

MENTAL ABILITY ASSIGNMENT No:1

Coding and Decoding

Introduction

Coding refers to a secretive language which is used to change the representation of the actual term/ word/ value/ number / letter. In attempting questions on coding, one needs to decode the given code and then apply it to the asked part.

Solved Examples

Q1. If ZXV stands for ACE. What will YZW stand for ?

a) ABD

b) EAC

c) SAD

d) BAD

Z	X	V	-----→ reverse series ←-----	Y	Z	W
A	C	E	-----→ natural series ←-----	B	A	D
1 st	3 rd	5 th	(Position of the letters)	2 nd	1 st	4 th

so (d) is the answer.

Q2. If BAD in a certain language is code as 514,GIVE as 3068 and FOR as 729,then how will VIDEO be written ?

a) 60482

b)03482

c) 30214

d) 60487

Explanation :- B A D
 5 1 4

G I V E
3 0 6 8

F O R
7 2 9

VIDEO : 60482

So, the answer is (d) 60487

MENTAL ABILITY ASSIGNMENT No:1

LEVEL: I

- 1.) If CHAIR is coded as FKDLU then RAID is coded as
a) ULGD b) ULKG c) ULDG d) UDLG
- 2.) In a certain code PORTUGESE is written as ESEGUTROP, MALAYALAM will be written in the same code as :
a) MALAYALAM b) MALYALAM c) MALAYALM d) MALAYLAM
- 3) If 'W' is coded as 'a', 's' as 'n' and 'n' as 'w' how will 'answer' be written.
a) wnsaes b) anvaew c) anvwas d) wnvaes
- 4) In a certain code PUNCTUAL is written as 16598623, in the same code ACTUPLN will be written as –
a) 29861653 b) 29861635 c) 29816135 d) 29851536
- 5) If "light" is called "dark", "dark" is called "green", "green" is called "blue", "blue" is called "red", "red" is called "white", "white" is called "yellow". What is the colour of blood?
a) Red b) Dark c) White d) Yellow
- 6) If "engineers" are "carpenters", "carpenters" are "painters", "painters" are "cobblers", "cobblers" are "doctors", "doctors" are "authors", "authors" are "jewelers" and "jewelers" are "robbers", who cures the sick people?
a) jewelers b) painters c) authors d) doctors
- 7) The following questions are based on the code pattern given below-
Digit s-----→ 2 6 4 1 0 8 3 7 5 9
 | | | | | | | | | |
Letters-----→ M E N H V F I W L X
Then, correct code form of given numbers are:-
I) 435216
a) HILMNE b) NILMHE c) VFLMNE d) NILHME
II) 897615
a) FXWEHL b) VXLENH c) FXLWHE d) VXELHI
III) 146738
a) HNEIWF b) HNWEIF c) HENWIF d) HNEWIF
IV) 092863
a) VXMFEI b) VXMIFE c) VXMIEF d) VXFMEI
V) 702439
a) LVMIEX b) INEMHV c) WVMNIX d) VWNMEX

MENTAL ABILITY ASSIGNMENT No:2

Calender , Clock , Time and Distance

Introduction

LEVEL: I

These are mathematical problem based on calculations of time by a clock or calendar and computations speed or distance.

Solved Example

Q) If day – after – Tomorrow is Sunday , what was day – before – yesterday ?

- a) Wednesday b) Thursday c) Friday d) Saturday

Explanation :

Day – before - yesterday -----→ Wednesday

Yesterday -----→ Thursday Friday

Today -----→ Friday

Tomorrow-----→ Saturday

Day after tomorrow -----→ Sunday

So the answer is (a) Wednesday

Q) How many times in 12 hours, the hands of the clock will be at right angles ?

- a) 12 b) 16 c) 18 d) 24

Explanation :-

In every hour the hands are at right angles twice so, the answer is (d) 24.

Q) If a train runs at a speed of 92.7 Km / hr , Then the distance covered in meters in 20 minutes will be

- a) 3009 b) 309 c) 3090 d) 30900

Explanation :-

Speed of train =92.7 km /hr.

Train travels 92700 m in 60 minutes. In 20 minutes distance traveled will be

$$\frac{92700}{60} \times 20 = 30900 \text{ Km}$$

So, the answer is (d) 30900 m.

ASSIGNMENT NO : 2

LEVEL: I

1. If day before yesterday was Thursday when will Sunday be ?
a) Tomorrow b) Day after tomorrow c) Today d) Two day after Today's
2. If the 7th day of a month is 3 days earlier than Friday. What day will it be on the 19th day of the month ?
a) Sunday b) Monday c) Wednesday d) Friday
3. A man is 3 year older than his wife and 4 times as old as his son . If The son attains an age of 15 yrs after 3 yrs . What is the present age of the mother ?
a) 60 yrs b) 51yrs c) 48yrs d) 45 yrs
4. A clock is so placed that at 12 noon. Its minute hand points towards North East. In which direction does its hour hand point at 1:30 pm ?
a) East b) West c) North d) South
5. Manoj left home for the bus stop 15 minutes earlier than the usual time . It takes 10 minutes to reach the stop. He reached the stop at 8:40 am .What time does he usually leave for the bus stop ?
a) 8:30 am b) 8:55 am c) 8:45 pm d) 9:00 am
6. Manu went to the movie nine days ago. She goes to movies only on Thursdays. What day of the week is today ?
a) Sunday b) Tuesday c) Thursday d) Saturday
7. A City Bus company operates 7 buses M,N,O,P,Q, R and S. Each once for daily 4 hours , sightseeing tours.
 - From Monday to Friday 1st bus leaves at 8:00 am sharp , subsequent bus leaves alternately after a gap of 45 min. Followed by 30 min, Again 45 min. and 35 min. and so on .
 - On Saturday and Sunday 1st bus leaves at 7:30 am others follows regularly after a gap of 1 hour.
 - Bus Q leaves immediately after M. and is immediately follower by S.
 - Bus O is not followed by any other bus.
 - Bus R leaves immediately before M. but not immediately after P.

