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Tel: 0121-7156203, 7156204

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PREFACE

Institute of Banking Personnel Selection , often known as IBPS is an autonomous body in India. It is envisioned as a self governed academic and research oriented institute with a mission of enhancing human resource through personnel assessment. From 2011 onwards a common written examination (CWE) is organised by the IBPS for the post of Probationary Officers. The examination is held every year. This CWE conducted by IBPS is now mandatory for anyone who seeks an employement in 20 public sector banks and some private banks also. IBPS periodically accepts the examination applications from the candidates at their website and the exams are organised at various locations throghout the country in online mode.

Reasoning is an equally weighted section in the examination. Reasoning tests your Logical and analytical skills. Importance of reasoning is constantly getting the center stage in today's competitive environment. Reasoning, thus forms an integral part of the Banking examination and it can be a hard nut to crack if the students are not familiar with the nuances of the subject.

The book at hand helps in cracking this hard nut by gradually building up the core analytical & logical concepts, starting from a very basic level. Examination papers of the past 20 years have been fully solved and a fine topical division ensures that no section has been left uncovered. Each chapter begins with an overview of the key concepts/analytical or logical that would be used in the chapter. The book doesn't require the reader to have advanced logics, instead helps the reader to develop such abilities in due course. The language used is kept simple and intricacies have been avoided as far as possible. Alternate solutions, wherever possible have been provided.

A thorough study of this book would not only pave the way for you in this era of cut-throat competition but would also help you untangle the intricacies of Reasoning.

Author

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Topicwise Distribution of Questions asked in the

PREVIOUS YEARS' EXAMS

Held in 2019, 2018 and 2017

S. NO.	TOPIC	IBPS (PO) Mains 2019	IBPS (PO) Pre. 2019	SBI (PO) Mains 2019	SBI (PO) PRE 2019	IBPS (PO/MT) PRE 2018
1.	Analogy					
2.	Series	1				
3.	Classification				1	1
4.	Alphabet Test		3	3	1	1
5.	Number and Time Sequence Test					
6.	Coding-Decoding		5	5	1	5
7.	Sitting Arrangement		8		13	15
8.	Inequality	2	4			5
9.	Blood Relation	2	3	2	7	
10.	Direction Test	3		1		3
11.	Input-Output	7		5		
12.	Ranking				3	
13.	Syllogism		4		4	
14.	Puzzle	25	8	20	5	5
15.	Data Sufficiency			2		
16.	Data Analysis					
17.	Statement and Assumptions	1				
18.	Statement and Course of Action			2		
19.	Statement and Arguments					
20.	Miscellaneous	4		5		
	Total	**45**	**35**	**45**	**35**	**35**

Topicwise Distribution of Questions asked in the
PREVIOUS YEARS' EXAMS
Held in 2019, 2018 and 2017

S. NO.	TOPIC	CANARA BANK (PO) 2018	IBPS (SO) PRE 2017	SBI (PO) PRE 2017	SBI (PO) MAINS 2017	IBPS RRB (PO) PRE 2017
1.	Analogy					
2.	Series					1
3.	Classification		1			
4.	Alphabet Test					2
5.	Number and Time Sequence Test		1	1	3	2
6.	Coding-Decoding		1	1		5
7.	Sitting Arrangement	5	15	1	2	15
8.	Inequality	4	5	5		5
9.	Blood Relation		3	1	2	
10.	Direction Test		3	1		
11.	Input-Output				5	
12.	Ranking	1	1	3		
13.	Syllogism	5	5			5
14.	Puzzle	22	15	22	20	5
15.	Data Sufficiency	4			2	
16.	Data Analysis				1	
17.	Statement and Assumptions	2			4	
18.	Statement and Course of Action	1			2	
19.	Statement and Arguments				1	
20.	Miscellaneous	6			3	
	Total	**50**	**50**	**35**	**45**	**40**

1

Analogy

Analogy means similarity or resemblance of one object to another in a certain way. The questions based on analogy, you are given a pair of words or letters having certain relationship. From the alternative provided, you have to select the choice that best matches the relationship existing between the first two words or letters. The given pair of words or letters is set off by a colon or ratio sign (:) signifying that word X is related to word Y. The double colon (: :) that separates the given pair stands for ''In the same way''.

Analogy is divided into following types

1. Number Analogy

In number analogy, numbers are given in pair or group and the candidate has to find the relationship between the numbers or group of numbers.

The relationship in number analogy can be of following types

  (i) Total number of digits   (ii) Square and square roots of digits

 (iii) Cube and cube roots of digits   (iv) Multiplication and division of numbers

  (v) Even and odd numbers

Ex. 1 Find the number that replaces the question mark.

    957 : 735 : : 833 : ?

    (a) 338   *(b)* 383   *(c)* 611   *(d)* 683   *(e)* 689

  Sol. *(c)* As $9 - 2 = 7$, $5 - 2 = 3$, $7 - 2 = 5$ Similarly, $8 - 2 = 6$, $3 - 2 = 1$, $3 - 2 = 1$

2. Letter Analogy

Letter analogy contains the relationship between the letters or group of letters. The candidate has to remember the position of letters in English alphabetical order and find out the relationship between the given letters or group of letters.

The relationship between the letters are of following types

  (i) Increment or decrement in position of letters

 (ii) Reverse order of position

 (iii) Vowel or consonant

Shortcut for Letter Analogy

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Ex. 2 KNQT : LORU : : ADGJ : ?

(a) BEHK   (b) FHLO   (c) DGEF   (d) MPVW
(e) CFIL

Sol. *(a)* As

```
      K   N   Q   T
   +1│ +1│ +1│ +1│
      ↓   ↓   ↓   ↓
      L   O   R   U
```

Similarly,

```
      A   D   G   J
   +1│ +1│ +1│ +1│
      ↓   ↓   ↓   ↓
     [B   E   H   K]
```
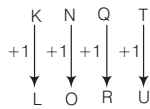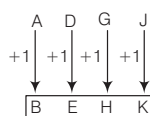
3. Word Analogy

In word analogy, candidates have to find the relationship between given words in a pair.

The relationships between the words are of following types

  (i) Cause and effect
 (iii) State and capital
  (v) Animal and their young one's
 (vii) Quantity and unit
 (ix) Instrument and measurement
 (xi) Metal and ore

  (ii) Whole and part
 (iv) Country and currency
 (vi) Synonyms and antonyms
(viii) Study and topic
  (x) Animal and sound
(xii) Worker and tool

Ex. 3 Boat : Oar : : Bicycle : ?

(a) Pedal   (b) Seat   (c) Road   (d) Wheel
(e) None of these

Sol. *(a)* Second denotes that part of the first, on which the effort is applied to move it.

In dealing with analogy questions, the following rules should be observed

  (i) Analyse the relationship between the question pair i.e. before the double colon (::).
 (ii) Look for the pair of words among the answer choices with a similar relationship.
(iii) If more than one answer choice seems to fit, re-examine the relation in the question pair.
(iv) Eliminate answers that do not appear to be the related words.
 (v) Parts of speech must be the same in the related words.

QUESTIONS with
Detailed Explanation

1. 'Gram' is relatd to 'Mass' in the same way as 'Centimetre' is related to

(a) Area   (b) Volume
(c) Length   (d) Sound
(e) Energy

⊙ **(c)** As, 'Gram' measures the mass of a body, in the same way, centimetre measures the length of a body.

2. 'Mustard' is related to 'Seed' in the same way as 'Carrot' is related to

(a) Fruit   (b) Stem
(c) Flower   (d) Root
(e) None of these

⊙ **(d)** Mustard is an oilseed (seed). Similarly, carrot is a modified root.

3. Which of the following pairs of words have the same relationship as Fan : Heat?

(a) Water   :   Drink
(b) Light   :   Night
(c) Teach   :   Student
(d) Air   :   Breathe
(e) Food   :   Hunger

⊙ **(e)** As, fan in necessary to remove heat, in the same way food is necessary to remove hunger.

4. 'Radish' is related to 'Root', in the same way as 'Brinjal' is related to

(a) Fruit   (b) Stem
(c) Flower   (d) Root
(e) None of these

⊙ **(a)** As, radish is the root of a plant, similarly brinjal is the fruit of a plant.

5. 'Jackal' is related to 'Carnivorous', in the same way as 'Goat' is related to

(a) Omnivorous
(b) Carnivorous
(c) Herbivorous
(d) Multivorous
(e) None of the above

⊙ **(c)** Jackal is a carnivorours animal, in the same way, goat is a herbivorous.

6. Which of the following pairs has similar relationship as Run : Race?

(a) Party : Dance   (b) Study : Book
(c) Lecture : Study   (d) Enjoy : Journey
(e) None of these

⊙ **(d)** In race we run, similarly in journey we enjoy.

7. Which of the following has the same relationship as that of
Money : Wealth?

(a) Pity : Kindness   (b) Cruel : Anger
(c) Wise : Education (d) Pride : Humility
(e) None of these

⊙ **(a)** Money add in our wealth, similarly pity add in our kindness.

8. Which of the following is related to 'Melody', in the same of way as 'Delicious' is related to 'Taste'?

(a) Memory   (b) Highness
(c) Tongue   (d) Speak
(e) Voice

⊙ **(e)** As, taste is delicious, similarly voice is melodious.

9. 'Offhand' is related to 'Premeditation' in the same way as 'Above board' is related to

(a) Integrity   (b) Honesty
(c) Guide   (d) Competition
(e) None of these

⊙ **(d)** Above board is related to competition.

10. 5 : 7 : : ? : 28

(a) 20   (b) 14   (c) 56   (d) 26
(e) None of these

⊙ **(a)** As, $\frac{5}{7} = \frac{x}{28}$, $x = 20$

Directions (Q. Nos. 11-12) *From the sets of numbers in the four alternatives given below, which is the most similar to the given set.*

11. Given Set : (6, 15, 28)

(a) (50, 59, 71)   (b) (46, 56, 66)
(c) (60, 69, 72)   (d) (60, 69, 82)
(e) None of these

⊙ **(d)** As, 6 + 9 = 15, 15 + 13 = 28
So, 60 + 9 = 69 , 69 + 13 = 82

12. Given Set : (81, 77, 69)

(a) (56, 52, 44)   (b) (64, 61, 53)
(c) (92, 88, 79)   (d) (75, 71, 60)
(e) None of these

⊙ **(a)** As, 81 − 4 = 77 , 77 − 8 = 69
Similarly, 56 − 4 = 52 , 52 − 8 = 44

13. Which one is different from the remaining three?

(a) GIJK   (b) DFGH (c) CEFG (d) ABCD
(e) None of these

⊙ **(d)** In others, there is a gap of one letter between the first and the second letters of the group.

14. Three of the following four are alike in certain way and so form a group. Which is one that does not belong to the group?

(a) 71   (b) 73   (c) 77   (d) 67
(e) None of these

⊙ **(c)** 77 does not belong to that group because others are prime number while 77 is not a prime number.

15. Unscramble the letters in the given words and find the odd one out.
(a) UMRSME   (b) EIWNTR
(c) PIGRSN   (d) LCUOD
(e) None of these

⊙ **(d)** LCUOD is odd one because other letters when rearranged provide name of seasons like summer, winter and spring.

Directions (Q. Nos. 16-18) *Each of these questions consists of a pair of words. Establish the relationship among the given pair and identify the pair that best illustrates a similar relationship from amongest the alternatives.*

16. Kick : Football
(a) Mop : Sweep   (b) Dust : Rage
(c) Wash : Dishes   (d) Throw : Ring
(e) None of these

⊙ **(d)** Kick is related to football, same as throw is related to ring.

17. Rectangle : Pentagon
(a) Triangle : Rectangle
(b) Diagonal : Perimeter
(c) Side : Angle
(d) Circle : Square
(e) None of the above

⊙ *(a)* Rectangle is a four sided figure while pentagon is a five sided figure, i.e. one side more. Similarly, triangle has one more side than rectangle.

18. Inherit : Acquire
(a) Instinct : Habbit
(b) Learn : discover
(c) Loss : Gain
(d) Hirearchial : Succession
(e) None of the above

⊙ *(a)* Inherit is related to acquire. Same as, Instinct is related to habbit.

Directions (Q. Nos. 19-20) *Each of these questions consists of a pair of words bearing a certain relationship. From amongst the given alternatives, pick up the pair that best illustrates a similar relationship.*

19. Court : Justice
(a) Police : Crime   (b) Teacher : Study
(c) Doctor : Sickness
(d) Auditor : Accuracy
(e) None of these

⊙ *(b)* Court is a place where trials or other law cases are held and justice is delivered. Similarly, teacher facilitates study.

20. Coal : Thermal
(a) Power : Energy
(b) Bulb : Light
(c) Air : Atmosphere
(d) Water : Hydel
(e) None of the above

⊙ *(d)* Coal is used to generate thermal power. Similarly, water is used to produce hydel power.

Practice Questions

Prelims

1. Choose the option that express the same relationship as the word Tobacco : Cancer, has
(a) Milk : Food
(b) Bud : Flower
(c) Soil : Eroson
(d) Mosquito : Malaria
(e) Honeybee : Wax

2. 'Flower' is related to 'Petal', in the same way as 'Book' is related to
(a) Pages   (b) Content
(c) Author
(d) Library
(e) None of these

3. An 'Island' is related to 'Sea' in the same way as an 'Oasis' is related to
(a) Water
(b) Illusion
(c) Pond
(d) Trees
(e) Desert

4. A 'Traveller' is related to 'Journey' in the same way as a 'Sailor' is related to
(a) Ship   (b) Crew
(c) Water   (d) Voyage
(e) Navy

Directions (Q. Nos. 5-7) *In each of the following questions, two words are given to the left side of the sign (: :) and one word and a question mark are given to the right side of the sign (::), select one word from the given alternatives which bears the same relationship to the word given to the right side of sign (: :) as that of the words given to the left side of the sign (::).*

5. Video : Cassette : : Computer : ?
(a) Reels   (b) Recordings
(c) Files   (d) Floppy
(e) CPU

6. Magazine : Editor : : Drama
(a) Director   (b) Player
(c) Manager
(d) Actor
(e) None of these

7. King : Throne : : Rider : ?
(a) Chair   (b) Horse
(c) Seat   (d) Saddle
(e) None of these

8. In the English alphabet, 'ADG' is to CPU in the same way as 'EGJ' is to
(a) FIL   (b) FJM
(c) FIM   (d) FIN
(e) None of these

Directions (Q. Nos. 9-10) *In each of the following questions, there is same relationship between the two terms of the left of (: :) and the same relationship holds between the two terms to its right. Also in each question, one term to the right of (: :) is missing. This term is given as one of the alternatives, from the below each question. Find out this term from the given alternatives.*

9. AFHO : GBDJ : CHFM : ?
(a) GBIM   (b) GBLD
(c) GPLD   (d) IDBH
(e) GBMD

10. AZCX : BYDW : : HQJO : ?
(a) GREP   (b) IPKM
(c) IPKN   (d) GRJP
(e) IPGR

Mains

1. Select the missing characters from the given responses.
   AGMSY, CIOUA, EKQWC, ?
   IOUAG, KQWCI
   (a) GMSYE   (b) FMSYE
   (c) GNSYD   (d) FMYES
   (e) GNYSD

2. Select the related letters from the given alternatives.
   ABCD : WXYZ : EFGH : ?
   (a) STUV   (b) ZYXW
   (c) VUTS   (d) WXZY
   (e) VWST

3. 'If' is related to 'Condition' in the same way as 'But' is related to
   (a) Disapproval   (b) Negation
   (c) Contradiction (d) Strengthen
   (e) Opposition

Directions (Q. Nos. 4-6) *From the sets of numbers in the four alternatives given below, which is the most similar to given set*

4. Given Set : (7, 77, 140)
   (a) (8, 80, 166)
   (b) (9, 88, 180)
   (c) (8, 88, 160)
   (d) (10, 110, 300)
   (e) (7, 26, 35)

5. Given set : (32, 24, 8)
   (a) (26, 32, 42)   (b) (34, 24, 14)
   (c) (24, 16, 0)   (d) (42, 34, 16)
   (e) None of the above

6. Given set : (56, 52, 36)
   (a) (95, 90, 65)   (b) (85, 80, 50)
   (c) (60, 70, 90)   (d) (45, 55, 65)
   (e) (47, 35, 66)

Directions (Q. Nos. 7-9) *The following questions consists of two words each that have certain relationship between each other, followed by four lettered pairs of words. Select the relationship as the original pair of words.*

7. Surgeon : Scalpel
   (a) Musician : Instrument
   (b) Carpenter : Cabinet
   (c) Sculptor : Chisel
   (d) Baker : Oven
   (e) None of the above

8. Horse : Hoof : : ?
   (a) Man : Foot   (b) Dog : Black
   (c) Paise : Rupee   (d) Pen : Pencil
   (e) None of the above

9. Chair : Wood : : ?
   (a) Book : Print   (b) Mirror : Glass
   (c) Plate : Food   (d) Purse : Money
   (e) None of the above

Directions (Q. Nos. 10-12) *In each of the following questions, there is a certain relationship between two given numbers on one side of (: :) and one number is given on the other side of (: :), while another number is to be found from the given alternatives having the same relationship with this number as the numbers of the given pair. Choose the best alternatives.*

10. 6524 : 9638 : : ?
    (a) 9825   (b) 9736
    (c) 9697   (d) 9579
    (e) None of these

11. 1, 2, 4, 7 : 3, 4, 6, 9 : : ? : 2, 3, 5, 8
    (a) 0, 1, 3, 6
    (b) 2, 4, 5, 8
    (c) 1, 3, 4, 7
    (d) 3, 5, 6, 8
    (e) 3, 4, 6, 7

12. 583 : 488 : : 293 ?
    (a) 581   (b) 291
    (c) 387   (d) 487
    (e) 287

13. In this pyramid, if 11 22 31 : 12 21 32 : : 9
    ```
                        1
                     2  3  4
                  9  8  7  6  5
              10 11 12 13 14 15 16
           25 24 23 22 21 20 19 18 17
        26 27 28 29 30 31 32 33 34 35 36
    ```
    (a) 2 7 1 4   (b) 8 13 20
    (c) 6 15 18   (d) 10 23 30
    (e) 12 21 32

Directions (Q. Nos. 14-15) *In each of the following questions, choose that word which has the same relationship among the given three words.*

14. Yuan, Kyat, Lira
    (a) Dirham
    (b) Turkey
    (c) Madrid
    (d) Mass
    (e) None of the above

15. Peat, Bituminous, Lignite
    (a) Coke
    (b) Granite
    (c) Basalt
    (d) Anthracite
    (e) None of the above

Answers

Prelims

| **1.** (d) | **2.** (a) | **3.** (e) | **4.** (d) | **5.** (d) | **6.** (a) | **7.** (c) | **8.** (c) | **9.** (d) | **10.** (c) |

Mains

| **1.** (a) | **2.** (a) | **3.** (c) | **4.** (c) | **5.** (c) | **6.** (a) | **7.** (c) | **8.** (a) | **9.** (b) | **10.** (d) |
| **11.** (a) | **12.** (c) | **13.** (b) | **14.** (a) | **15.** (d) | | | | | |

02

Series

Series is a sequential order of letters, numbers or a combination of both arranged in such a way that each term in the series is obtained according to some specific pattern. Questions from this chapter are asked on number pattern or letter pattern or both. A group of numbers or letters is given in arranged order.

A particular place is left blank in the series. Students are expected to choose the correct option and fill the blank. By these questions, the motive is to check the ability of candidates to calculate fast. It is also examined that how fast a candidate establishes relationship among given elements of the series.

