## MATRIX

The topic deals with the questions related to two matrices of letters and numbers. Each letters on be denoted by a set of two numbers. In given matrices the first number indicates the in her while the second number represented the column number. By this information's Candidate have to identify the code for given word.

Direction ( $\mathbf{1}$ to $\mathbf{5}$ ): A word is represented by one set of numbers as given in anyone of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below.
The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9 . A letter from these matrices can be represented first by its row and next by its column, e.g., can be represented by 0012,23 etc. and ' $P$ can be represented by $58,69,75$ etc. Similarly, you have to identify the set for the word given in each question.

|  | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | A | R | S | N | C |
| 1 | N | C | A | R | S |
| 2 | S | N | C | A | R |
| 3 | R | S | N | C | A |
| 4 | C | A | R | S | N |

Matrix II

|  | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Q | E | L | P | T |
| 6 | T | O | E | L | P |
| 7 | P | T | O | E | L |
| 8 | L | P | T | O | E |
| 9 | E | L | P | T | O |

EXAMPLE (1): PAST
(a) $75,2114,65$
(b) $86,12,31,76$
(c) $58,41,12,67$
(d) $88,77,41,67$

Solution: (b)
According to the question, we can arrange the set for word PAST as
$\mathrm{P} \rightarrow 58,69,75,86,97$
$\mathrm{A} \rightarrow 00,12,23,34,41$
$S \rightarrow 02,14,20,0,43$
$\mathrm{T} \rightarrow 59,65,76,87,98$
So, set of word PAST will be : $86,12,31,76$.
Example (2) : RATE
(a) $13,12,98,67$
(b) 42, 23, 56, 76
(c) $30,14,95,89$
(d) $24,43,89,95$

Solution: (a)
According to the question, we can arrange the set for word
RATE as
$R \rightarrow 01,13,24,30,42$
$A \longrightarrow 00,12,23,34,41$
$\mathrm{T} \rightarrow 59,65,76,87,98$,
$\mathrm{E} \longrightarrow 56,67,78,89,95$

So. set for word RATE will be $13,12,98,67$.

## Example (3) : POET

(a) $69,88,67,65$
(b) $75,55,65,67$
(c) $77,88,98,78$
(d) $75,66,76,78$

Solution: (a)
According to the question, we can arrange the set I'm word POET as
$P \rightarrow 58,69,75,86,97$
$0 \rightarrow 55,66,77,88,99$
$\mathrm{E} \rightarrow 56,67,78,89,95$
$T \rightarrow 59,65,76,87,98$
So, set for word POET will be 69, 88, 67, 65

## Example 4: NEST

(a) $32,56,20,89$
(b) 10, 65, 41, 76
(c) $32,76,34,98$
(d) $21,67,14,59$

Solution: (d)
According to the question, we can arrange the set for word NEST as
$\mathrm{N} \rightarrow$ 03, 10,21, 32, 44
$\mathrm{E} \rightarrow 56,67,78,89,95$
$S \rightarrow 0214,20,31,43$
$T \rightarrow 59,65,76,87,98$
So, set for word NEST will be $21,67,14,59$

## Example 5: PEST

(a) $97,89,34,59$
(b) $58,67,43,98$
(c) $57,59,31,98$
(d) $68,95,31,76$

Solution: (b)
According to the question, we can arrange the set for word PEST as
$\mathrm{P} \rightarrow \quad 58,69,75,86,97$
$\mathrm{E} \rightarrow \quad 56,67,78,89,95$
$S \rightarrow 02,14,20,31,43$
$T \rightarrow 59,65,76,87,98$
So, set for word PEST will be $58,67,43,98$

## Example 6:

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix li are numbered from 5 to 9 . A letter from these matrixes can be represented first by its row and next by its column eg: " $B$ " can be represented by 01,31 , etc.,, and " $P$ " can be represented by 67.75 ,etc., Similarly, you have to identify the set for the word ":CARD"

| Matrix I |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  0 1 2 3 4 <br> 0 A B C D E <br> 1 D C B A E <br> 2 B A D C E <br> 3 D B C A E <br> 4 C D A E B |  |  |  |  |  |

Matrix II

|  | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | P | Q | R | S | T |
| 6 | Q | S | P | R | T |
| 7 | P | T | R | S | Q |
| 8 | Q | S | P | R | T |
| 9 | T | P | S | Q | R |

Solution: (c)
According to the question, we can arrange the set for word CARD as
$C \rightarrow 02,11,23,32,40$
$A \rightarrow 00,13,21,33,42$
$R \rightarrow 57,68,77,88,99$
$D \rightarrow 03,10,30,41$
So, set for word CARD will be II, 33, 57, 22.
Example 7: A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix 1 are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9 . A letter from these matrices can be represented first by its row and next by its column, e.g., 'A' can be represented by $01,20,42$ etc., and ' $H$ ' can be represented by $65,57,98$, etc., Similarly you have to identify the set for the word given in the question.

Matrix I

|  | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | F | A | N | O | I |
| 1 | I | O | F | A | N |
| 2 | A | N | O | I | F |
| 3 | O | F | I | N | A |
| 4 | N | I | A | F | O |

a. $24,31,10,59,57$
b. $12,20,40,68,65$
c. $31,34,23,76,79$
d. $43,42,41,78,89$

Solutio ( C )

| F | $=$ | $00,12,24,31,43$ |
| :--- | :--- | :--- |
| A | $=$ | $01,13,20,34,42$ |
| I | $=$ | $04,10,23,32,41$ |
| T | $=$ | $59,68,76,87,95$ |
| H | $=57,65,79,86,98$ |  |

FAITH $=31,34,23,76,79$

## PRACTICE QUESTIONS

## DIRECTION(1-5) :

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix 1 are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. . A letter from these matrices can be represented first by its row and next by its column, e.g., ' $A$ ' can be represented by $55,77,88$ etc., and ' $U$ ' can be represented by $10,02,23$ etc., Similarly you have to identify the set for the word given in the question -

|  | Matrix I |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 |
| 0 | G | N | U | F | Q |
| 1 | U | G | E | C | F |
| 2 | B | F | Q | U | N |
| 3 | L | G | B | C | F |
| 4 | F | E | L | D | B |

## 1. FEAR

(a) $21,34,56,79$
(b) $40.34,88,96$
(c) $03,1277,56$
(d) $03,41,65,96$
2. GUMS
(a) $00,11,75,65$
(b) $31,02,97,87$
(c) $00,23,75,97$
(d) $13,23.75,59$
3. LOVE
(a) $30,67.76,34$
(b) $42,68.99,12$
(c) $03,67,99,34$
(d) $30,67,99,12$
4. NOSE
(a) 01, 76, 59, 43
(b) 01. 77. 65. 38
(c) $24,67,65,34$
(d) $24,67,59,35$

## 5. HUNT

(a) 68, 23, 42, 98
(b) 68, 10, 42, 86
(c) $76,10,01,86$
(d) 69, 23, 01, 88

## ANSWER

1. C
2.B
3.D
4.C
5.C
