. YXXYXXYXYY, YXXYYXYXYY, YXXYXXYXXY
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- 24. 7661637.8787, 7666137.8787, 7666137.8787
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- 25. 101100110.0101, 101100110.0101, 101100100.0101
  - ) A
- (b) B
- (c) C
- (d) D
- (e) E
- 26. LLEEJILLJIFIIJ, LILEEJLLJIFIIJ, LLEEJLILJIFIIJ
  - (a) A
- (b) B
- (c) C
- (d) D
- (e) E
- 27. How many circles are there in the adjoining figure?



28. What is the minimum number of straight lines that is needed to construct the figure?



29. Count the number of rectangles in the given figure.



30. What is the minimum number of colours required to fill the spaces in the given diagram without any two adjacent spaces having the same color?