Let us discuss some example to understand series

Number Series

Ex. 1 Replace the question mark (?) in the given series with suitable option.

$$5, 11, 24, 51, 106, ?$$

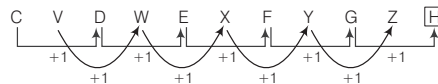**Sol.** In the given series, following pattern is used

Letter Series

Ex. 2 What comes in place of question mark (?) in the series given below?

$$C, V, D, W, E, X, F, Y, G, Z, ?$$
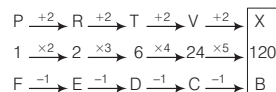
Sol. The series has two part as shown below

Alpha Numeric Series

Ex. 3 Replace the question mark (?) with suitable option.

$$P1F, R2E, T6D, V24C, ?$$

Sol. The pattern is as follows

QUESTIONS *with*
Detailed Explanation

1. What should come in place of question mark (?) in the following series based on the above arrangement?
YC, WE, TH, PL, ?

[IBPS RRB PO (Pre) 2017]
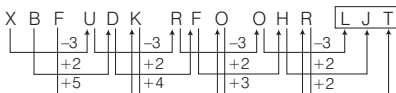
(a) KQ
(b) KP
(c) LQ
(d) LP
(e) Other than the given options

⊛ **(a)** Y $\xrightarrow{-2}$ W $\xrightarrow{-3}$ T $\xrightarrow{-4}$ P $\xrightarrow{-5}$ $\boxed{K}$
  C $\xrightarrow{+2}$ E $\xrightarrow{+3}$ H $\xrightarrow{+4}$ L $\xrightarrow{+5}$ $\boxed{Q}$

2. The following series is based on the English alphabets. Which one of the following will come in place of the question mark in the given alphabetical series?
XBF, UDK, RFO, OHR, ?

[IBPS RRB PO (Pre) 2016]

(a) LKU   (b) MKS
(c) LJT   (d) MJS
(e) LJV

⊛ **(c)**

X B F   U D K   R F O   O H R $\boxed{L\ J\ T}$
  −3↑   −3↑   −3↑   −3↑
  +2   +2   +2   +2
  +5   +4   +3   +2

3. What should come next in the following number series?
0 2 4 6 2 3 0 2 4 6 4 5 0 2 4 6 6 7 0 2 ?

[United India Insurance (AO) 2013]

(a) 4   (b) 2
(c) 6   (d) 8
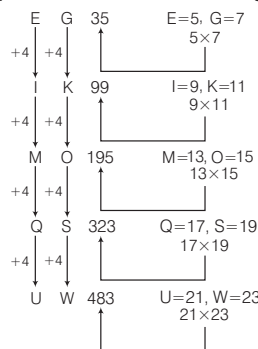(e) 5

⊛ **(a)** The pattern is as follows

0246	23
0246	45
0246	67
02$\boxed{4}$	...

4. What will be there in the place of question mark in the following series?
E G 3 5, I K 9 9, M O 1 9 5, Q S 3 2 3, ?

[Corporation Bank (PO) 2010]

(a) UW483
(b) ZA26
(c) TU420
(d) ST380
(e) None of the above

⊛ **(a)** Here, the series is in following pattern.

E G	35	E=5, G=7 5×7
+4 +4		
I K	99	I=9, K=11 9×11
+4 +4		
M O	195	M=13, O=15 13×15
+4 +4		
Q S	323	Q=17, S=19 17×19
+4 +4		
U W	483	U=21, W=23 21×23

5. What should come next in the following letter series?
A Z A B Y A B C X A B C D W A B C D E V A B C D E

[Indian Overseas Bank (PO) 2009]

(a) U   (b) T
(c) A   (d) G
(e) None of these

⊛ **(e)** Letter series will be formed as follows
AZ, ABY, ABCX, ABCDW, ABCDEV, ABCDE$\boxed{F}$

6. What should come next in the following letter series?
H G F E D C B A G F E D C B A G F E D C B

[Corporation Bank (PO) 2009]

(a) E   (b) G
(c) F   (d) B
(e) None of these

⊛ **(c)** The series is as follows
H G F E D C B A, G F E D C B A,
G F E D C B, $\boxed{F}$ E D C B
Next letter series = F

7. What should come next in the following letter series?
Z X V T R P N L J Y W U S Q O

[RBI Grade Officer 2009]

(a) M   (b) K
(c) H   (d) J
(e) None of these

⊛ **(a)** The series is in the following pattern.
Z $\xrightarrow{-2}$ X. $\xrightarrow{-2}$ V $\xrightarrow{-2}$ T $\xrightarrow{-2}$ R $\xrightarrow{-2}$ P $\xrightarrow{-2}$ N
$\xrightarrow{-2}$ L $\xrightarrow{-2}$ J, Y $\xrightarrow{-2}$ W $\xrightarrow{-2}$ U $\xrightarrow{-2}$ S
$\xrightarrow{-2}$ Q $\xrightarrow{-2}$ O $\xrightarrow{-2}$ $\boxed{M}$

8. Which of the following should come next in the given sequence of numbers?
2 4 3 2 4 3 1 2 4 3 1 2 2 4 3 1 2 3 2 4 3 1 2 3

[NABARD (PO) 2009]

(a) 2   (b) 3
(c) 4   (d) 5
(e) None of these

⊛ **(c)** The sequence of numbers are
243 2431 24312 243123 243123$\boxed{4}$

9. What should come next in the following letter series?
P P O P O N P O N M P O N M L P O N M L

(a) P   (b) K
(c) J   (d) I
(e) None of these   **[United Bank (PO) 2009]**

⊛ **(b)** Series is increasing as follows.
P P O P O N P O N M P O N M L P O N M L$\boxed{K}$

10. What should come next in the following number series?
9 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8 9 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8

[New India Assurance (AO) 2009]

(a) 8   (b) 1
(c) 9   (d) 2
(e) None of these

⊛ **(c)** The series is in the pattern of 9876 54321, 123456789, 98765432, 2345678$\boxed{9}$

11. What should come next in the following number series?
3 4 4 3 4 4 5 3 4 4 5 6 3 4 4 5 6 7 3 4 4 5 6

[Dena Bank (PO) 2008]

(a) 4   (b) 5
(c) 6   (d) 7
(e) None of these

⊛ **(d)** The series is in the pattern of
344 3445 34456 344567 34456 $\boxed{7}$

12. What should come next in the following letter series?
A A B A B C A B C D A B C D E A B C D E F

[Indian Overseas Bank (PO) 2008]

(a) A
(b) G
(c) H
(d) B
(e) None of these

⊛ **(b)** The series is in the following pattern
A AB ABC ABCD ABCDE ABCDEF ABCDEF $\boxed{G}$

13. What should come in the place of the question mark (?) in the following series of combination of alpha-numerals and symbols?
Y 9B* W * D 7 * U5F ?　　[LIC (AAO) 2006]

(a) S 3 H*　　　　　(b) T # H *
(c) T * # H　　　　　(d) S * H 5
(e) S H * 1

⊙ **(a)** The series is as follows

$$Y \xrightarrow{-2} W \xrightarrow{-2} U \xrightarrow{-2} S$$
$$9 \xrightarrow{-2} 7 \xrightarrow{-2} 5 \xrightarrow{-2} 3$$
$$B \xrightarrow{+2} D \xrightarrow{+2} F \xrightarrow{+2} H$$

Y 9 B * W * D 7 * U 5 F [S 3 H *]
The symbol will occupy the last position.

14. What should come next in the following number series?
9 7 5 3 1 1 8 6 4 2 2 9 7 5 3 1 8 6 4 2 2 9 7 5 3 1 8 6 4 2 9 7 5 　　[Canara Bank (PO) 2003]

(a) 1　　(b) 8　　(c) 3　　(d) 5
(e) None of these

⊙ **(c)** The series is as follows

975311	86422
97531	86422
97531	8642
975[3]	

15. What should come next in the place of question mark (?) in the following letter sequence?
AZB, CYD, EXF, ?, IVJ, KUL
　　[RBI Grade B Officer 2002]

(a) FYH
(b) GWG
(c) HWH
(d) GUF　　　　　(e) None of these

⊙ **(e)** The pattern is as follows

A Z B, C Y D, E X F, [G W H], I V J, K U L
(−1 between pairs; +1 below)

Practice Questions

Prelims

Directions (Q. Nos. 1-10) *Choose the missing term out of the given alternatives.*

1. B, I, P, ?, D
(a) U　　(b) W　　(c) S　　(d) R
(e) None of these

2. AC, EG, IK, MO, ?
(a) PR　(b) QS　(c) QR　(d) PS
(e) None of these

3. FLU, GMV, HNW, IOX, ?
(a) JYP　(b) WYP　(c) WPY　(d) JPY
(e) None of these

4. TSMD, TSDM, TMDS, ?
(a) TSDM　　　　(b) SDTM
(c) TMDS　　　　(d) SDMT
(e) None of these

5. BEAG, DGCI, FIEK, ?
(a) HMIE　　　　(b) HKGM
(c) HGKJ　　　　(d) HKLJ
(e) HGJK

6. 3, 5, 7, ?, 13, 17, 19, 23
(a) 9　　　　　　(b) 11
(c) 8　　　　　　(d) 10
(e) None of these

7. 6, 42, ?, 1260, 5040, 15120, 30240
(a) 546　(b) 424　(c) 252　(d) 328
(e) None of these

8. 823543, 46656, 3125, 256, ?, 4, 1
(a) 28　(b) 27　(c) 36　(d) 49
(e) 24

9. 7, 8, 24, 105, 361, ?
(a) 986　(b) 617　(c) 486　(d) 1657
(e) None of the above

10. 30, 68, 130, 222, ?, 520, 738
(a) 420　(b) 350　(c) 250　(d) 280
(e) 460

Mains

Directions (Q. Nos. 1-5) *In each of the following questions, one number is wrong in the series. Find out the wrong number.*

1. 2, 6, 12, 72, 865, 62208
(a) 72　　　　　(b) 12
(c) 62208　　　(d) 865
(e) 6

2. 7.5, 47.5, 87.5, 157.5, 247.5, 357.5, 487.5
(a) 357.5　　　　(b) 87.5
(c) 157.5　　　　(d) 7.5
(e) 47.5

3. 8424, 4212, 2106, 1051, 526.5, 263.25, 131.625
(a) 131.625　　　(b) 1051
(c) 4212　　　　(d) 8424
(e) 263.25

4. 4 3 9 34 96 219 435
(a) 4　　　　　　(b) 9
(c) 34　　　　　(d) 435
(e) None of these

5. 5531 5506 5425 5304 5135 4910 4621
(a) 5531　　　　(b) 5425
(c) 4621　　　　(d) 5136
(e) None of these

Directions (Q. Nos. 6-10) *In each of the following questions a number is given followed by (a), (b), (c), (d) and (e). You have to complete the series starting with the number given following the sequence of the given series.*

6. 9　19.5　41　84 .5
12　(a)　(b)　(c)　(d)　(e)
Which of the following number will come in place of *(c)* ?
(a) 111.5　(b) 118.5　(c) 108.25　(d) 106.75
(e) None of these

7. 4 5 22 201

7 (a) (b) (c) (d) (e)

Which of the following number will come in place of *(d)*?

(a) 4948

(b) 4840

(c) 4048

(d) 4984

(e) None of these

8. 60, 121, 131, 264, 284, 571, 601, 120

(a) (b) (c) (d) (e)

Which number will come in place of *(d)*?

(a) 524   *(b)* 1011

(c) 1010   *(d)* 514

(e) None of these

9. 200, 184, 193, 157, 182, 118, 167, 150 (a) (b) (c) (d) (e)

Which of the following numbers will come in place of *(c)* ?

(a) 132

(b) 115

(c) 68

(d) 117

(e) None of these

10. 80, 50, 130, 100, 180, 150, 230, 900 (a) (b) (c) (d) (e)

Which number will come in place of *(c)*?

(a) 1050   *(b)* 920

(c) 1000   *(d)* 950

(e) None of these

11. What should come next in the following sequence of letters?

B B C B C D B C D E B C D E F B C D E F G B C D E F

(a) B   *(b)* G

(c) H   *(d)* D

(e) None of these

12. What should come next in the following letter series?

P Q R S T A B C D E P Q R S A B C D E P Q R S A B C D P Q

(a) R   *(b)* T

(c) A   *(d)* B

(e) None of these

(e) 4

Answers

Prelims

1. (b)	**2.** (b)	**3.** (d)	**4.** (d)	**5.** (b)	**6.** (b)	**7.** (c)	**8.** (b)	**9.** (a)	**10.** (b)

Mains

1. (d)	**2.** (e)	**3.** (b)	**4.** (d)	**5.** (a)	**6.** (e)	**7.** (a)	**8.** (a)	**9.** (e)	**10.** (b)
11. (b)	**12.** (a)								

03

Classification

Classification is the process of grouping various objects on the basis of their common properties like shape, size, colour, category, etc., and finding the odd object from the group. All the items except one, follow a certain rule or have some common qualities among them and one that is different, is classified as odd.

There are basically three types of classification.

1. Number classification   2. Alphabet classification   3. Word classification

Let us discuss some examples to understand classification

Ex. 1 Find the odd word.
   (a) Silver   (b) Iron   (c) Gold   (d) Hydrogen   (e) None of these

   Sol. (d) All except 'Hydrogen' are Metals.

Ex. 2 Find the odd group of letters.
   (a) AOE   (b) EUI   (c) OUT   (d) IEM   (e) None of these

   Sol. (c) All except 'OUT' have a difference of four positions.
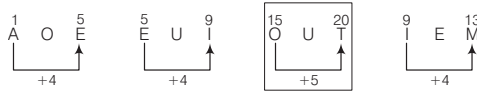
Ex. 3 Find the number different from others.
   (a) 345   (b) 133   (c) 225   (d) 216   (e) None of these

   Sol. (b) All except '133' are non-prime numbers.

Ex. 4 Find the odd word.
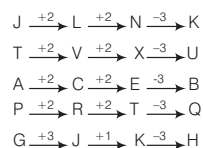   (a) Succeed   (b) Victory   (c) Triumph   (d) Compete   (e) Win

   Sol. (d) Compete is different from the other words.

Ex. 5 Find the odd group of letters.
   (a) JLNK   (b) TVXU   (c) ACEB   (d) PRTQ
   (e) GJKH

   Sol. (e)

$$J \xrightarrow{+2} L \xrightarrow{+2} N \xrightarrow{-3} K$$
$$T \xrightarrow{+2} V \xrightarrow{+2} X \xrightarrow{-3} U$$
$$A \xrightarrow{+2} C \xrightarrow{+2} E \xrightarrow{-3} B$$
$$P \xrightarrow{+2} R \xrightarrow{+2} T \xrightarrow{-3} Q$$
$$G \xrightarrow{+3} J \xrightarrow{+1} K \xrightarrow{-3} H$$

   So, GJKH is odd group of letters.

QUESTIONS *with* Detailed Explanation

Type ❶ Number Classification

1. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Corporation Bank (PO) 2009]**

(a) 215   (b) 143
(c) 247   (d) 91
(e) 65

⊙ **(a)** Apart from 215, all other numbers are divisible by 13.

$143 = 13 \times 11; \quad 247 = 13 \times 19$

$91 = 13 \times 7; \quad\quad 65 = 13 \times 5$

$215 = 5 \times 43$

2. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[RBI Grade B 2009]**

(a) 78   (b) 48   (c) 72   (d) 54
(e) 42

⊙ **(a)** Except 78, all others give a prime number when 1 is subtracted from them.

$78 - 1 = 77$
$54 - 1 = 53$
$48 - 1 = 47$
$42 - 1 = 41$
$72 - 1 = 71$

3. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Indian Overseas Bank (PO) 2009]**

(a) 45   (b) 51   (c) 39   (d) 93
(e) 85

⊙ **(e)** Except 85, all other numbers are divisible by 3.

4. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Haryana Grameen Bank (PO) 2009]**

(a) 39   (b) 27
(c) 48   (d) 42
(e) 24

⊙ **(b)** Only 27 is a perfect cube.

$3^3 = 27$

5. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[New India Assurance AO 2009]**

(a) 187   (b) 323
(c) 119   (d) 221
(e) 289

⊙ **(e)** Only 289 is a perfect square.

$17^2 = 289$

6. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[United Bank of India (PO) 2009]**

(a) 35   (b) 80
(c) 45   (d) 60
(e) 75

⊙ **(c)** Except 45, in all other numbers digit sum is even.

$35 = 3 + 5 = 8$
$75 = 7 + 5 = 12$
$80 = 8 + 0 = 8$
$45 = 4 + 5 = 9$
$60 = 6 + 0 = 6$

7. Four of the following are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[SBI (PO) 2008]**

(a) 31   (b) 39   (c) 47   (d) 41
(e) 43

⊙ **(b)** Except 39, all other numbers prime numbers.

8. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Indian Overseas Bank (PO) 2008]**

(a) 27   (b) 64   (c) 125   (d) 216
(e) 384

⊙ **(e)** Except 384, all other numbers are perfect cube.

$27 = 3^3; \ 216 = 6^3$

$64 = 4^3; 125 = 5^3$

9. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Bank of Baroda (PO) 2008]**

(a) 25   (b) 64   (c) 189   (d) 225
(e) 121

⊙ **(c)** Except 189, all other numbers are perfect square.

$25 = 5^2; \ 225 = 15^2; \ 64 = 8^2; \ 121 = 11^2$

10. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Uttarakhand GBO (PO) 2007]**

(a) 23   (b) 29   (c) 37   (d) 39
(e) 31

⊙ **(d)** Except 39, all other numbers are prime numbers.

11. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? **[Bank of Maharashtra (PO) 2007]**

(a) 115   (b) 145   (c) 95   (d) 155
(e) 75

⊙ **(e)** Only 75 is divisible by 3.

12. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? [LIC Assistant Administrative Officer (AAO) 2006]

(a) 126
(b) 217
(c) 345
(d) 513
(e) 730

⊚ **(c)** Except 345, all other numbers are one more than the perfect cube.

$$126 = 5^3 + 1$$
$$217 = 6^3 + 1$$
$$513 = 8^3 + 1$$
$$730 = 9^3 + 1$$
But $345 = 7^3 + 2$

13. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? [Corporation Bank (PO) 2006]

(a) 144   (b) 169   (c) 256   (d) 288
(e) 324

⊚ **(d)** Except 288, all other numbers are perfect square.

$$144 = 12^2 \; ; \; 169 = 13^2$$
$$256 = 16^2 \; ; \; 324 = 18^2$$
But $288 = 17^2 - 1$

14. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
[Union Bank of India (PO) 2005]

(a) 143   (b) 168   (c) 224   (d) 195
(e) 257

⊚ **(e)** Except 257, all other numbers are one less than perfect square.

$$143 = 12^2 - 1$$
$$168 = 13^2 - 1$$
$$224 = 15^2 - 1$$
$$195 = 14^2 - 1$$
But $257 = 16^2 + 1$

15. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Canara Bank (PO) 2003]
(a) 29
(b) 85
(c) 147
(d) 125
(e) 53

⊚ **(d)** Here, only 125 is a perfect cube.

Type ❷ Alphabet Classification

In this type, questions are asked based on various parameters of English alphabet, which are as follows
- Vowel consonant relationship, i.e. A, E, I, O, U are vowels and rest are consonants.
- Position or order of the alphabets position belonging to their occurrence, ie. A = 1, B = 2,..., Z = 26
- A group of jumbled letters typically consisting of letters (can be two, three or four) put together.
- Skipping or repetition of the alphabets.
- Capital or small alphabets.
- Combination of any of the above or all.

16. Four of the following five are alike in a certain way (based on the English alphabetical series) and hence form a group. Which is the one that does not belong to that group, if the English alphabetical series is broken into two equal halves, i.e. the first 13 alphabets are clubbed together and the last 13 alphabets are clubbed separately?   [IBPS RRB (PO) 2012]
(a) FH   (b) SU
(c) MA   (d) CK
(e) LB

⊚ **(b)** Except 'SU', all the pairs of letters belong to the first half.

Directions (Q. Nos. 17-19) *Four of the following five are alike in a certain way based upon the order in which these appear in the English alphabetical series and hence form a group. Which is the one that does not belong to that group?*   [Bank of Baroda (PO) 2011]

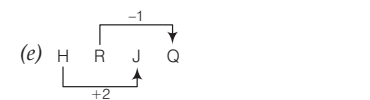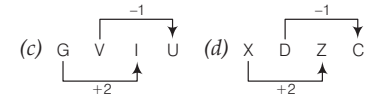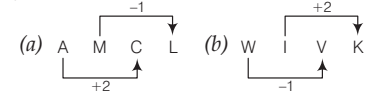**17.** (a) MPQO   (b) DGHF
(c) RUTV   (d) VYZX
(e) JMNL

⊚ **(c)** Except RUTV, all others follow a same pattern.
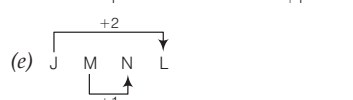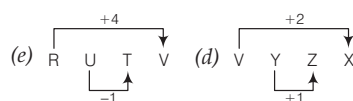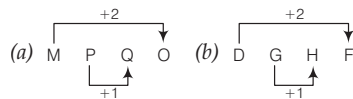
Hence, 'RUTV' does not belong to that group.

18. (a) AMCL   (b) WIVK
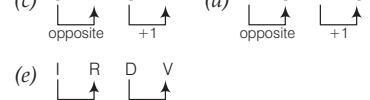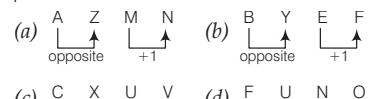(c) GVIU   (d) XDZC
(e) HRJQ

⊚ **(b)** Except WIVK, all others follow a same pattern

Hence, 'WIVK' does not belong to that group.

19. (a) AZMN   (b) BYEF
(c) CXUV   (d) FUNO
(e) IRDV

⊚ **(e)** Except IRDV, all others follow a same pattern

Hence, 'IRDV' does not belong to that group.

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

[Central Bank of India (PO) 2010]

(a) LOJ   (b) FID   (c) RUP   (d) ILN
(e) CFA

◉ **(d)** Except ILN, all others follow a same pattern.

$$L \xrightarrow{+3} O \xrightarrow{-5} J$$
$$F \xrightarrow{+3} I \xrightarrow{-5} D$$
$$R \xrightarrow{+3} U \xrightarrow{-5} P$$
$$C \xrightarrow{+3} F \xrightarrow{-5} A$$

But $I \xrightarrow{+3} L \xrightarrow{+2} N$

Hence, ILN does not belong to that group.

21. Four of the following five pairs are alike in a certain way and so form a group. Which is the one that does not belong to that group?

[Central Bank of India (PO) 2010]

(a) RICE   : ECIR
(b) WINGS   : SGNIW
(c) SMART   : RTSMA
(d) COUSIN : SINCOU
(e) BRAKE   : AKRFB

◉ **(e)** As,

```
1 2 3 4            4 3 2 1
R I C E    ⇒      E C I R
1 2 3 4 5          5 4 3 2 1
W I N G S  ⇒      S G N I W
1 2 3 4 5          4 5 1 2 3
S M A R T  ⇒      R T S M A
1 2 3 4 5 6        4 5 6 1 2 3
C O U S I N ⇒     S I N C O U
```

But
```
1 2 3 4 5          3 4 2 5 1
B R A K E  ⇒      A K R Ⓕ B
                          E
```

Except BRAKE, in all others, the order of letters has been changed. But in BRAKE, the letter E has been replaced with F.

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

[New India Assurance (AO) 2009]

(a) VT   (b) MK   (c) DB   (d) KH
(e) XV

◉ **(d)** Except KH, all others follow a same pattern.

$$V \xrightarrow{-2} T$$
$$M \xrightarrow{-2} K$$
$$D \xrightarrow{-2} B$$
$$X \xrightarrow{-2} V$$

But $K \xrightarrow{-3} H$

Hence, KH does not belong to that group.

23. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? [Uttarakhand GBO (PO) 2007]

(a) PS   (b) FI
(c) AD   (d) KN
(e) GD
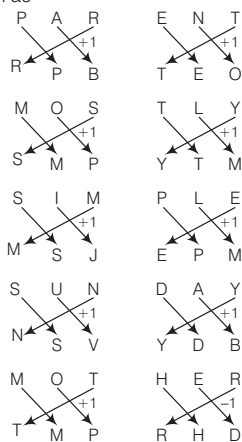
◉ **(e)** Except GD, all others follow a same pattern.

$$P \xrightarrow{+3} S$$
$$F \xrightarrow{+3} I$$
$$A \xrightarrow{+3} D$$
$$K \xrightarrow{+3} N$$

But $G \xrightarrow{-3} D$

Hence, GD does not belong to that group.

24. Four of the following five pairs are alike in a certain way and hence form a group. Which one does not belong to that group?   [SBI (PO) 2005]

(a) PARENT : RPBTEO
(b) MOSTLY : SMPYTM
(c) SIMPLE : MSJEPM
(d) MOTHER : TMPRHD
(e) SUNDAY : NSVYDB

◉ **(d)** Except (d), all others follow a same pattern as

But

Hence, option (d) does not belong to that group.

25. Four of the following five pairs have same relation between their elements and hence form a group. Which one does not belong to the group?   [Syndicate Bank (PO) 2004]

(a) PLENTY : LEPTYN
(b) COWARD : OWCRAD
(c) ALWINS : LWANIS
(d) EXAMIN : XAEIMN
(e) LOCATE : OCLTAE

23. (a) Except (a), all others follow a same pattern as

But
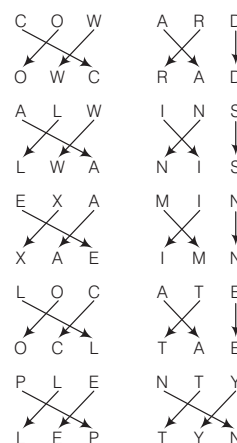
Hence, (a) does not belong to the group.

26. Four of the following five pairs have same relation between their elements as in the case of the pair UNDERWAY : 39412576 and hence form a group. Which one does not belong to the group?

[Syndicate Bank (PO) 2004]

(a) WARDEN : 572419
(b) DERANU : 412793
(c) NEDAYU : 924763
(d) ENDWAR : 194572
(e) URADYE : 327461

◉ **(c)**
```
U  N  D  E  R  W  A  Y
↓  ↓  ↓  ↓  ↓  ↓  ↓  ↓
3  9  4  1  2  5  7  6
W  A  R  D  E  N
↓  ↓  ↓  ↓  ↓  ↓
5  7  2  4  1  9
D  E  R  A  N  U
↓  ↓  ↓  ↓  ↓  ↓
4  1  2  7  9  3
E  N  D  W  A  R
↓  ↓  ↓  ↓  ↓  ↓
1  9  4  5  7  2
U  R  A  D  Y  E
↓  ↓  ↓  ↓  ↓  ↓
3  2  7  4  6  1
```

But
```
N  E  D  A  Y  U
↓  ↓  ↓  ↓  ↓  ↓
9  ②  4  7  6  3
```

The value of 'E' is '1' and not '2'

Hence, (c) does not belong to the group.

Type ❸ Word Classification

In this type, different items are classified based on common properties like names, professions, parts of speech, places, etc. Generally, the following types of relations are found in such questions.

- Category based relationships (Diseases, capitals, currency, etc)
- Medium or activity based relationship
- Word meaning relationship (Synonyms, antonyms)
- Functional relationship
- Interrelationship of words
- Word formation relationship

Directions (Q. Nos 27-28) *Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group.*

[State Bank of India (PO) 2014]

27. (a) Stem   (b) Branch
(c) Leaf   (d) Web
(e) Fruit

⊙ **(d)** Except 'Web', all others are parts of tree,

28. (a) Clone   (b) Replica
(c) Duplicate   (d) Copy
(e) Fake

⊙ **(e)** Except 'Fake', all are synonyms.

Directions (Q. Nos. 29-31) *Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?*

[IBPS RRB (PO) 2012]

29. (a) Repair   (b) Mend
(c) Correct   (d) Rectify
(e) Trouble

⊙ **(e)** Except 'Trouble', all others are synonyms.

30. (a) Employed   (b) Trained
(c) Hired   (d) Appointed
(e) Commissioned

⊙ **(b)** Except 'Trained', all others are synonyms.

31. (a) Quick
(b) Brisk
(c) Quiet
(d) Fast
(e) Rapid

⊙ **(c)** Except 'Quiet', all others are synonyms.

Directions (Q. Nos. 32-33) *Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to the group?*

[Bank of Baroda (PO) 2011]

32. (a) Asia   (b) Antarctica
(c) Africa   (d) Alaska
(e) Australia

⊙ **(d)** Except 'Alaska', all others are continents.

33. (a) Trophy   (b) Medal
(c) Certificate   (d) Gift
(e) Prize

⊙ **(d)** Except 'Gift', all others things are gained by competition.

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

[Union Bank of India PO 2011]

(a) Lens   (b) Shutter
(c) Film   (d) Camera
(e) Zoom

⊙ **(d)** Except 'camera' all others are just parts of camera.

Directions (Q. Nos. 35-38) *Four of the following five are alike and hence form a group. Which of the following does not belong to the group?*

[Oriental Bank of Commerce (PO) 2010]

35. (a) Cricket   (b) Volleyball
(c) Chess   (d) Tabletennis
(e) Badminton

⊙ **(c)** Only 'Chess' is a sitting game.

36. (a) Dogs   (b) Cats
(c) Goats   (d) Giraffes
(e) Cows

⊙ **(d)** Except 'Giraffes', all are pet animals.

37. (a) Paragraph   (b) Sentence
(c) Page   (d) Words
(e) Alphabet

⊙ **(c)** On a page, all others are written.

38. (a) Talking
(b) Blinking
(c) Writing
(d) Sitting
(e) Reading

⊙ **(b)** Only blinking is a sign.

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

[Central Bank of India (PO) 2010]

(a) Brother   (b) Grandfather
(c) Mother   (d) Grandmother
(e) Father

⊙ **(a)** Except 'Brother', all are parents and grand parents.

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

(a) Sweet (b) Cake   (c) Pastry (d) Bread
(e) Biscuit

⊙ **(a)** Except 'Sweet', all others are baked items.

41. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [RBI Grade B 2009]

(a) Cup   (b) Jug   (c) Tumbler
(d) Plate   (e) Pitcher

⊙ **(d)** 'Plate' is normally used for solid matters.

42. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Andhra Bank (PO) 2009]

(a) Copper   (b) Mercury
(c) Iron   (d) Aluminium
(e) Zinc

⊙ **(b)** Except 'Mercury', all are available in solid form at normal temperature.

43. Four the following are alike in a certain way and so form a group. Which is the one that does not belong to that group? [Corporation Bank (PO) 2009]

(a) Gold   (b) Nickel
(c) Platinum   (d) Tungsten
(e) Diamond

⊙ **(e)** 'Diamond' is the allotropes of carbon.

44. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [NABARD 2009]

(a) Nephew   (b) Cousin
(c) Mother   (d) Brother
(e) Sister

⊙ **(b)** Except 'Cousin', all others have a specific gender, i.e. either male or female.

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

[Indian Overseas Bank (PO) 2009]

(a) Black   (b) Yellow
(c) Red   (d) Green
(e) Violet

⊙ **(a)** Except 'Black', all are the colours of a rainbow.

46. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [SBI (POO 2008]

(a) Iron
(b) Copper
(c) Zinc
(d) Aluminium
(e) Brass

⊙ **(e)** Except 'Brass', all are metals.

47. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Bank of Baroda (PO) 2008]

(a) Boy   (b) Girl
(c) Lady   (d) Man
(e) Child

⊙ **(e)** Except 'Child', all others have a specific gender, i.e. either male or female.

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

[Indian Overseas Bank (PO) 2008]

(a) Table
(b) Chair
(c) Bench
(d) Desk
(e) Wood

⊙ **(e)** Except 'Wood', all are furniture.

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

[Andhra Bank (PO) 2008]

(a) Asia
(b) Australia
(c) Antarctica
(d) Africa
(e) Austria

⊙ **(e)** Except 'Austria', all are continent.

50. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Dena Bank (PO) 2008]

(a) Grandchild
(b) Niece
(c) Uncle
(d) Grandfather
(e) Nephew

⊙ **(a)** A grandchild belong to either male or female gender. Others have a specific gender.

51. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Dena Bank (PO) 2008]

(a) Violet   (b) Blue
(c) Red   (d) Yellow
(e) Pink

⊙ **(e)** Apart from pink, all are the colours of spectrum.

52. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [Andhra Bank PO 2007]

(a) Jasmine   (b) Rose
(c) Dahlia   (d) Marigold
(e) Lotus

⊙ **(e)** Lotus grows in muddy water.

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

[LIC Assistant Administrative Officer (AAO) 2006]

(a) Sultry   (b) Hot
(c) Humid   (d) Warm
(e) Cool

⊙ **(e)** Except 'Cool', all others refers to hot (warm) or humid condition.

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

[LIC Assistant Administrative Officer (AAO) 2006]

(a) Now   (b) After
(c) Then   (d) Before
(e) Again

⊙ **(e)** Except 'Again', all others denote certain period.

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

[Corporation Bank (PO) 2006]

(a) Camel
(b) Horse
(c) Bullock
(d) Cat
(e) Donkey

⊙ **(d)** Except 'Cat', all other animals are considered to be beasts of burden.

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

[Canara Bank (PO) 2003]

(a) Food : Hunger
(b) Water : Thirst
(c) Air : Suffocation
(d) Talent : Education
(e) Leg : Lame

⊙ **(d)** Without food, we feel hungry.
      Without water, we feel thirsty.
      Without air, we feel suffocation.
      Similarly, without leg, one is lame.
Talent is not related to education in that way.

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

[Canara Bank (PO) 2003]

(a) Crow
(b) Vulture
(c) Bat
(d) Ostrich
(e) Eagle

⊙ **(c)** Except 'Bat', all others belong to class Aves. Bat is a mammal.

58. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?   [SBI Bank (PO) 2001]

(a) Anxiety
(b) Anger
(c) Sorrow
(d) Joy
(e) Feeling

⊙ **(e)** Except 'Feeling', all others are the different kinds of feeling.

Practice Questions

Directions (Q. Nos. 1-10) *In the following questions, four out of the five alternatives are same in a certain way and so form a group. Find the odd one that does not belong to the group.*

1. (a) Unicorn   (b) Rhino
(c) Fox   (d) Antelope
(e) Jackal

2. (a) Swimming   (b) Sailing
(c) Diving   (d) Driving
(e) Boating

3. (a) Rigveda   (b) Yajurveda
(c) Atharveda   (d) Ayurveda
(e) Samaveda

4. (a) Ring   (b) Tyre
(c) Plate   (d) Bangle
(e) Rubber tube

5. (a) HJN   (b) JLP
(c) PRU   (d) QSW
(e) ACG

6. (a) ABDG   (b) CDFI
(c) EFHK   (d) GHJK
(e) HIKN

7. (a) CDFE   (b) JKLM
(c) STVU   (d) WXZY
(e) HIKJ

8. (a) 120   (b) 168
(c) 290   (d) 380
(e) 728

9. (a) 131   (b) 151
(c) 161   (d) 171
(e) 191

10. (a) 385   (b) 572
(c) 671   (d) 264
(e) 427

Directions (Q. Nos. 1-15) *Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group.*

1. (a) Dim : Bright   (b) Wrong : Right
(c) Shallow : Deep   (d) Genuine : Real
(e) Involvement : Indifference

2. (a) Stale : Fresh   (b) Truth : Lie
(c) Slow : Sluggish   (d) Teach : Learn
(e) Kind : Cruel

3. (a) Gold : Ornaments
(b) Cloth : Garments
(c) Wood : Furniture
(d) Leather : Footwear
(e) Earthern posts : Clay

4. (a) SUWYA   (b) LJNPR
(c) KMOQS   (d) BDFHJ
(e) ACEGI

5. (a) ZVRN   (b) UQMJ
(c) SOKG   (d) TPLH
(e) XTPL

6. (a) 15 : 26   (b) 43 : 28
(c) 32 : 13   (d) 28 : 68
(e) 91 : 82

7. (a) 7 : 50   (b) 8 : 65
(c) 11 : 123   (d) 12 : 145
(e) 10 : 101

8. (a) 36 : 18   (b) 18 : 8
(c) 15 : 5   (d) 44 : 16
(e) 25 : 12

9. (a) 488   (b) 929
(c) 776   (d) 667
(e) 668

10. (a) 426   (b) 369
(c) 279   (d) 159
(e) 819

11. (a) 145   (b) 197
(c) 257   (d) 325
(e) 399

12. The following three words are alike in a certain manner and so form a group. Which one of the five options belongs to the same group?
Arc, Radius, Circumference
(a) Diagonal
(b) Cuboid
(c) Diameter
(d) Perimeter
(e) Square

13. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
(a) X-ray   (b) Telephone
(c) Computer   (d) Radio
(e) Television

Answers

Prelims
1. (a)   **2.** (d)   **3.** (d)   **4.** (c)   **5.** (c)   **6.** (d)   **7.** (b)   **8.** (d)   **9.** (c)   **10.** (e)

Mains
1. (d)   **2.** (c)   **3.** (e)   **4.** (b)   **5.** (b)   **6.** (b)   **7.** (c)   **8.** (e)   **9.** (d)   **10.** (d)
11. (e)   **12.** (c)   **13.** (a)

04

Alphabet Test

'*Alphabet test*' is a test of the sequence of words in alphabetical order as they appear in the dictionary or arranged in some other specific way. This test requires the knowledge of English alphabets and way to use a dictionary. Questions based on alphabet test are based on orderly arrangement of different words or to detect a rule in which they are arranged. Some questions can be based on finding a letter or number following a particular rule in a alpha-numeric sequence.

Some Important Points

• Position numbers of letters in English alphabet   In reverse order

A	B	C	D	E	F	G	H	I	J	K	L	M
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1	2	3	4	5	6	7	8	9	10	11	12	13

A	B	C	D	E	F	G	H	I	J	K	L	M
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
26	25	24	23	22	21	20	19	18	17	16	15	14

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
14	15	16	17	18	19	20	21	22	23	24	25	26

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
13	12	11	10	9	8	7	6	5	4	3	2	1

• A → M (A to M) letters are called the first half of English alphabet.
• N → Z (N to Z) letters are called the second half of English alphabet.
• To remember the position of the opposite letter of English alphabet.

A — Z	A to Z of Aaza	H — S	High School
B — Y	By-By	I — R	Indian-Railway
C — X	CT Scan -X-RAY	J — Q	Jack-Queen
D — W	Dew	K — P	Kevin Peterson
E — V	Evening	L — O	Light ON
F — U	First U (You)	M — N	Man

Let us discuss some examples to understand Alphabet Test

Ex. 1 How many such pairs of letters are there in the word 'SOUTHERN' each of which has as many letters between them as in the English alphabet?
(a) None   (b) One   (c) Two   (d) Three
(e) Four

Sol. *(c)* Here, SOUTHERN letter pairs are SU and TU. Hence option (c) is correct answer.

Ex. 2 How many meaningful three letter words can be formed with the letter AER, using each letter only once in each word?
(a) None   (b) One   (c) Two   (d) Three
(e) Four

Sol. *(d)* Meaningful words = ARE, EAR, ERA

So, there are three words can be formed.

QUESTIONS *with* Detailed Explanation

Type ❶ Letter-Word Problems

In these type of problems, a word is given and candidates are required to answer question like–how many letters in the word are as far away from the beginning of the word as it is from the beginning of the English alphabet. Sometimes, a word is given and then they are asked how many letters remain same in its position, if they are arranged in alphabetical order. Sometimes, a word is given and they are asked, which vowel or a consonant going to follow it.

1. How many such pairs of letters are there in the word 'SUBSTANCE', each of which has as many letters between them in the word (in both forward and backward directions) as in the English alphabetical series?

[IBPS (SO) 2012]

(a) None (b) One
(c) Two (d) Three
(e) More than three

⊙ **(d)** Here,

S U B S T A N C E

Hence, there are three such pairs of letters– SU, ST and AC.

2. How many such pairs of letters are there in the word TELEPATHY, each of which has as many letters between them in the word (in both forward and backward directions), as they have between them in the English alphabetical series?

[IBPS RRB (PO) 2012]

(a) One (b) Two
(c) None (d) Three
(e) More than three

⊙ **(b)** Here,

T E L E P A T H Y

Hence, there are two such pairs of letters–PT and AE.

3. How many such pairs of letters are there in the word QUICKLY, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical order?

[Rajasthan Grameen Bank (PO) 2011]

(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(e)** Here,

Q U I C K L Y

Hence, there are four such pairs of letters–IK, IL, KL and LQ.

4. How many such pairs of letters are there in the word FREQUENT, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series ?

[Union Bank of India (PO) 2011]

(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(c)** Here,

F R E Q U E N T

Hence, there are two such pairs of letters–RU and QN.

5. How many such pairs of letters are there in the word POSITIVE, each of which has as many letters between them in the word as in the English alphabet ?

[Punjab & Sind Bank (PO) 2010]

(a) None (b) One
(c) Two (d) Three
(e) More than three

⊙ **(d)** Here,

P O S I T I V E

Hence, there are three such pairs of letters–PO, IE and TV.

6. How many such pairs of letters are there in the word HORIZONTAL, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series?

[Oriental Bank of Commerce (PO) 2010]

(a) None (b) One
(c) Two (d) Three
(e) More than three

⊙ **(d)** Here,

H O R I Z O N T A L

Hence, there are three such pairs of letters–HN, RO and ON.

7. How many such pairs of letters are there in the word TRANSCRIBE, each of which has as many letters between them in the word as in the English alphabet?

[Corporation Bank (PO) 2010]

(a) None (b) One
(c) Two (d) Three
(e) More than three

⊙ **(a)** There is no such pair of letters in 'TRANSCRIBE'.

8. How many such pairs of letters are there in the word JUMPING, each of which has as many letters between them in the word as in the English alphabet? **[United Bank of India (PO) 2009]**

(a) None
(b) One
(c) Two
(d) Three
(e) More than three

⊙ **(c)** Here,

J U M P I N G

Hence, there are two such pairs of letters–PN and IG.

9. How many such pairs of letters are there in the word OBJECTIVE, each of which has as many letters between them in the word as in the English alphabet?   **[Corporation Bank (PO) 2009]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

O B J E C T I V E

Hence, there are two such pairs of letters–OI and TV.

10. How many such pairs of letters are there in the word SECURITY, each of which has as many alphabets between them as there are in the English alphabetical series?

[NABARD (PO) 2009]

(a) None   (b) Two
(c) Three   (d) Four
(e) More than four

⊙ **(c)** Here,

S E C U R I T Y

Hence, there are three such pairs of letters–EI, RT and UY.

11. How many such pairs of letters are there in the word FOREIGN, each of which has as many letters between them in the word as in the English alphabet ?   **[Indian Overseas Bank (PO) 2009]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

F O R E I G N

Hence, there are two such pairs of letters–RN and EG.

12. How many such pairs of letters are there in the word DISCREDIT, each of which has as many letters between them in the word as in the English alphabet?   **[New India Assurance (AO) 2009]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(e)** Here,

D I S C R E D I T

Hence, there are four such pairs of letters–CE, DI, DE, EI.

13. How many such pairs of letters are there in the word HOARDINGS, each of which has as many letters between them in the word as in the English alphabet?

[Haryana Grameen Bank (PO) 2009]

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(e)** Here,

H O A R D I N G S

Hence, there are four such pairs of letters–HN, DG, GI and DH.

14. How many such pairs of letters are there in the word STAPLER, each of which has as many letters between them in the word as in the English alphabet?   **[Andhra Bank (PO) 2009]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

S T A P L E R

Hence, there are two such pairs of letters–ST and SP.

15. How many such pairs of letters are there in the word BOARDING, each of which has as many letters between them in the word as in the English alphabet ?   **[Indian Overseas Bank 2008]**

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

B O A R D I N G

Hence, there are two such pairs of letters–DG and IG.

16. How many such pairs of letters are there in the word SEQUENTIAL, each of which has as many letters between them in the word as in the English alphabet?   **[Dena Bank (PO) 2008]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(e)** Here,

S E Q U E N T I A L

Hence, there are four such pairs of letters–SQ, QN, EA and SN.

17. How many such pairs of letters are there in the word DISTINGUISH, each of which has as many letters between them in the word as they have between them in the English alphabet?   **[SBI (PO) 2008]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(e)** Here,

D I S T I N G U I S H

Hence, there are four such pairs of letters–ST, IG, GI and US.

18. How many such pairs of letters are there in the word DOMESTIC, each of which has as many letters between them in the word as they have in the English alphabet?

[Bank of Baroda (PO) 2008]

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

D O M E S T I C

Hence, there are two such pairs of letters–MI and ST.

19. How many such pairs of letters are there in the word REFRESHING, each of which has as many letters between them in the word as they have in the English alphabet?

[Uttarakhand GBO 2007]

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(d)** Here,

R E F R E S H I N G

Hence, there are three such pairs of letters–EF, HI and IG.

20. How many such pairs of letters are there in the word 'ADVERTISE', each of which has as many letters between them in the word as they have in the English alphabet ?

[Bank of Maharashtra (PO) 2007]

(a) None (b) One   (c) Two   (d) Three
(e) None of these

⊙ **(b)** Here

A D V E R T I S E

Hence, there is only one such pair exists, i.e. DI.

21. How many pairs of letters are there in the word ATMOSPHERE, which has as many letters between them as in the English alphabet? **[SBI (PO) 2006]**

(a) Two   (b) Three
(c) Four   (d) Five
(e) None of these

⊙ **(a)** Here,

A T M O S P H E R E

Hence, there are two such pairs of letters–TP and HE.

22. How many such pairs of letters are there in the word 'APPREHENSION', each of which has as many letters between them in the English alphabet? **[SBI (PO) 2005]**

(a) Four   (b) Five
(c) Six   (d) Seven
(e) None of these

⊙ **(b)** Here,

A P P R E H E N S I O N

Hence, there are five such pairs of letters–AE, PR, RN, HN and ON.

23. How many such pairs of letters are there in the word RESIDENTIAL, each of which has as many letters between them in the word as in the English alphabet?

[Union Bank of India (PO) 2005]

(a) Nil   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(c)** Here,

R E S I D E N T I A L

Hence, there are two such pairs exists, i.e. DE and AE.

24. How many such pairs of letters are there in the word 'ENTHUSIASTIC', each of which has as many letters between them in the word as there are between them in the English alphabet? **[Syndicate Bank (PO) 2004]**

(a) Two   (b) Three
(c) Four   (d) More than four
(e) None of these

⊙ **(a)** Here, E N T H U S I A S T I C

Hence, there are two such pairs exists, i.e. EH and ST.

Type ❷   Word Formation using Letters of a Given Word

Here, candidate is required to select the desired letters. Then, he/she has to make meaningful words by using those letters.

25. If it is possible to make only one meaningful word with the 1st ,2nd , 4th and 7th letters of the word 'ECUADOR' using each letter once which would be the second letter of the word from the right? If more than one such word can be formed give 'Y' as the answer. If no such word can be formed, give 'Z' as your answer. **[IBPS RRB PO (Pre) 2017]**

(a) A   (b) E   (c) I   (d) Z
(e) M

⊙ **(a)** The letters are, E, C, A and R
∴ The word = RACE

26. If only one meaningful English word can be made with the first, the fourth, the ninth and the tenth letters of the word CORRUPTION, using each letter only once, then which is the first letter of the word from the left. If no such word can be formed then your answer is X. If more than one such word can be formed then your answer is Z? **IBPS RRB PO (Pre) 2016]**

(a) X   (b) Z   (c) R   (d) O
(e) C

⊙ **(e)** First, fourth, ninth and tenth letter of the given word are C, R, O and N, respectively.
∴ Required word = CORN

27. How many meaningful words can be made with the alphabets D, R, H and A each being used only once in each word? **[IBPS (PO) 2012]**

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(b)** Only one word can be formed–HARD.

28. Howmany meaningful English words not ending with 'D' can be made with the third, fifth, seventh and ninth letters of the word 'STEADFAST', using each letter only once in each word? (All letters are counted from left to right) **[IBPS (PO) 2012]**

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(b)** Letters are E, D, A and T Meaningful word–DATE
So, only one meaningful word can be made.

29. How many meaningful English words can be made with the letters I, F, E, L, using each letter only once in each word? **[Punjab & Sind Bank (PO) 2010]**

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(c)** Two words can be formed - LIFE and FILE.

30. How many meaningful words can be formed with the letters S, L, I, K, L, using each letter only once?

[Oriental Bank of Commerce (PO) 2010]

(a) One   (b) Two
(c) Three   (d) More than three
(e) None of the above

⊙ **(b)** The meaningful words that can be formed are SKILL, KILLS.

31. How many meaningful English words can be made with the letters S, U, L, E, T, R using each letter only once in each word? **[Corporation Bank (PO) 2010]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(b)** Only one meaningful word can be formed – RESULT.

32. How many meaningful English words can be made with the letters R, B, A, E, using each letter only once in each word? **[Corporation Bank (PO) 2009]**

(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(c)** The meaningful words are BEAR, BARE.

33. How many meaningful English words can be made with the letters O, N, D, E using each letter only once in each word ? **[UBI (PO) 2009]**

(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(c)** The meaning words are DONE and NODE.

34. How many meaningful English words can be formed with the letters E, D, O, M using each letter only once in each word? **[NABARD (PO) 2009]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(c)** Two meaningful words can be formed DOME, MODE.

35. How many meaningful English words can be made with the letters E, M, L, I using each letter only once in each word? **[IOB (PO) 2009]**
(a) One (b) Two (c) Three (d) Four
(e) More than four

⊚ **(b)** Two meaningful words can be made MILE, LIME.

36. How many meaningful English words can be formed with the letters M, A, S, T, E using each letter only once in each word? **[RBI 2009]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(e)** The meaningful words are MATES, STEAM, TEAMS, TAMES.

37. How many meaningful English words can be formed with the letters M, R, T, A using each letter only once in each word?
[Haryana Grameen Bank (PO) 2009]
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(c)** The meaningful words are MART, TRAM.

38. How many meaningful English words can be formed made with the letters E, S, T, R, using each letter only once in each word?
[Andhra Bank (PO) 2009]
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(b)** Only meaningful word that can be formed is REST.

39. If it is possible to make only one meaningful English word with the first, the sixth, the eighth and the ninth letters of the word HOARDINGS, then which of the following will be the third letter of that word? If no such word can be made, then give 'X' as the answer and if more than one such word can be made, then give 'Y' as the answer.
[Indian Overseas Bank (PO) 2009]
(a) G (b) I (c) S (d) X
(e) Y

⊚ **(a)** Letters : H, I, G, S

Meaningful word : S I G H
So, the third letter is G.

40. How many meaningful English words can be formed by using the third, fifth, ninth and eleventh letters of the 'COMMANDMENT' using each letter only once? **[IDBI (PO) 2009]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(e)** The letters are –M, A, E, T
Words are MEAT, TEAM, MATE and TAME.

41. How many meaningful English words can be formed with the letters A, R, I, L, T using each letter only once in that word?
[Oriental Bank of Commerce (PO) 2009]
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(b)** The only meaningful word is – TRAIL.

42. If it is possible to make only one meaningful English word with the 3rd, 4th, 6th and 8th letters of the word SINGLETON, then which of the following will be the 3rd letter of that word? If no such word can be made, then give 'X' as the answer and if more than one such word can be made, then give 'Y' as the answer. **[New India Assurance (AO) 2009]**
(a) N (b) O (c) E (d) X
(e) Y

⊚ **(a)** 1 2 3 4 5 6 7 8 9
S I N G L E T O N

Meaningful word from NGEO is 'GONE'.
Third letter in the word 'GONE' is N.

43. How many meaningful English words can be made with the letters A, R, E, N using each letter only once in each word ? **[Indian Overseas Bank (PO) 2008]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(c)** Meaningful words are NEAR and EARN.

44. If it is possible to make only one meaningful English word with the first, second, fourth and tenth letters of the word MAJESTICAL, then which of the following will be the second letter of that word ? If no such word can be made, then give 'X' as the answer and if more than one such word can be made, then give 'Y' as the answer. **[Indian Overseas Bank (PO) 2008]**
(a) M (b) E
(c) L (d) X
(e) Y

⊚ **(e)** Meaningful English words with the first, second, fourth and tenth letters of the word MAJESTICAL are MALE, MEAL and LAME.

45. How many meaningful English words can be formed with the letters L, T, S, O, using each letter only once in each word? **[Andhra Bank (PO) 2008]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(d)** Meaningful words are LOST, SLOT and LOTS.

46. If it is possible to make only one meaningful word with the second, third, sixth and eighth letters of the word BASEMENT, then which of the following will be the third letter of that word ? If no such word can be made, then give 'X' as the answer and if more than one such words can be formed, then give 'Y' as the answer. **[Dena Bank (PO) 2008]**
(a) X (b) Y (c) T (d) N (e) R

⊚ **(b)** In the word BASEMENT, second, third, sixth and eighth letters are A, S, E and T and from these letters meaningful words will be SEAT and EAST.

47. If it is possible to make only one meaningful word from the first, third, fifth and eleventh letters of word INHERITANCE, using each letter only once, second letter of that word is your answer. If more than one such words can be formed then your answer is 'X', if no such word can be formed, then your answer is 'Y'. **[Bank of Baroda (PO) 2008]**
(a) E (b) I (c) R (d) X (e) Y

⊚ **(d)** Meaningful words from first, third, fifth and eleventh letters of the word INHERITANCE are HIRE and HEIR.

48. How many meaningful English words can be formed from the letters A, I, P, R, using each letter only once? **[Bank of Baroda (PO) 2008]**
(a) None (b) One (c) Two (d) Three
(e) More than three

⊚ **(b)** One meaningful word can be formed, i.e. PAIR.

49. How many meaningful English words can be made from the letters A, D, E, R, using each letter only once in each word? **[SBI (PO) 2008]**
(a) None (b) One (c) Two (d) Three
(e) Four

⊚ **(e)** The meaningful words are READ, DEAR, EARD and DARE.

50. How many meaningful English words can be made from the letters A, E, R, T, using each letter only once in each word? [Uttarakhand GBO (PO) 2007]
(a) None (b) One (c) Two (d) Three
(e) four

⊙ **(c)** Two meaningful words from A, E, R, T, are RATE and TEAR.

51. How many meaningful words can be made from the letters A, D, E, L, using each letter only once?
[Bank of Maharashtra (PO) 2007]
(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(d)** The meaningful words are DEAL, LEAD and LADE.

52. If it is possible to make only one meaningful word with the first, second, fifth and ninth letters of the word MEDIATION, then which of the following will be the third letter of that word ? If no such word can be made, then give 'X' as the answer and if more than one such words can be made, then give 'Z' as the answer. [Corporation Bank (PO) 2006]
(a) A (b) N (c) M (d) X
(e) Z

⊙ **(e)** The letters are M, E, A, N
Meaningful words are MANE, MEAN, NAME.

53. If it is possible to make a meaningful word from the second, fourth, fifth, eleventh and thirteenth letters of the word ESTABLISHMENT, using each letter only once, write second letter

of that word as your answer, if more than one such words can be formed, then write 'M' as your answer and if no such word can be formed, then write 'X' as your answer. [SBI (PO) 2006]
(a) B (b) A (c) E (d) M
(e) X

⊙ **(d)** Letters are S, A, B, E, T
Meaningful words are BEAST and BEATS.

54. If it is possible to make a meaningful English word with the seventh, tenth and fourth letters of the word 'ARISTOPATHOLOGY' and the only vowel from the word TOP, the third letter of that word is your answer. If more than one English word can be formed, then 'M' is your answer. If no such word can be formed, then your answer is 'N'.
[LIC (AAO) 2006]
(a) O (b) P (c) S (d) M
(e) N

⊙ **(d)** Letters are S, P, H, O.
Meaningful words are POSH, SHOP.

55. If it is possible to make only one meaningful word from the second, fourth, sixth and eighth letters of the word COMPUTER, second letter of the word is your answer. If more than one such words can be formed, then 'X' is your answer and if no such word can be formed, then 'Z' is the answer. [Union Bank of India (PO) 2005]
(a) R (b) P (c) O (d) X
(e) Z

⊙ **(c)** Letters are O, P, T, R

Meaningful word is PORT.
Second letter is 'O'.

56. If it is possible to make a meaningful word with the second, fourth, sixth and ninth letters of the word PERMEABILITY, then which of the following will be the first letter of that word ? If no such word can be formed then give 'N' as the answer. If only two such words can be formed, then give 'D' as the answer and if more than two such words can be formed, give 'Z' as the answer.
[Canara Bank (PO) 2003]
(a) M (b) L (c) N (d) D
(e) Z

⊙ **(e)** Letters are E, M, A, L,
Meaningful words are MEAL, MALE, LAME.

57. If it is possible to make only one meaningful English word from the sixth, fifth, twelfth and fourth letters of the word IMAGINATIONS, using each letter only once, the second letter of that word is your answer. If no such word can be made, then mark 'X' as your answer and if more then than one such words can be formed, then mark 'M' as your answer. [RBI Officer 2002]
(a) I (b) N
(c) S (d) X
(e) M

⊙ **(e)** Letters are G, I, N, S.
Meaningful words are SING, SIGN

Type ③ Mixed Problems

Here, questions are related to word formation and position in alphabetical order are asked.

58. How many letter are there in the word 'MONKEY' which remain the same in its position, if the letters are arranged in descending order alphabetically? [IBPS RRB PO (Pre)2017]
(a) One (b) Two
(c) Three (d) More than Three
(e) None

⊙ **(b)** M O̲ N̲ K E Y
Y O̲ N̲ M K E
Hence, there are two such letters.

60. If each of the alphabets of the word SALIENT is arranged in alphabetical order from left to right and then each vowel in the new word thus formed is changed to the next letter in the English alphabetical series and each consonant is changed to the previous letter in the English alphabetical series. Which of the following will be third from the left? [Rajasthan Grameen Bank (PO) 2011]
(a) M (b) I
(c) J (d) K
(e) R

⊙ **(c)** Given word = S A L I E N T

Alphabetical order of the given word
A   E   I   L   N   S   T
+1↓ +1↓ +1↓ −1↓ −1↓ −1↓ −1↓
B   F   J̲   K   M   R   S
→ from left

Hence, J letter will be third from the left.

61. The positions of how many alphabets will remain unchanged, if each of the alphabets in the word 'FORGET' is arranged in alphabetical order from left to right ? [UBI (PO) 2011]
(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(b)** Given Word : F O R G E T̲
Arranged Word : E F G O R T̲

Hence, the position of only one alphabet will remain unchanged.

62. Each **c**onsonant in the word TIRADES is replaced by the previous letter in the English alphabet and each vowel is replaced by the next letter in the English alphabet and the new letters are rearranged alphabetically. Which of the following will be the fourth from the right end?

(a) F [Punjab & Sind Bank (PO) 2010]
(b) J
(c) Q
(d) C
(e) None of these

⊙ (b)
```
T    I    R    A    D    E    S
↓-1  ↓+1  ↓-1  ↓+1  ↓-1  ↓+1  ↓-1
S    J    Q    B    C    F    R
```
Alphabetically rearranged = B C F J̲ Q R S
J is 4th from the right.

63. If each vowel in the word HABITUAL is changed to the next letter in the English alphabetical series and each consonant is changed to the previous letter in the English alphabetical series, then which of the following will be fourth from the left? [Oriental Bank of Commerce (PO) 2010]

(a) A (b) S
(c) J (d) H
(e) None of these

⊙ (c) As,
```
H    A    B    I    T    U    A    L
↑    ↓    ↓    ↑    ↓    ↓    ↓    ↑
G    B    A    J    S̲    V    B    K
```
So, 'J' is fourth from the left.

64. If each consonant in the word TOLERANT is replaced by the previous letter in the English alphabet and each vowel in the word is replaced by the next letter in the English alphabet and the new set of letters are arranged alphabetically, then which of the following will be the fourth from the right end after the replacement? [Corporation Bank (PO) 2009]

(a) M
(b) P

(c) Q
(d) K
(e) None of these

⊙ (b) As,
```
T    O    L    E    R    A    N    T
↓-1  ↓+1  ↓-1  ↓+1  ↓-1  ↓+1  ↓-1  ↓-1
S    P    K    F    Q    B    M    S
```
Alphabetically,
B F K M P̲ Q S S
So, P is the 4th from right.

65. Each vowel in the word JOURNEY is replaced by the previous letter in the English alphabet and each consonant is replaced by the next letter in the English alphabet, then the substituted letters are arranged in alphabetical order. Which of the following will be the fifth from the left end ? [Indian Overseas Bank (PO) 2009]

(a) D (b) K
(c) O (d) T
(e) None of these

⊙ (e) JOURNEY

According to the question, after rearrangement : KNTSODZ

Alphabetically : DKNOSTZ

Fifth letter from the left end = S

66. Each consonant in the word BISCUIT is replaced by the next letter in the English alphabet and each vowel is replaced by the previous letter in the English alphabet and the letters so obtained are rearranged in alphabetical order, which of the following will be the third from the left end after the rearrangement?

[New India Assurance (AO) 2009]

(a)
(b) D
(c) H
(d) T
(e) None of these

⊙ (c) BISCUIT

According to the question,
After rearrangement
    C H T D T H U
According to the alphabet.
    C D H H T T U
       └┘
    3rd from left

So, H is third from left.

67. If all the vowels of the word CONSTRUCTED are substituted with the next letter of the English alphabet series and each consonant is substituted with the letter preceding it, then which of the following would be the ninth letter from the right? [Dena Bank (PO) 2008]

(a) R (b) Q
(c) P (d) M
(e) None of these

⊙ (d)
```
C    O    N    S    T    R    U    C    T    E    D
↓-1  ↓+1  ↓-1  ↓-1  ↓-1  ↓-1  ↓+1  ↓-1  ↓-1  ↓+1  ↓-1
B    P    M    R    S    Q    V    D    S    F    E
     Right
```
Ninth from the right is M.

68. If in the word EQUALITY, the positions of first and fifth letters are interchanged, similarly the positions of the second and the sixth letters are interchanged and so on. Which letter will be third from the right end? [Uttarakhand GBO (PO) 2007]

(a) Q (b) U
(c) I (d) T
(e) None of these

⊙ (a) Given letters = EQUALITY

After interchanging the new letters formed
= L I T Y E Q̲ U A
So, Q is the third from the right.

69. If in the word ISOLATE, all the consonants are replaced by the previous letter in the alphabet and all the vowels are replaced by the next letter then all the letters are arranged alphabetically, which letter will be third from the right end?

[Uttarakhand GBO (PO) 2007]

(a) P (b) B
(c) N (d) Q
(e) None of these

Practice Questions

⊙ **(a)**

Prelims

1. How many such pairs of letters are there in the word 'PREAMBLE', each of which has as many letters between them as in the English alphabet?
- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) More than three

2. How many pairs of letters exists in the word 'RESTRICTIVE', each of which has as many letters between them as in the alphabetical order ?
- (a) Five
- (b) Three
- (c) Two
- (d) One
- (e) None of the above

3. How many such pairs of letters are there in the word 'MONETARY' each of which has as many letters between them as in the English alphabet ?
- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) More than three

4. How many pairs of letters are there in the word 'SEQUENTIAL', each of which has as many letters between them (from both sides) as in the alphabet ?
- (a) Zero
- (b) Four
- (c) One
- (d) Two
- (e) Three

5. If it is possible to make a meaningful word with the first, eighth, ninth and eleventh letters of the 'REORGANISATION', then write the last letter of that word, so formed as your answer. If no such word can be formed, then mark 'M' as your answer, and if more than one such words can be formed, then mark 'D' as your answer.
- (a) I
- (b) S
- (c) T
- (d) D
- (e) M

6. If the positions of the first and sixth, second and seventh, third and eighth and so on letters of the word 'BENEFICIAL' are interchanged. Which letter will be third from the right end after rearrangement ?
- (a) E
- (b) N
- (c) C
- (d) F
- (e) None of these

7. If with the third, fourth, fifth, seventh and tenth letters of the word 'PERSONALITY' a meaningful word is formed, then first letter of the word is the answer. If no word is possible, then 'X' is the answer.
- (a) O
- (b) T
- (c) R
- (d) S
- (e) X

8. A meaningful word is made, if we take the first, fourth, fifth, seventh, tenth, eleventh and twelfth letters of the word 'FELICITATIONS'. Which of the following will be the fifth letter of that word from the right end of that word ?
- (a) T
- (b) C
- (c) N
- (d) I
- (e) None of these

Mains

1. If it is possible to make only one meaningful word with the fourth, fifth, seventh and eleventh letters of the word 'PREDICTABLE' which of the following will be the first letter of that word ? If only two such words can be formed, give 'W' as the answer; if three or more such words can be formed, give 'Z' as the answer and if no such word can be formed, give 'X' as the answer .
- (a) D
- (b) T
- (c) W
- (d) Z
- (e) X

2. If it is possible to make a meaningful word from the second, seventh, ninth and eleventh letters of the word 'ORGANISATION' using each letter only once, then which will be the third letter of that word ? If no such word can be formed, then your answer would be 'X' and if more than one such words can be formed, then your answer would be 'M'.
- (a) R
- (b) S
- (c) T
- (d) M
- (e) X

3. Two letters (one pair of letters) of the word 'YESTERDAY' have as many letters between them as in the alphabet. The letter which comes first in the alphabetical order is your answer. If no such pair is formed, then give X as your answer.
- (a) R
- (b) S
- (c) X
- (d) M
- (e) None of these

4. How many such pairs of letters are there in the word 'STONED', each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series?
- (a) None
- (b) Three
- (c) Two
- (d) One
- (e) More than three

Directions (Q. Nos. 5-7) *Study the following arrangement of numbers, letters and symbols carefully and answer the questions given below*

R @ 2 9 T V A Y 5 © # J 1 P 8 Q $ E 3 ★ H % 6 W 4 I δ U Z

5. Four of the following five are alike in a certain way based on their positions in the above arrangement and so form a group. Which is the one that does not belong to that group?
(a) JP©
(b) E★Q
(c) WI%
(d) 9V@
(e) 1#δ

6. Which of the following is the fifth to the right of the nineteenth element from the right end?
(a) P
(b) V
(c) W
(d) 8
(e) None of these

7. How many such number are there in the given arrangement, each of which is immediately preceded by a consonant and immediately followed by a symbol?
(a) One *(b)* Two   *(c)* Three *(d)* Four
(e) More than four

8. If it is possible to make a meaningful word with the second, fourth, sixth and eighth letters of the word 'ATMOSPHERE'. What will be the third letter of that word ? If more than one such words can be formed, then give 'X' as the answer and if no such word can be formed, then give 'Y' as the answer.
(a) E   *(b)* O   *(c)* T   *(d)* X

9. If it is possible to make only one meaningful word with the second, fourth, fifth and tenth letters of the word 'CREDITABLE' using each letter only once, then which of the following will be the first letter of the word ? If more than one such words can be formed, then give 'M' as the answer and if no such word can be formed, then give 'N' as the answer.
(a) A   *(b)* E   *(c)* R   *(d)* M
(e) N

10. Two letters in the word 'PRESENCE' have as many letters between them in the word as there are between them in the alphabet and in the same order. Which one of the two letters comes earlier in the alphabet ?
(a) C
(b) E
(c) R
(d) P
(e) None of these

Directions (Q. Nos. 11-15) *Study the following arrangement carefully and answer the questions given below*

F 4 © J 2 E % M P 5 W 9 @ I Q R 6 U H 3 Z 7 ★ A T B 8 V # G $ Y D

11. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number but not immediately followed by a number ?
(a) None
(b) Two
(c) More than three
(d) One
(e) Three

12. Which of the following is the tenth to the right of the 19th from the right end of the above arrangement ?
(a) M
(b) T
(c) #
(d) 2
(e) None of these

13. If all the symbols are dropped from the above arrangement, then which of the following will be the 14th from the left end ?
(a) R
(b) Q
(c) U
(d) 3
(e) None of the above

14. What should come in place of the question mark based on the above arrangement ? JEM, 591, RU3 ?
(a) 7 A B
(b) 7 A T
(c) ★ 7 8
(d) A B V
(e) None of the above

15. How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter ?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

Answers

Prelims

1. (c)   **2.** (b)   **3.** (d)   **4.** (d)   **5.** (e)   **6.** (b)   **7.** (c)   **8.** (b)

Mains

1. (d)   **2.** (a)   **3.** (b)   **4.** (b)   **5.** (e)   **6.** (e)   **7.** (a)   **8.** (d)   **9.** (d)   **10.** (d)
11. (d)   **12.** (b)   **13.** (e)   **14.** (a)   **15.** (d)

Number and Time Sequence Test

05

Number and time sequence are arrangement of characters/persons/ objects in a particular order based on some specific characteristics. In this chapter, we deal with the questions which are followed with a sequence of numbers and time. We have to find answers on the basis of given conditions. The questions may be based on some series pattern, analogy, classification etc. Sometimes, the given sequence also includes symbols and letters along with numbers.

Types of Questions

In this section, we will deal with two types of questions based on number, and time sequence test which are asked in various competitive exam

Number Test

In this type of questions, a number or a set of numbers or a series of digits is given and the candidate are asked to find out digits following certain given conditions.

Ex. 1 How many 5's are there in the following number sequence which are preceded by 7 and followed by 6?

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

   (a) 1   (b) 2   (c) 3   (d) 4   (e) 5

   Sol *(a)* 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.

Time Sequence Test

This test is designed to test a candidate's ability in understanding 'time sequences.

To solve such type of problems a candidate must have a proper knowledge regarding calender and clock.

Ex. 2 Sunita leaves her house at 20 min to seven in the morning, reaches Vineeta's house in 25 min, they finish their breakfast in another 15 min and leave for their office which takes another 35 min. At what time, did they leave Vineeta's house to reach their office?

   (a) 7 : 40 am   (b) 7 : 20 am   (c) 7 : 45 am   (d) 8 : 15 am   (e) None of these

   Sol *(b)* Sunita leaves her house at 6 : 40 am.

         She reaches Vineeta's house in 25 min, *i.e.,* 6 : 40 + 0 : 25 at 7 : 05 am. Both leave for office, 15 min after 7 : 05 am *i.e.,* 7 : 05 + 0 : 15 at 7 : 20 am.

QUESTIONS *with*
Detailed Explanation

Type ❶ Questions Related to Types of Numbers

1. In the number 76534218, each digit is replaced by the next digit i.e. '1' is replaced by '2', '2' is replaced by '3' and so on and then the digits are arranged in ascending order from left to right, which digit will fifth from the left end? **[SBI PO (Pre) 2017]**
(a) None (b) 7   (c) 6   (d) 5
(e) 4

⊙ **(c)** Original number - 7 6 5 3 4 2 1 8
Step I Arrangement - 8 7 6 4 5 3 2 9

Step II Arrangement- 2 3 4 5 ⑥ 7 8 9

From left

⑤5th
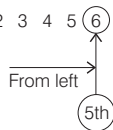
2. If 1 is subtracted from each odd digit and 2 is added to each even in the digit 9436527, then how many digits will appear twice in the new number thus formed? **[IBPS RRB PO (Pre) 2017]**
(a) Only 8   (b) Only 8 and 6
(c) 8, 6 and 4   (d) 2, 4 and 6
(e) None of these

⊙ **(c)** 9 4 3 6 5 2 7
      8 6 2 8 4 4 6

Hence, three digits 8, 6 and 4 appear twice.

3. How many such pair of numbers are there in the given number "46579739" (Both backward and forward) same as far as according to numeric series? **[IBPS RRB PO (Pre) 2017]**
(a) One   (b) Two
(c) Three   (d) More than three
(e) None of these.

⊙ **(c)**   4 6 5 7 9 7 3 9

Hence, there are four such pairs.

4. How many such pairs of digits are there in the number 67594138 (both in forward and backward directions), each of which has as many digits

between them as in the arithmetic series? **[IBPS RRB PO (Pre) 2017]**
(a) Two   (b) None
(c) One   (d) Three
(e) More than three

⊙ **(e)**

Number = 6 7 5 9 4 1 3 8
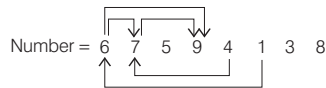
∴ Required pairs
= {(6, 9) (6, 7) (7, 9) (4, 7) (1, 6)}
= 5
i.e. more than three

5. The positions of the first and the fifth digits of the number 81943275 are interchanged. Similarly, the positions of the second and the sixth digits are interchanged and so on till the fourth and the eighth digits. Which of the following will be the third digit from the right end after the rearrangement? **[IBPS (PO) 2012]**
(a) 1   (b) 9
(c) 2   (d) 4
(e) None of these

⊙ **(a)** Given number – 8 1 9 4 3 2 7 5
New arrangement– 3 2 7 5 8 1 9 4
Hence, third digit from the right end is 1.

6. If two is subtracted from each odd digit and if two is added to each even digit in the number 9275436, then what will be the difference between the digits which are third from the right and second from the left of the new number thus formed ? **[Union Bank of India (PO) 2011]**
(a) 6
(b) 8
(c) 2
(d) 1
(e) 5

⊙ **(c)** According to the question,

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

So, the number at third from right = 6
and the number at second from left = 4
∴   Required difference
              = 6 − 4 = 2

Directions (Q. Nos. 7-11) *Study the arrangement carefully and answer the questions given below.*

4 2 6 1 3 8 9 5 8 1 6 5 1 5 8 5 3 9
4 9 2 3 2 1 5 7 2 6 2 4 2 7 4
[Corporation Bank (PO) 2011]

7. If all the even digits are deleted from the arrangement, then which of the following will be seven from the right end of the arrangement?
(a) 3   (b) 5
(c) 1   (d) 9
(e) 7

⊙ **(d)** When even digits are deleted, then the arrangements are

Left 1 3 9 5 1 5 1 ⑤5 3 9 9 3 1 5 7 7
                    ↑   Right
              7th from the right end

8. How many such 2s are there in the above arrangement, each of which is immediately preceded by an odd and also immediately followed by an odd digit?
(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ **(c)** According to the question, the arrangements are as shown below

| Odd digit | 2 | Odd digit |

923,321

Note Some books do not count 1 as an odd number but the concept of odd number is $(2 \times \text{number} + 1)$. So, if we put 0 at number, then $2 \times 0 + 1 = 1$, then 1 will be odd number. We all agree that 3 is an odd number how? $2 \times 1 + 1 = 3$

9. How many such 1's are there in the above arrangement each of which is immediately preceded by a perfect square?
(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(a)** According to the question, arrangements are

Perfect square of any number	1

None such arrangement is available.

10. If one is added to each of the even digits and two is added to each of the odd digits given in bold in the above arrangement, then how many digits will appear twice in the new number thus formed?
(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(e)** When one is added to each of the even digits and two is added to each of the odd digits, then the new numbers are
5, 3, 7, 3, 5, 9, 11, 7, 9, 3, 7, 7, 3, 7, 9, 7, 5, 11, 5, 11, 5, 3, 3, 7, 3, 7, 3, 5, 3, 9, 5
The digits which appear twice are 5, 3, 7, 9, 11. So, it is more than three.

11. Which of the following is seventh to the right of the nineteenth digit from the right end of the above arrangement?
(a) 3 (b) 5 (c) 1 (d) 7
(e) None of these

⊙ **(a)** Nineteenth digit from the right end = 8 and seventh digit to the right of 8 = 3

Alternate Method
Required digit = 19 – 7 = 12th from the right end = 3

Directions (Q. Nos. 12-16) *Study the following arrangement carefully and answer the questions given below*

7 1 2 8 2 5 2 7 5 6 4 9 1 9 2 4 1
4 6 4 5 3 2 6 3 7 8 5 9 3 1 5 8 2 7
[Rajasthan Grameen Bank (PO) 2011]

12. How many such 5's are there in the above arrangement each of which is immediately preceded and also immediately followed by an even digit?
(a) None (b) One (c) Two (d) Three
(e) None of these

⊙ **(b)** Number of 5's that are immediately preceded and also immediately followed by an even digit.
Even digit 5's Even digit.
2 5 2
Only one 5 is there in the arrangement.

13. If all the even digits are deleted from the arrangement, then which of the following will be eighth from the right end of the arrangement?
(a) 1 (b) 7 (c) 9 (d) 5
(e) 3

⊙ **(e)** After deleting all the even digits, the new arrangement is

7 1 5 7 5 9 1 9 1 5 3 ③ 7 5 9 3 1 5 7
⎣_____⎦
8th digit from the right

14. How many such 2's are there in the above arrangement, each of which is immediately preceded by a perfect square? (1 is also a perfect square)
(a) None (b) One (c) Two (d) Three
(e) More than three

⊙ **(c)** Perfect square ②
1 2, 9 2

1 and 9 are perfect square . So, there are two possible cases for the given condition.

15. What is the difference between the digit which is seventh from the left end and the digit which is eleventh from the right end of the arrangement?
(a) 0 (b) 1 (c) 2 (d) 3
(e) 5

⊙ **(b)** The 7th digit from left end is 2.
The 11th digit from right end is 3.
∴ Required difference = 3 – 2 = 1

16. Which of the following is sixth of the left of the twentieth digit from the left end of above arrangement?
(a) 1 (b) 4 (c) 3 (d) 9
(e) 8

⊙ **(d)** 20th digit from left end = 4
6th digit to the left of 4 is 9.

Alternate method
Required digit = (20th – 6th) from the left
= 14th from the left = 9

Directions (Q. Nos. 17-19) *Following questions are based on the five three digit numbers given below.*

528 739 846 492 375
[Corporation Bank (PO) 2010]

17. Which of the following represents the sum of the first two digits of the highest number ?
(a) 7 (b) 10 (c) 12 (d) 13
(e) None of these

⊙ **(c)** The highest number is 846.
∴ Sum of first two digits = 8 + 4 = 12.

18. If the positions of the first and the second digits of each number are interchanged, then which of the following will be the third digit of the second lowest number?
(a) 8 (b) 9 (c) 6 (d) 2
(e) 5

⊙ **(b)** Given numbers are
528 739 846 492 375
New arranged numbers are
258 379 486 942 735
∴ Second lowest number = 379 and third digit is 9.

19. If the positions of the first and the third digits of each number are interchanged, then which of the following will be the middle digit of the third highest number?
(a) 2 (b) 3
(c) 4 (d) 9
(e) 7

⊙ **(c)** Given numbers are
528 739 846 492 375
New arranged numbers are
825 937 648 294 573
∴ Third highest number = 648 and middle digit = 4.

Directions (Q. Nos. 20-24) *Following questions are based on the five three-digit numbers given below.*
519 328 746 495 837
[Punjab & Sind Bank (PO) 2010]

20. If half of the second highest number is subtracted from the third highest number, then what will be the value ?
(a) 156 (b) 146 (c) 213 (d) 314
(e) None of these

⊙ **(b)** Third highest number = 519
Half of second highest number
$$= \frac{746}{2} = 373$$
∴ Difference = 519 – 373 = 146

21. If the positions of the first and the third digits in each of the numbers are interchanged, then which of the following will be the second digit of the lowest number ?
(a) 1 (b) 2 (c) 4 (d) 9
(e) 3

⊙ **(d)** Given numbers are
519 328 746 495 837
New arranged numbers are
915 823 647 594 738
∴ Smallest number = 594
and 2nd digit = 9

22. If in each number the third digit becomes the first digit, the first digit becomes the second digit and the second digit becomes the third digit, then which of the following will be the first digit of the second highest number?
(a) 9   *(b)* 6
(c) 5   *(d)* 7
(e) 8

⊙ *(e)* The arranged numbers are
951   832   674   549   783
Second largest number = 832 and
first digit = 8.

23. Which of the following represents the difference between the first and the second digits of the second highest number ?
(a) 4   *(b)* 1
(c) 3   *(d)* 5
(e) None of these

⊙ *(c)* Second highest number = 746
∴ Required difference = 7 − 4 = 3

24. If 1 is subtracted from the third digit of each number and 1 is added to the first digit of each number, then which of the following will be the sum of the second and third digits of the second lowest number ?
(a) 13   *(b)* 9
(c) 8   *(d)* 6
(e) None of these

⊙ *(a)* According to the question,

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

Second smallest number = 594
and sum 9 + 4 = 13

25. If it is possible to form only one such number with the 3rd, the 6th and the 7th digits of the number 7394261 then which is the perfect square of a two digit odd number, which of the following will be the first digit of the two digit odd number?
[Punjab & Sind Bank (PO) 2010]
(a) 9
(b) 3
(c) 5
(d) No such number can be formed
(e) More than one such number can be formed

⊙ *(e)* 7 3 9 4 2 6 1
961 → Number formed → 169 and square root of 169 = 13, also the square root of 961 will be 31. So, more than one such number can be formed.

26. How many such pairs of the digits are there in the number 539816, each of which has as many digits between them in the numbers, as when the digits are arranged in descending order within the number?
[Punjab & Sind Bank (PO) 2010]
(a) None   *(b)* One
(c) Two   *(d)* Three
(e) More than three

⊙ *(d)*
5   3   9   8   1   6
Descending arrangement
9   8   6   5   3   1

So, there are three such pairs.

27. How many such digits are there in the number 5846937, each of which is as far away from the beginning of the number as when the digits are arranged in descending order within the number?
[Indian Overseas Bank (PO) 2009]
(a) None *(b)* One   *(c)* Two   *(d)* Three
(e) More than three

⊙ *(c)* Number : 5 8 4 6 9 3 7
In decreasing order : 9 8 7 6 5 4 3
So, there will no change in the position of 8 and 6.

Directions (Q. Nos. 28-30) *Following questions are based on the five three digit numbers given below.*

832   719   654   967   481
[Corporation Bank (PO) 2009]

28. If the positions of the second and the third digits within each number are interchanged, then which of the following will be the sum of the first and the second digits of the third highest number?
(a) 16   *(b)* 10   *(c)* 9   *(d)* 15
(e) None of these

⊙ *(a)* Given numbers are
832   719   654   967   481
New arrangements
823   791   645   976   418
Third largest number is 791.
∴ Required sum = 7 + 9 = 16

29. Which of the following is the sum of the first and the third digits of the second lowest number?
(a) 16   *(b)* 10   *(c)* 18   *(d)* 5
(e) None of these

⊙ *(b)* Second lowest number is 654.
So, required sum = 6 + 4 = 10

30. If the positions of the first and the second digits within each number are interchanged, then which of the following will be the difference between the highest and the second highest number?
(a) 203   *(b)* 133
(c) 385   *(d)* 182
(e) 144

⊙ *(e)* After interchanging first and second digits of numbers
832   →   382
719   →   179
654   →   564
967   →   697
481   →   841
Highest number = 841
Second highest number = 697
Difference between them
= 841 − 697 = 144

31. How many such pairs of digits are there in the number 8429516, each of which has as many digits between them in the number as when the digits are arranged in ascending order within the number ?
[Corporation Bank (PO) 2009]
(a) None   *(b)* One
(c) Two   *(d)* Three
(e) More than three

⊙ *(c)* Given number,
8   4   2   9   5   1   6
In ascending order,
1   2   4   5   6   8   9
So, there are two pairs.

32. The positions of the first and the second digits in the number 85341279 are interchanged. Similarly, the positions of the third and the fourth digits are interchanged and so on till the position of the seventh and the eighth digits. Which of the following will be the third to the right of three after the arrangement?
[Corporation Bank (PO) 2009]
(a) 9   *(b)* 7
(c) 8   *(d)* 2
(e) None of these

⊙ *(a)* Given number is
8   5   3   4   1   2   7   9
New arrangement is
5   8   4   3   2   1   9   7
So, the required number = 9

Directions (Q. Nos. 33-35) *The following questions are based on the five three digit numbers given below.*

394   632   783   576   895

33. If the positions of the first and the second digits within each number are interchanged, then which of the following will be the second highest number?
(a) 632   (b) 782   (c) 576   (d) 895
(e) 394

⊙ *(e)* Interchanging the first and second digits of each number,
934   362   873   756   985
Hence, the second highest number is 394.

34. If the first and second digits of each of the numbers are added, then the resulting sum of which of the following numbers will not be exactly divisible by 3?
(a) 895   (b) 394   (c) 576   (d) 632
(e) 783

⊙ *(a)* First and second digits of each of the numbers are added,
12   9   15   12   17
17 cannot divisible by 3. Hence, the number is 895.

35. If 2 is added to the last digit of each number and then that positions of first and the third digits are interchanged, then which of the following will be exactly highest number?
(a) 576   (b) 895   (c) 783   (d) 394
(e) 632

⊙ *(a)* If 2 is added to the last digit of each number, then
394 + 2 = 396 , 632 + 2 = 634
783 + 2 = 785 , 576 + 2 = 578
895 + 2 = 897
Now, on interchanging the positions of first and third digits.
693,   436,   587,   875,   798
Hence, the highest number is 576.

36. The positions of how many digits in the number 53147926 will remain unchanged after the digits within the number are rearranged in descending order?   [Haryana Grameen Bank (PO) 2009]
(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ *(b)* Given number is 5 3 1 4 7 9 2̲ 6.
In decreasing order 9 7 6 5 4 3 2̲ 1
So, the position of 2 remain unchanged.

37. How many such digits are there in the number 27561493, each of which is as far away from the beginning of the number as when the digits are arranged in descending order within the number?   [NABARD (PO) 2009]
(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ *(b)*

Given number	2	**7**	5	6	1	4	9	3
Decreasing order	9	**7**	6	5	4	3	2	1

Only 7 has same place.

38. How many such digits are there in number 928416375, each of which is as far away from the beginning in the number as when the digits are arranged in descending order within the number?   [Andhra Bank (PO) 2008]
(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ *(c)* Given number
9 2 8 4 1 6 **3** 7 5
Number in decreasing order
9 8 7 6 5 4 **3** 2 1
So, there are two such digits– (9,3).

39. How many such digits are there in the number 7346285. Which are as far away from the beginning of the number, as they will be when arranged in ascending order within the number?   [Bank of Baroda (PO) 2008]
(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ *(c)* Given numbers
7 **3** **4** 6 2 8 5
In increasing order
2 **3** **4** 5 6 7 8
So, there are two such digits.

40. How many digits are there in the number 71836942 each of which is as far away from the beginning of the number as when the digits are arranged in ascending order?   [Dena Bank (PO) 2008]
(a) One   (b) Two   (c) Three   (d) Four
(e) None of these

⊙ *(a)*

Number	7	1	8	3	**6**	9	4	2
In increasing order	1	2	3	4	**6**	7	8	9

There will be no change in the place of 6.

41. How many such digits are there in the number 284371, each of which is as far away from the beginning of the number as when they are arranged it descending order?
[Indian Overseas Bank (PO) 2008]
(a) None (b) One   (c) Two   (d) Three
(e) More than three

⊙ *(d)* Given number is
2 8 **4 3** 7 **1**
In decreasing order
8 7 **4 3** 2 **1**
There are three such digits 4,3 and 1.

Directions (Q. Nos. 42-44) *Study the set of numbers given below and answer the questions which follow.*

279   543   926   247   438

42. Which of the following numbers will be obtained, if the second digit of the smallest number is added to the third digit of the largest number, after adding 5 to each number?
(a) 4   (b) 5   (c) 6   (d) 9
(e) None of these

⊙ *(c)* New numbers are
279 + 5 = 284 ; 543 + 5 = 548
926 + 5 = 931 ; 247 + 5 = 252
438 + 5 = 443
Smallest number = 252,
and largest number = 931
∴ Number   5 + 1 = 6

43. If in each number, the first and the last digits are interchanged, then which will be the largest number ?
(a) 247   (b) 926   (c) 543   (d) 279
(e) 438

⊙ *(d)* The new numbers are
972 345 629 742 834
So, the largest number = 279

44. If the second and the third digits are interchanged, then which will be the smallest number ?
(a) 438   (b) 247   (c) 926   (d) 279
(e) 543

⊙ *(b)* The new numbers are
297   534   962   274   483
So, the smallest number = 247

Directions (Q. Nos. 45-49) *Study the number series given below and answer the questions which follow.*

6 7 8 9 9 8 7 9 7 7 8 9 7 8 7 6 9
6 8 9 7 7 9 8 9 7 6 8 8 7

45. How many such numbers are there in the given series, each of which when subtracted from the following number, has a difference of 2?
(a) Three   (b) Four
(c) Five   (d) Nine
(e) None of these

⊙ **(e)** Required numbers are as follow

6 7 8 9 9 8 7 9 7 7 7 8 9 7 8 7 6 9 6 8

9 7 7 9 8 9 7 6 8 8 7
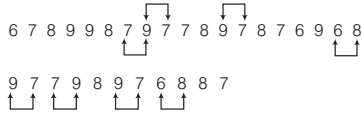
So, there are eight required numbers.

46. Which of the following numbers is obtained when 18th number from the left of the number series is added to 19th from the right ?
(a) 15   (b) 20
(c) 10   (d) 17
(e) None of these

⊙ **(a)** 19th from the right = 9
    18th from the left = 6
∴   Required sum = 9 + 6 = 15

47. How many nines are there in the given series, each of which is immediately preceded by an odd number?
(a) One   (b) Two
(c) Three   (d) Four
(e) More than four

⊙ **(c)** According to the question, required 9 are
    6 7 8 9 9 8 7 9 7 7 7 8 9 7 8 7 6 9 6 8 9
    7 7 9 8 9 7 6 8 8 7
There are three such 9.
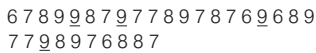
48. How many such odd numbers are there in the given series, each of which is immediately preceded by an even number ?
(a) Five   (b) Seven
(c) Nine   (d) Eleven
(e) None of these

⊙ **(c)** According to the question, numbers are as follow
    6 7 8 9 9 8 7 9 7 7 8 9 7 8 7 6 9 6 8 9 7 7
    9 8 9 7 6 8 8 7
So, required even numbers are nine.
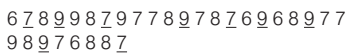
49. How many such sevens are there in the given series each of which is immediately preceded immediately followed by 8?
(a) None   (b) One
(c) Two   (d) Three
(e) More than three

⊙ **(b)** Only one.

Directions (Q. Nos. 50-56) *These questions are based on the following arrangement of numerals, symbols and letters.*
W T D I 5 M K % L $ 3 7 F E B
1 G H A © @ J U V 2 4

50. How many such symbols are there in the above arrangement, each of which is immediately followed by a numeral and also immediately preceded by a letter?
(a) None (b) Two   (c) Three (d) One
(e) None of these

⊙ **(b)** L $ 3 and B # 1, so there are two such pairs.

51. If KL : $7, then B1 : ?
(a) GA   (b) H©   (c) GH   (d) ©J
(e) None of these

⊙ **(a)** As, Similarly

K L : $ 7,   B I : G A
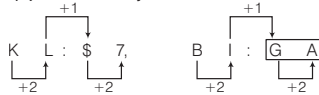
52. If all the vowels are dropped from the arrangement, then which element will be fifth to the right of the thirteenth element from the right?
(a) H   (b) G   (c) A   (d) 1
(e) None of these

⊙ **(b)** All the vowels are dropped from the arrangement
W T D 5 M K % L $ 3 7 F B # 1 G H © @ J V 2 4
Fifth to the right of the thirteenth from the right is 'G'.

53. If the first ten elements in the arrangement are reversed, then which element will be third to the left of eleventh element from the left?
(a) D   (b) %   (c) K   (d) I
(e) None of these

⊙ **(a)** First ten elements arranged in the reverse order are
$ L % K M 5 I D T W 3 7 F B # 1 G H © @ J U V 2 4
Third to the left of eleventh element from the left is D.

54. Four of the following five are alike in a certain way on the basis of their position in the above arrangement and so form a group. Which is the one that does not belong to the group?
(a) D5W (b) L3K   (c) E#7   (d) H©G
(e) U2@

⊙ **(d)** D 5 W L 3 K E # 7 U 2 @ H © G
    +2 −4 +2 −4 +2 −4 +2 −4 +2 −3
H©G does not belong to the group.

55. How many such vowels are there in the above arrangement, which are immediately preceded as well as immediately followed by a consonant?
(a) None   (b) One
(c) Two   (d) Three
(e) None of these

⊙ **(c)** F E B and J U V
Two vowels are E and U.

56. Which element is exactly midway between the eighth element from the left and the tenth element from the right ?
(a) E   (b) 7
(c) B   (d) #
(e) None of these

⊙ **(e)** Eighth element from the left is % and the tenth element from the right is G and between them is F.

57. How many such pairs of digits are there in the number 421579368 each of which has as many digits between them in the number as when they are arranged in ascending order?
(a) None
(b) One   (c) Two
(d) Three   (e) More than three
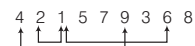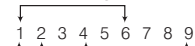
⊙ **(d)** Given number is
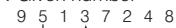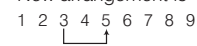4 2 1 5 7 9 3 6 8
New arrangement is
1 2 3 4 5 6 7 8 9
So, there are three such pairs.

58. How many such pairs of digits are there in the number 95137248, each of which has as many digits between them in the number as when they are arranged in ascending order ?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

⊙ **(b)** Given number
9 5 1 3 7 2 4 8
New arrangement is
1 2 3 4 5 6 7 8 9
So, there is only one such pair.

Type ❷ Time Sequence Test

[SBI (PO) 2017]

Symbols represent time in a clock as

'#' Either the hour or minute hand of clock is at 3.

'$' Either the hour or minute hand of clock is at 12.

'%' Either the hour or minute hand of clock is at 4.

'@' Either the hour or minute hand of clock is at 8.

'+' Either the hour or minute hand of clock is at 5.

e.g. Time '+%' represents 5 h 20 min. All the times are in pm.

The first symbol represents hours and second symbol represents minutes.

59. A train reaches station at time '$+'. If it gets late by 8 h 15 min, then what is the time at which it reaches the station?
(a) +#   (b) @+   (c) @#   (d) @@
(e) +$

⊙ **(d)** $ – 12, + – 5
So, time is 12:25 pm
∴ 12:25 pm + 8 h 15 min
      = 8:40 pm
40 means minute hand is at 8.
So, time is @@.

60. A person has to catch a train that is scheduled to depart at '@%'. It takes the person 4 h and 15 min to reach the railway station from his home. At what time should he leave from his home for the railway station to arrive at the station atleast 25 min before the departure of the train?
(a) %@   (b) #@
(c) %+   (d) +@
(e) None of these

⊙ **(b)** Scheduled time of departure of train= @%= 8:20 pm

Time for travel+ early arrival
     = 4 h 15 min + 25 min
     = 4 h 40 min
8:20 pm- 4 h 40 min
     = 3:40 pm=#@

61. A train is scheduled to leave the station at '+@'.
A person has reached the station 20 min before the train's scheduled time. At what time the person has reached the station?
(a) #@   (b) +#   (c) %+   (d) + %
(e) None of these

⊙ **(d)** '+@' – 5:40 pm
20 min before = 5:20 pm.
So, '+%'

62. If was 9.35 am in Rakhi's watch, which kept correct time, when Reena informed her that the last bus left the bus stop at 9.25 am. Reena's watch is 5 min fast. The frequency of the bus is every 20 min. For how long Rakhi must wait to catch the next bus ?
(a) 5 min (b) 10 min (c) 15 min (d) 25 min
(e) None of these   **[NABARD (PO) 2009]**

⊙ **(a)** Since, Reena's watch is 5 min fast.
So, last bus = 9:25 – 0:05 = 9:20 am
∴ Next bus = 9:20 + 0:20 = 9:40 am
So, Rakhi has to wait for 5 min.

63. Mohan correctly remember that his father's birthday is before twentieth January but after sixteenth January where as his sister correctly remembers that their father's birthday is after eighteenth January but before twenty-third January. On which date in January is definitely their father's birthday ?
[Corporation Bank (PO) 2009]
(a) Eighteenth
(b) Nineteenth
(c) Twentieth
(d) Data inadequate
(e) None of the above

⊙ **(b)** According to Mohan, birthday may be 17, 18 or **19** Jan. According to Mohan's sister, birthday may be **19**, 20, 21 or 22 Jan.
So, we can see that only common day is 19 Jan.
Hence, the birthday is at 19th Jan.

64. Abha correctly remembers that her mother's birthday is before Friday while after Monday. Her brother Abhay correctly remembers that their mother's birthday is after Wednesday while, before Saturday. On which of the following days does their mother's birthday definitely fall ? **[Dena Bank (PO) 2008]**
(a) Tuesday   (b) Wednesday
(c) Thursday   (d) Friday
(e) Cannot be determined

⊙ **(c)** According to Abha, birthday may be Tuesday, Wednesday, **Thursday**. According to Abha's brother, birthday is on **Thursday**. Since, only Thursday is common. So, the birthday falls on Thursday.

Practice Questions

1. How many 9's are followed by and preceded by numbers divisible by 2?
8 9 6 5 3 5 9 6 8 3 4 9 6 5 2 6 9 7 3 7 2 9 4 1 3 7 9 4 1 7 3 4 9 8 4 5 3 9 7 6 1 5 3 1 9 5 7 4 2 9 6 8 5 3 2 9 5 7 4 8 9 4 5 1
(a) 12   (b) 6   (c) 8   (d) 10
(e) 4

2. 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
(a) 2   (b) 3   (c) 4   (d) 7
(e) None of these

3. How many such 5's are there in the number sequence, each of which is preceded by 3 or 4 but not followed by 8 or 9?
3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 5 4 5 2 3 5 1 0
(a) Six   (b) Three
(c) Four   (d) Five
(e) None of these

4. If each of the digits in the number 92581473 is arranged in ascending order, then what will be the difference between the digits, which are fourth from the right and third from the left in the new arrangement?
(a) 1   (b) 2   (c) 3   (d) 4
(e) None of these

5. How many digits position will remain same in the number 6315784, each of which has as many digits between them in the number as when the digits are rearranged in descending order?
(a) None (b) One   (c) Two   (d) Three
(e) More than three

6. How many digits position will remain same in the number 9431658, each of which has as many digits between them in the number as when the digits are rearranged in ascending order?
(a) None (b) One   (c) Two   (d) Three
(e) More than three

7. How many digits position will remain same in the number 5231698, each of which is as far away from the beginning of the number as when the digits are rearranged in ascending order?
(a) None (b) One   (c) Two   (d) Three
(e) More than three

Directions (Q. Nos. 8-10) *Study the sets of numbers given below and answer the questions.*

972   682   189   298   751

8. If one is added to the lowest number and two is added to the highest number, then what will be the difference between the second digit of the smallest number and third digit of the highest number?
(a) 5   (b) 7
(c) 9   (d) 8
(e) None of these

9. If in each number, first and the last digits are interchanged, then which one of the following will be the third highest number?
(a) 972   (b) 682
(c) 189   (d) 298
(e) 751

10. If in each number, all the three digits are arranged in descending order, then which of the following will be the third highest number?
(a) 972   (b) 682
(c) 189   (d) 298
(e) 751

1. The positions of how many digits in the number 837912 will remain unchanged after the digits within the number are rearranged in descending order (from left to right)?
(a) None (b) One   (c) Two   (d) Three
(e) More than three

2. Praveen correctly remembers that his father's birthday is after 21st May but before 27th May whereas his sister correctly remembers that their father's birthday is after 24th May but before 30th May. On which day in May was definitely their father's birthday?
(a) 25th   (b) 24th
(c) 26th   (d) 25th or 26th
(e) None of these

3. If it is possible to make only one such number with the first, the fourth and the sixth digits of the number 531697, then which is the perfect square of a two digit even number, which of the following will be the second digit of the two digit even number. If no such number can be made, then give '@' as the answer and if more than one such numbers can be made, then give '©' as the answer.
(a) 4   (b) 2   (c) 6   (d) @
(e) ©

Directions (Q. Nos. 4-8) *Study the sets of numbers given below and answer the questions.*

489   841   654   953   783

4. If in each number, the first and the last digits are interchanged, then which of the following will be the second highest number?
(a) 489
(b) 541
(c) 654
(d) 953
(e) 783

5. If in each number, all the three digits are arranged in ascending order, then which of the following will be the lowest number?
(a) 489
(b) 841
(c) 654
(d) 953
(e) 783

6. If five is subtracted from each of the numbers then which of the following numbers will be the difference between the second digit of second highest number and the second digit of the highest number?
(a) 0   *(b)* 3
(c) 1   *(d)* 4
(e) 2

7. If in each number, the first and the second digits are interchanged, then which will be the third highest number?
(a) 489   *(b)* 541
(c) 783   *(d)* 953
(e) 654

8. If the middle digit of each of the following numbers is increased by 2 and then the digits of each number are written in reverse order, then which number will be the fourth, if arranged in descending order ?
(a) 236
(b) 843
(c) 566
(d) 358
(e) 478

Directions (Q. Nos. 9-13) *Study the following arrangement carefully and answer the questions given below.*

M 3 R # A P 4 9 K % D 1 U H @
J 2 N © W E Q 5 T 6 $ V 7 * 1
F 8 B Y

9. How many such symbols are there in the above arrangement each of which is immediately preceded by a number but not immediately followed by a consonant ?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

10. Which of the following is the eighth to the left of the twenty first from the end of the above arrangement ?
(a) 1   *(b)* I
(c) 5   *(d)* Q
(e) None of these

11. How many such consonants are there in the above arrangement each of which is immediately preceded by a number but not immediately followed by a symbol?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

12. If all the numbers in the above arrangement are removed, then which of the following will be eleventh from the right end ?
(a) N
(b) 2
(c) E
(d) W
(e) None of the above

13. Four of the following five are alike in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to * that group?
(a) W Q N   *(b)* V * 6
(c) 1 8 7   *(d)* P 9 #
(e) D K U

14. Sunita leaves her house at 20 min to seven in the morning, reaches Vineeta's house in 25 min, they finish their breakfast in another 15 min and leave for their office which takes another 35 min. At what time, did they leave Vineeta's house to reach their office?
(a) 7 : 40 am   *(b)* 7:20 am
(c) 7 : 45 am   *(d)* 8:15 am
(e) None of these

15. There are twenty people working in an office. The first group of five works between 8 : 00 am to 2 : 00 pm. The second group of ten works between 10 : 00 am to 4 : 00 pm and the third group of five works between 12 noon to 6 pm. There are three computers in the office which all the employees frequently use. During which of the following hours the computers are likely to be used most?
(a) 10 : 00 am -12 : 00 noon
(b) 12 noon - 2 : 00 pm
(c) 1 : 00 pm - 3 : 00 pm
(d) 2 : 00 pm - 4 : 00 pm
(e) None of the above

Answers

Prelims

| **1.** (b) | **2.** (e) | **3.** (d) | **4.** (b) | **5.** (b) | **6.** (b) | **7.** (d) | **8.** (a) | **9.** (b) | **10.** (a) |

Mains

| **1.** (b) | **2.** (d) | **3.** (a) | **4.** (c) | **5.** (b) | **6.** (c) | **7.** (d) | **8.** (a) | **9.** (b) | **10.** (e) |
| **11.** (c) | **12.** (e) | **13.** (e) | **14.** (b) | **15.** (b) | | | | | |

06

Coding-Decoding

Coding-Decoding is a way to convey a message in a secret manner. This method hides the message from the third person and ensure the authenticity of the message between the sender and the receiver. Here, the candidate has to understand the given pattern of the coded message and answer the question based on that pattern.

The person who transmits the code or signal, is called the sender and the person who receives it, is called the receiver. Transmitted codes or signals are decoded on the other side by the receiver–this is known as decoding.

In questions on coding-decoding, a word (basic word) is coded in a particular way and the candidates are asked to code other word in the same way. The coding and decoding tests are set up to judge the candidate's ability to decipher the rule that has been followed to code a particular word/message and break the code to decipher the message.

Order of the English Alphabet

Forward order position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Alphabets	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
Backward order position	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

There are different types of questions asked in the examinations. The common types are

1. Coding of Letters
2. Coding of Numbers/Symbols
3. Message Coding
4. Coding by Substitution
5. Miscellaneous

QUESTIONS *with*
Detailed Explanation

Type ❶ Coding of Letters

In this type of coding, the letters of a word are coded according to a certain pattern or rule to form other group of letters. You have to identify the pattern and answer the questions according to that pattern or rule.

Directions (Q. Nos. 1-5) *Study the given information carefully to answer the given question.*

In a certain code language, 'festival for women only' is written as 'pa ge bo xu' 'provide peace to women' is written as 'wr dl nj ge' 'womem like to celebrate' is written as 'ge ct fx wr' 'celebrate peace in festival' is written as 'dl bo sv ct'

(All codes are two letter codes only)

1. What may be the possible code for 'provide idea' in the given code language?
(a) fk hy
(b) xu bo
(c) hy nj
(d) nj xu (e) wr fx

2. What is the code for 'celebrate' in the given code language?
(a) sv   (b) wr   (c) ct   (d) dl
(e) fx

3. In the given code language what does the code 'pa' stand for?
(a) peace
(b) either 'for' or 'only'
(c) either 'women' or 'to'
(d) celebrate
(e) festival

4. What is the code for 'women' in the given code language?
(a) bo
(b) xu
(c) ct
(d) other than those given as options
(e) ge

5. If 'peace to mind' is coded as 'zg wr dl' in the given code language, then what is the code for 'mind in festival'?
(a) zg bo dl
(b) dl zg sv
(c) bo sv zg
(d) zg nj wr
(e) sv wr bo

Solutions (Q. Nos. 1-5)

festival for women only ⟶ pa ge bo xu

provide peace to women ⟶ wr dl nj ge

women like to celebrate ⟶ ge ct fx wr

celebrate peace in festival ⟶ dl bo sv ct

The code for 'festival' → bo
The code for 'women' → ge
The code for 'peace' → dl
The code for 'to' → wr
The code for 'celebrate' → ct
The code for 'for' → either 'pa' or xu
The code for 'only' → either 'pa' or 'xu'
The code for 'provide' → nj
The code for 'like' → fx
The code for 'in' → sv

❯ **1. (c)** The possible code for 'provide idea' in the given code language in 'hy nj'.

❯ **2. (c)** The code for 'celebrate' in the given code language in 'ct'

❯ **3. (b)** The code 'pa' stands for either 'for' or 'only'

❯ **4. (e)** The code for 'women' in the given code language is 'ge'

❯ **5. (c)** If 'peace to mind' is coded as 'zg wr dl', then, 'mind in festival' is coded in the given code language is 'bo sv zg'.

6. In a certain code language, the word COSTLY is written as WORVMF and the word PRAISE is written as CVGDPS. How will the word SOCCER be written in that code language? **[IBPS (PO) 2013]**
(a) PHAFMV
(b) BJWQRA
(c) PGAENU
(d) AKXPSB
(e) None of these

❯ **(a)** In a certain code language, the word COSTLY is written as WORVMF, i.e.
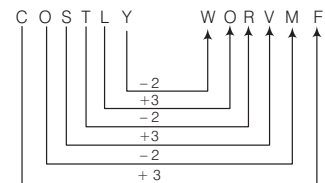
In the above code, we have a increment of + 3, − 2 of the position of alphabets. In the same manner, we write the code for PRAISE
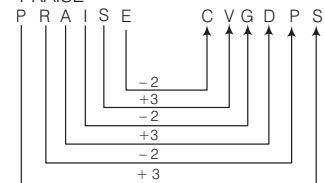
Similarly, the word SOCCER is written as
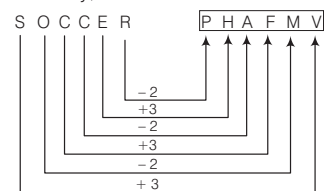
7. In a certain code language, DHIE is written as WSRV and AEFB is written as ZVUY. How will GKLH be written in that code language? **[IBPS (PO) 2013]**
(a) SQNR (b) TQMP (c) TRDO (d) TPOS
(e) None of these

❯ **(d)** In a certain code language, DHIE is written as WSRV, i.e.

D — Opposite → W
H — Opposite → S
I — Opposite → R
E — Opposite → V

and AEFB is written as ZVUY

A — Opposite → Z
E — Opposite → V
F — Opposite → U
B — Opposite → Y

Similarly, we can write the code for GKLH as
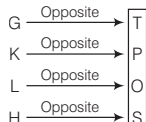
8. In a certain code, CONFUSED is written as EMNBEFTV. How is SECLUDED written in that code?
(a) RDBKEFEV
(b) KBDRCDCT
(c) KBDREFEV
(d) MDFTCDCT
(e) None of the above

⊚ **(c)** In a certain code, CONFUSED is written as EMNBEFTV.
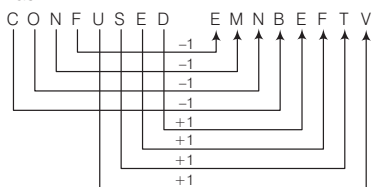
In the above code, first four letters are decrement by one position and the last four letters are increment by one position. In the same manner, we find the code for SECLUDED.
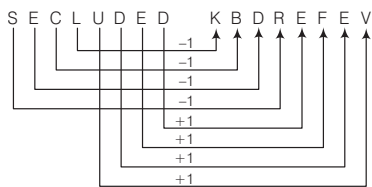
9. In a certain code, DESPAIR is written as TFEQSJB. How is NUMERAL written in that code?
(a) OVNFMBS
(b) NVOFSBN
(c) NVOMFBS
(d) NVOFMBS
(e) None of the above

⊚ **(d)** In a certain code, DESPAIR is written as TFEQSJB, i.e.
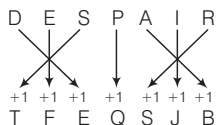
In the above figure, all the letters are increment by 1. In the same manner, we find the code for NUMERAL.

Similarly,
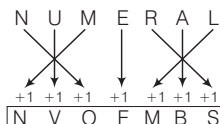
10. In a certain code, CROWNED is written as PSDVEFO. How is STREAMS written in that code?
(a) SUTDBNT
(b) TUSDTNB
(c) SUTFTNB
(d) QSRDTNB
(e) None of the above

⊚ **(e)** In a certain code, CROWNED is written as PSDVEFO, i.e.
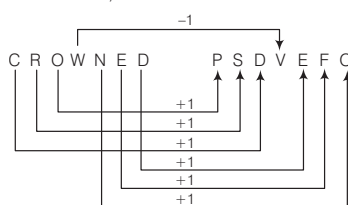
In the above figure, first three and the last three letters of the word CROWNED are increment by 1 and the middle letter is decrement by 1.

In the same manner, we find the code for STREAMS, i.e.
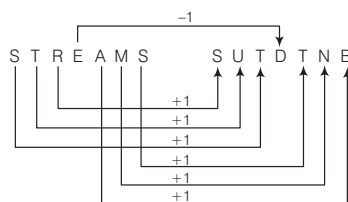
11. In a certain code, CORDIAL is written as SPDCMBJ. How is SOMEDAY written in that code?
(a) NPTDEBZ
(b) NPTFZBE
(c) TPNDZBE
(d) NPTDZBE
(e) None of the above

⊚ **(d)** In a certain code, CORDIAL is written as SPDCMBJ, i.e.
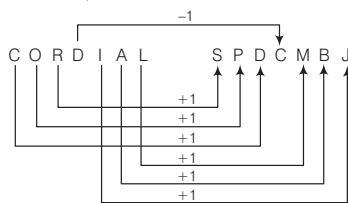
In the above figure, first three letters are increment by 1 and last three letters are also increment by 1 but middle letter is decrement by 1.

Similarly,
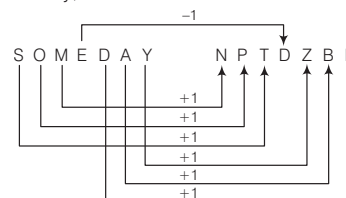
So, the code will be NPTDZBE.

Alternate Method

As,
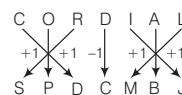
Similarly,

12. In a certain code, GLAMOUR is written as BMHLQTN. How is SERVING written in that code?
(a) TFSUTMH
(b) QDRTFMH
(c) QDRTHOJ
(d) SFTUFMH
(e) None of the above

⊚ **(d)** In a certain code, GLAMOUR is written as BMHLQTN, i.e.
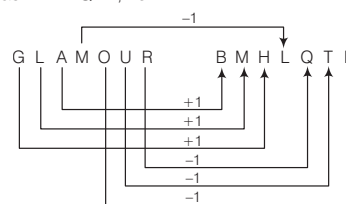
Here, first three letters are increment by 1 and last three letters are decrement by 1. The middle letter is also decrement by 1.
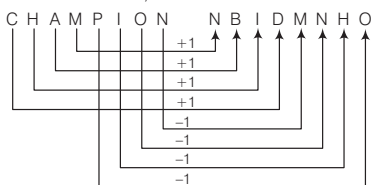
Similarly, we can find the code for SERVING, i.e.
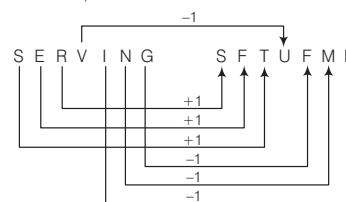
**13.** In a certain code, CHAMPION is written as NBIDMNHO. How is ELECTRON written in the code?

(a) FMDFMNQS
(b) BDKDMNQS
(c) DFMFOPSU
(d) DFMFMNQS
(e) None of the above

⊙ **(d)** In a certain code, CHAMPION is written as NBIDMNHO, i.e.

C H A M P I O N   N B I D M N H O
(+1, +1, +1, +1, −1, −1, −1, −1)

In the above code, first four letters are increment by 1 and last four letters are decrement by 1.

Similarly, we can find the code for ELECTRON, i.e.

E L E C T R O N   D F M F M N Q S
(+1, +1, +1, +1, −1, −1, −1, −1)
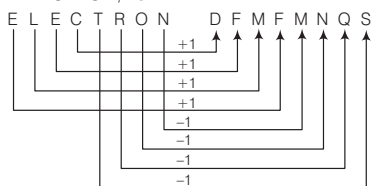
14. In a certain code, ORGANISE is written as BHSPDRHM. How is DOUBTFUL written in that code?

(a) CVPEKTES
(b) CVPIMVGU
(c) ATNCKTES
(d) ATNCMVGU
(e) None of the above

⊙ **(a)** In a certain code, ORGANISE is written as BHSPDRHM, i.e.
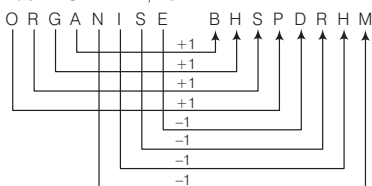
O R G A N I S E   B H S P D R H M
(+1, +1, +1, +1, −1, −1, −1, −1)

In the above code, first four letters are increment by 1 and last four letters are decrement by 1. In the same manner, we write the code for DOUBTFUL, i.e.

D O U B T F U L   C V P E K T E S
(+1, +1, +1, +1, −1, −1, −1, −1)
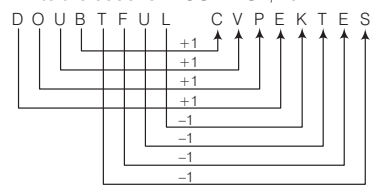
15. In a certain code, LAWN is written as JCUP. How will SLIT be coded in that code?

(a) QNGV (b) QJGV (c) QNVG (d) NJGV
(e) NJVG

⊙ **(a)** In a certain code, LAWN is written as JCUP, i.e.

Similarly

L —−2→ J   S —−2→ Q
A —+2→ C   L —+2→ N
W —−2→ U   I —−2→ G
N —+2→ P   T —+2→ V
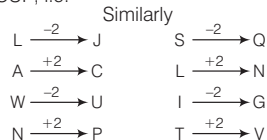
So, the code will be QNGV.

In the above code, each alphabet on odd position is decrement by 2 and each alphabet on even position is increment by 2.

16. In a certain code, SATELLITE is written as FUBTLDSHK. How is LAUNCHING written in that code?

(a) DOUBFGMHO   (b) OVBMCFMHG
(c) OVMBCFMHG   (d) DOUBCFMHG
(e) None of these

⊙ **(b)** In the given code,
SATELLITE → FUBTLDSHK
As,

S A T E L L I T E   F U B T L D S H K
(+1, +1, +1, +1, −1, −1, −1, −1)
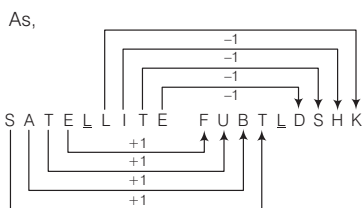
First four letters are increment by 1 and last four letters are decrement by 1 and the middle letter remains same.

Similarly,

L A U N C H I N G   O V B M C F M H G
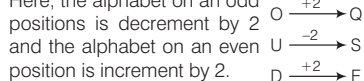(+1, +1, +1, +1, −1, −1, −1, −1)
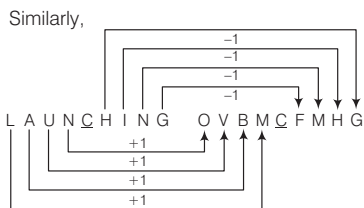
So, the code will be OVBMCFMHG.

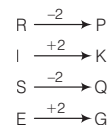**17.** In a certain code, if LOUD is written as JQSF, then which of the following English words shall be coded as PKQG?   **[Andhra Bank (PO) 2008]**

(a) RISE (b) ROPE (c) ROAD (d) RICE
(e) ROLE

⊙ **(a)** LOUD is written as JQSF.
Here, the alphabet on an odd positions is decrement by 2 and the alphabet on an even position is increment by 2.
Similarly,

L —−2→ J
O —+2→ Q
U —−2→ S
D —+2→ F
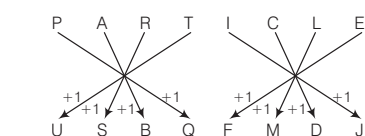
R —−2→ P
I —+2→ K
S —−2→ Q
E —+2→ G

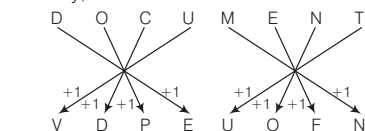**18.** In a certain code, PARTICLE is written as USBQFMDJ, how is DOCUMENT written in that code?   **[Uttarakhand (PO) 2007]**

(a) VDEPUONF
(b) VDPENFUQ
(c) VDPENFOU
(d) VDPEUOFN
(e) None of these

⊙ **(d)** PARTICLE is written as USBQFMDJ, i.e.

P A R T I C L E
(+1, +1, +1, +1, +1, +1, +1, +1)
U S B Q F M D J

Similarly,

D O C U M E N T
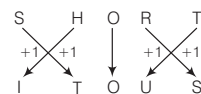(+1, +1, +1, +1, +1, +1, +1, +1)
V D P E U O F N

19. In a certain code language, SHORT is written as ITOUS and DWARF is written as XEAGS. How is MANGO written in that code language?   **[LIC AAO 2006]**

(a) NBNHP
(b) BNNPH
(c) BNNHP
(d) LBNPF
(e) None of these

⊙ **(b)** In a certain code language, SHORT is written as ITOUS.

S H O R T
(+1, +1, +1, +1)
I T O U S

Here, first two letters are increment by 1 alphabet and interchange their positions. The middle letter remains as it is and the last two letters are also increment by 1 alphabet and interchange their positions and also DWARF is written as XEAGS.

D W A R F
(+1, +1, +1, +1)
X E A G S

We follow the same logic in finding the code for MANGO.

M A N G O
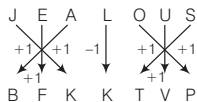(+1, +1, +1, +1)
B N N P H

20. In a certain code, JEALOUS is written as BFKKTVP. How is HEARTEN written in that code?
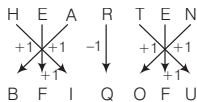
[Corporation Bank (PO) 2006]

(a) OFUQBFI   (b) BFIQOFU
(c) BFIQUFO   (d) UFOQIBF
(e) None of these

(b) In a certain code, JEALOUS is written as BFKKTVP.

In first three letters and last three letters codes increment by 1 and the middle letter of the given word decrement by 1. In the same manner, we code the following word HEARTEN.
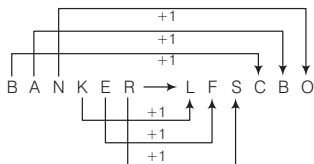

21. In a certain code language, BANKER is written as LFSCBO, how will CONFER be written in that code?

[Union Bank of India (PO) 2005]

(a) GFSDPO   (b) FGSDOP
(c) GFSEPO   (d) FHSDPO
(e) None of these

(a) In a certain code language, BANKER is written as LFSCBO, i.e.

Here, first three letters of the word are increment by one alphabet and becomes last three and the last three letters of the word are increment by one alphabet becomes first three letters of coded word.
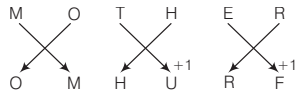
In the same manner, we code the word CONFER.
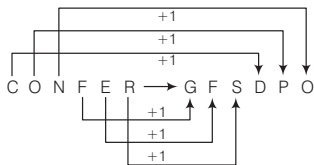
22. In a certain code, MOTHER is written as OMHURF. How will ANSWER be written in that code?
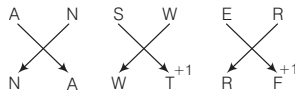
[Syndicate Bank (PO) 2004]

(a) NBWRRF   (b) MAVSPE
(c) NBWTRD   (d) NBXSSE
(e) None of these

(e) In a certain code language, MOTHER is written as OMHURF, i.e.

In the above code, we break the word in a set of 2 letters. Both the set of 2 letters interchange their positions but the letter at 3rd and 5th position is increment by 1. In the same manner, we code the word ANSWER.
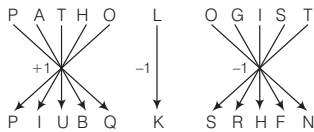

23. In a certain code, PATHOLOGIST is written as PIUBQKSRHFN. How is CONTROVERSY written in that code?
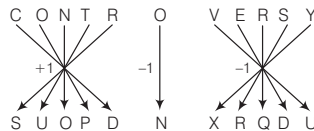
[Canara Bank (PO) 2003]

(a) SUOPDNXRQDU (b) SUOPDNZISFW
(c) QSMNBPXRQDU (d) QSMNBPZTSFW
(e) None of these

(a) In a certain code language, PATHOLOGIST is written as PIUBQKSRHFN.

In the above code, first five letters are increment by 1 and middle letter is decrement by 1, also the last five letters are decrement by 1. In the same manner, we find the code for the word CONTROVERSY.
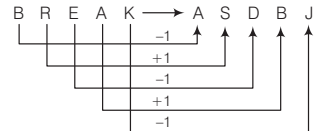

24. In a certain code, BREAK is written as ASDBJ. How is SOLAR written in that code?
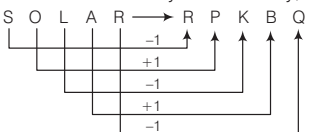
[SBI Bank (PO) 2001]

(a) RPKBS   (b) TPMBS
(c) RPKBQ   (d) TPKBQ
(e) None of these

(c) In a certain code, BREAK is written as ASDBJ, i.e.

In the above code, the letter at odd position is decrement by one and the letter at even position is increment by one. Similarly,

25. In a certain code, CHEMISTRY is written as NFIDITUSZ. How is BEANSTOCK written in that code?
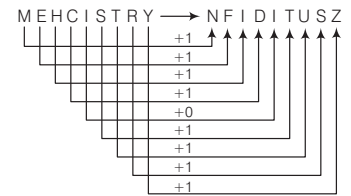
[SBI Bank (PO) 2001]

(a) CFBOSLDPU   (b) CFBOSUPDL
(c) OBFCSUPDL   (d) OBFCSLDPU
(e) None of these

(c) In a certain code language, CHEMISTRY is written as NFIDITUSZ.

In the word CHEMISTRY, write the first four letters in reverse order and the remaining letter as it is.

Increment all the letters by one letter except the middle letter.

Similarly, we can write the code for BEANSTOCK, i.e.
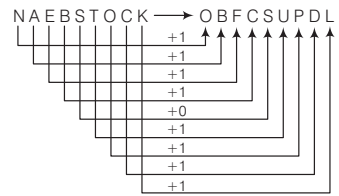
26. In a certain code language, the word DISTURB is written as DTWVUKF. How will the word FRANTIC be written in that code language? [SBI Associates Bank (PO) 2000]

(a) EKUPDTH
(b) FKCPVTH
(c) EKVPCTH
(d) FLVPCTH
(e) None of these

(c) In a certain code language, DISTURB is written as DTWVUKF
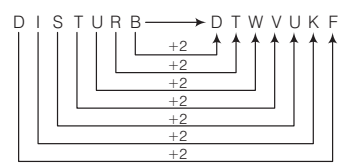
In the above code, each letter is increment by 2. In the same way, FRANTIC be written in that code as

Type ❷ Coding of Numbers/Symbols

In this type of coding, either numerical code values are assigned to a word or alphabetical code letters are assigned to the numbers. Sometimes, alphanumeric characters or special symbols are also assigned to a word or a number.
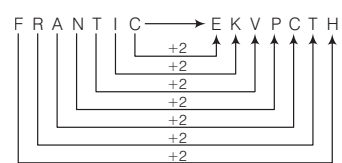
27. In a certain code, BASKET is written as 5$3%#1 and TRIED is written as , 14★#2. How is SKIRT written in that code?   **[IBPS (SO) 2012]**

(a) 3%★41   (b) 3★%41
(c) 3%#41   (d) 3#4%1
(e) None of these

⊙ **(a)** In a certain code, BASKET is written as

B A S K E T
↓ ↓ ↓ ↓ ↓ ↓
5 $ 3 % # 1

and TRIED is written as

T R I E D
↓ ↓ ↓ ↓ ↓
1 4 ★ # 2

So, we can write the word

S ——→ 3   R ——→ 4
K ——→ %   T ——→ 1
I ——→ ★

28. In a certain code, GATE is written as 5★3$ and TOUR is written as 32δ%. How is URGE written in that code?
          [Punjab & Sindh Bank (PO) 2010]

(a) 3%5$ (b) $%δ5 (c) δ%3$ (d) δ%5$
(e) None of these

⊙ **(d)** In a certain code language, GATE and TOUR is written as

G A T E and T O U R
↓ ↓ ↓ ↓   ↓ ↓ ↓ ↓
5 ★ 3 $ 3 2 δ %

From the above two different codes, we can find the code for URGE as

U R G E
↓ ↓ ↓ ↓
δ % 5 $

29. In a certain code, GEAR is written as 5%9$ and FIRM is written as 3@$7. How is FAME written in that code?
          [United Bank of India (PO) 2009]

(a) 397% (b) 3%97 (c) 597% (d) 5397
(e) None of these

⊙ **(a)** In a certain code, GEAR is written as

G → 5
E → %
A → 9
R → $ ...(i)

and FIRM is written as

F → 3
I → @
R → $
M → 7   ...(ii)

From Eqs. (i) and (ii), the code for FAME is

F → 3
A → 9
M → 7
E → %

30. In a certain code, DOES is written as 5 $ 3% and SITE is written as %4 # 3. How is EDIT written in that code?
          [Indian Overseas Bank (PO) 2009]

(a) 354# (b) 3#54 (c) 3$4# (d) 35$#
(e) None of these

⊙ **(a)** In a certain code, DOES is written as

D → 5
O → $
E → 3
S → %   ...(i)

and SITE is written as

S → %
I → 4
T → #
E → 3   ...(ii)

From Eqs. (i) and (ii), the code for EDIT is

E → 3
D → 5
I → 4
T → #

31. In a certain code, MODEL is written as 513#2 and DEAR is written as 3#%8. How is LOAD written in that code?   **[Andhra Bank (PO) Exam 2009]**

(a) 21%3 (b) 23%1 (c) 25%3 (d) 21#3
(e) None of these

⊙ **(a)** In a certain language, MODEL is written as

M → 5
O → 1
D → 3
E → #
L → 2   ...(i)

and DEAR is written as

D → 3
E → #
A → %
R → 8   ...(ii)

From Eqs. (i) and (ii), the code for LOAD is written as

L → 2
O → 1
A → %
D → 3

32. In a certain code, STAR is written as 5$★2 and TORE is written as $32@. How is OATS written in that code?
          [NABARD Bank (PO) 2009]

(a) 3★5$ (b) 3$$5 (c) 3$★5 (d) 35★$
(e) None of these

⊙ **(b)** In a certain code, STAR is written as

S → 5
T → $
A → ★
R → 2   ...(i)

and TORE is written as

T → $
O → 3
R → 2
E → @   ...(ii)

From Eqs. (i) and (ii), the code for OATS is written as

O → 3
A → ★
T → $
S → 5

33. In a certain code, DONE is written as 5139 and SEAL is written as 8942. How is LOAD written in that code?
          [New Assurance (PO) 2009]

(a) 2415   (b) 2145
(c) 2945   (d) 2182
(e) None of these

⊙ **(b)** In a certain code, DONE is written as.

D → 5
O → 1
N → 3
E → 9   ...(i)

and SEAL is written as

S → 8
E → 9
A → 4
L → 2   ...(ii)

From Eqs. (i) and (ii) the code for LOAD is written as

L → 2
O → 1
A → 4
D → 5

34. In a certain code PLANT is written as $@2★© and YIELD is written as β64@%. How is DELAY written in that code?   **[Oriental Bank (PO) 2009]**

(a) β 4★2%   (b) β 4 @ 2 %
(c) % 4 2 @β   (d) % 4 @ 2 β
(e) None of these

⊙ **(d)** In a certain code language, PLANT is written as

P → $
L → @
A → 2
N → ★
T → ©   ...(i)

and YIELD is coded as

Y → β
I → 6
E → 4
L → @
D → %

From Eqs. (i) and (ii), we get the code for DELAY as

```
D   E   L   A   Y
↓   ↓   ↓   ↓   ↓
%   4   @   2   β
```

35. In a certain code, SAFER is written as 5@3#2 and RIDE is written as 2©%#. How is FEDS written in that code?
      [RBI (Grade B) PO 2009]

(a) 3#©5   (b) 3@%5   (c) 3#%5   (d) 3#%2
(e) None of these

⊙ **(c)** In a certain code, SAFER is written as

```
S   →   5
A   →   @
F   →   3
E   →   #
R   →   2
```

RIDE is written as

```
R   →   2
I   →   ©
D   →   %
E   →   #
```

In the same manner, we write the code for FEDS as

```
F   E   D   S
↓   ↓   ↓   ↓
3   #   %   5
```

36. In a certain code, GEAR is written as 5@3© and MOVE is written as 7$9@. How is ROAM written in that code?
      [Haryana Grameen Bank (PO) 2009]

(a) ©$37   (b) ©3$7   (c) @$37   (d) ©$57
(e) None of these

⊙ **(a)** GEAR is written as

```
G   E   A   R
↓   ↓   ↓   ↓
5   @   3   ©
```

and MOVE is written as

```
M   O   V   E
↓   ↓   ↓   ↓
7   $   9   @
```

From the above two codes, we get

```
R   →   ©
O   →   $
A   →   3
M   →   7
```

37. In a certain code, DOWN is written as 5139 and NEAR is written as 9486. How is RODE written in that code?
      [Indian Overseas Bank (PO) 2008]

(a) 6514   (b) 6154   (c) 9154   (d) 3154
(e) None of these

⊙ **(b)** In a certain code, DOWN is written as

```
D   →   5
O   →   1
W   →   3
N   →   9        ...(i)
```

and NEAR is written as

```
N   →   9
E   →   4
A   →   8
R   →   6        ...(ii)
```

From Eqs. (i) and (ii), RODE is written as

```
R   →   6
O   →   1
D   →   5
E   →   4
```

38. In a certain code, ROSE is written as #43$ and FIRST is written as 5★#37. How is STORE written in that code?
      [SBI (PO) 2008]

(a) 473$#   (b) 473#$ (c) 374#$ (c) 347#$
(e) None of these

⊙ **(c)** In a certain code, ROSE is written as

```
R   O   S   E
↓   ↓   ↓   ↓
#   4   3   $        ...(i)
```

and FIRST is written as

```
F   I   R   S   T
↓   ↓   ↓   ↓   ↓
5   ★   #   3   7    ...(ii)
```

From Eqs. (i) and (ii), STORE is written as

```
S   →   3
T   →   7
O   →   4
R   →   #
E   →   $
```

39. In a certain code, PRAISE is written as #@$27% and RESPIRE is written as @%7#2@%. How is REPAIR written in that code?
      [Dena Bank (PO) 2008]

(a) @ % # 2 $ @   (b) @ % $ # 2 @
(c) @ % # $ 2 @   (d) @ % $ 2 # @
(e) None of these

⊙ **(c)** In a certain code, PRAISE is written as #@$27% and RESPIRE is written as @%7#2@%.

```
P   R   A   I   S   E
↓   ↓   ↓   ↓   ↓   ↓
#   @   $   2   7   %
```

and

```
R   E   S   P   I   R   E
↓   ↓   ↓   ↓   ↓   ↓   ↓
@   %   7   #   2   @   %
```

So, From the above code, we get the code for REPAIR

```
R   E   P   A   I   R
↓   ↓   ↓   ↓   ↓   ↓
@   %   #   $   2   @
```

40. In a certain code, JUST is written as #@%$ and LATE is written as ©↑$★. How is TASTE written in that code?
      [Bank of Baroda (PO) 2008]

(a) ★↑%$★   (b) $↑%$★
(c) $↑%★$ (d) $%↑%★
(e) None of these

⊙ **(b)** JUST and LATE are written as

```
J   U   S   T   and   L   A   T   E
↓   ↓   ↓   ↓         ↓   ↓   ↓   ↓
#   @   %   $         ©   ↑   $   ★
```

Therefore, TASTE is written as

```
T   A   S   T   E
↓   ↓   ↓   ↓   ↓
$   ↑   %   $   ★
```

41. In a certain code, RAID is written as %#★$, RIPE is written as %★@©. How is DEAR written in that code?
      [Andhra Bank (PO) 2007]

(a) @©#%   (b) $@#%
(c) @$#%   (d) $©#%
(e) None of these

⊙ **(d)** In a certain code, RAID and RIPE is written as.

```
R   A   I   D   and   R   I   P   E
↓   ↓   ↓   ↓         ↓   ↓   ↓   ↓
%   #   ★   $         %   ★   @   ©
```

So, DEAR is written as

```
D   ——→   $
E   ——→   ©
A   ——→   #
R   ——→   %
```

42. In a certain code, ORIENT is written as 532146 and SOUL is written as 7598. How is LINE written in that code?
      [Corporation Bank (PO) 2006]

(a) 9241   (b) 8341
(c) 8241   (d) 6241
(e) None of these

⊙ **(c)** In a certain code, ORIENT is written as

```
O   →   5
R   →   3
I   →   2
E   →   1
N   →   4
T   →   6        ...(i)
```

and SOUL is written as

```
S   →   7
O   →   5
U   →   9
L   →   8        ...(ii)
```

From Eqs. (i) and (ii), we derive the code for the word LINE

```
L   →   8
I   →   2
N   →   4
E   →   1
```

43. In a certain code language, MEAL is written as $£★@ and SAFE is written as ●★+£. How is FAME written in that code language?
      [LIC (AAO) 2006]

(a) +★$£   (b) ★+$@
(c) +★@$ (d) £@★+
(e) None of these

⊙ **(a)** In a certain code language, MEAL is written as

```
M   →   $
E   →   £
A   →   ★
L   →   @        ...(i)
```