I. At what time bus M leaves on Saturday ?

- a) 10 :00 am b) 9:45 am c) 10 :30 am d) 8 :30 am

II. On Sunday when bus P completes its tour, which of the following buses begin its tours ?

- a) Q b) S c) O d) M

III If the time gaps, after bus M leaves on sat. and sun. is increased by 30 min. For the subsequent trips at what time tour of bus O will be completed ?

- a) 3:00 pm b) 2: 00 pm c) 6:00 pm d) 7:00 pm.

MENTAL ABILITY ASSIGNMENT No:3

ARRANGING LETTER / NUMBER

LEVEL: I

Q1. If the word 'DISINTERESTEDNESS' is re-written by reserving the order of first seven and last six letter then,

1. Which letter will be tenth letter towards right ?

- a) R b) E C) T d) S

2. Which letter will be sixth letter from end towards left ?

- a) R b) E c) S d) N

3. which consonant will be exactly in the middle ?

- a) T b) E c) S d) None

Q2. 6 9 6 9 9 6 6 7 6 9 7 9 6 6 9 7 7 9 6 6 7

1. How many 9s are sandwiched between 6 and 7 ?

- a) 2 b) 3 c) 4 d) 1

2. How many 6s are sandwiched between 9s ?

- a) 1 b) 2 c) 3 d) 4

3. How many 7s have a 6 before and after ?

- a) 1 b) 2 c) 3 d) 4

Q3. If the first three letters of the word 'COMPREHENSION' are reversed, then last letters are added and then the remaining letter are reversed and added then.

1. Which letter will be exactly in the middle ?

- a) H b) R c) S d) N

2. Which letter will be fifth from the end ?

- a) S b) R c) N d) E

Q4. If first six letters of the word 'THOUGHT FULESSNESS' are reversed, next six letters are writtern as they are and then the remaining letters are reversed,

1. Which letter will be exactly in the middle ?

- a) F b) U c) L: d) T

2. Which two letters will be sandwiched between double T and double L?

- a) NS b) FE c) FU d) HT

3. If all vowels are removed which letter will be exactly in the middle ?

- a) T b) L c) F d) None

Q5. Series m n m n n m m n m n m m m u u m n m n n m m m n

1. How many m's are preceded by n and followed by m ?

- a) 1 b) 2 c) 3 d) 4

2. How many n's are preceded and followed by n ?

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

3. How many m's are preceded and followed by m ?

- a) 1 b) 2 c) 3 d) 4

Q6. Sequence

a b c d e f g h i l k j m n o r q s t u v w x y z

1. Which letters are wrongly placed ?

- a) rt/jl b) vu/jl c) m/j d) jl/rq

2. How many letters are missing and how many repeated ?

- a) 5 b) 3 c) 2 d) None

Q7. Sequence

P M P A Q R O P Q R E S O T A P Q E O A P A P A Q E O

1. If all vowels are eliminated which letter will come exactly in the centre ?

- a) Q b) P c) R d) T

2. Which consonant has maximum vowels preceding it ?

- a) T b) Q c) R d) P

3. How many P's are there which are preceded by vowels but not followed by vowel

- a) 1 b) 2 c) 3 d) 4

4. Which consonants have equal frequency ?

- a) PMR b) MSQ c) MST d) PQR

MENTAL ABILITY ASSIGNMENT No: 4

ARRANGING IN ORDER

Introduction

LEVEL: I

In these type of questions, arrangement of given options is done on the basis of dictionary , size, weight , natural / reverse sequence etc. in either ascending or descending order.

Solved Example

I) What will come in the second place if the following words are arranged according to dictionary ?

- * Reason * Retina * Regard * Ransom * Ration

- a) Retina b) Ration c) Regard d) Ransom

Explanation: - Arrangement according to dictionary is as follows
Ransom, Ration, Reason, Regard, Retina

So , the answer is (b)

II) Arrange the following in a meaningful order

- * Andhra Pradesh * Universe * Tirupathi * World * India

- a) 15324 b) 41532 c) 54213 d) 34125

Explanation: - Tirupathi is in Andhra Pradesh that is in India . India is a part of the world that belongs to the universe.

Questions

1. Which word would appear in the middle if they are arranged in the dictionary order ?

- a) Delude b) Delirium c) Defer d) Demean
e) Delete

2. Arrange in a meaningful order.

- 1)Key 2)Door 3) Lock 4)Room 5)Switch on .
a) 51243 b) 42153 c) 13245 d) 12354

3. Which will be the third word in sequence. If the following words are arranged according to the dictionary order?

- a) Amphibian b) Amorphous c) Ambiguous d) Amphidextrous
e) Ambivalent

4. Arrange in a meaningful order.

- 1) Construction , 2) Illness , 3) Doctor , 4) Treatment, 5) Recovery

MENTAL ABILITY ASSIGNMENT No: 5

ANALOGY

Introduction

LEVEL: I

Analogies are about relationships between words letters or numbers. In questions pertaining to analogy, the first step is to identify the type of relationship between the given pair and then apply it to the other.

Solved Examples:

1. "Mania" is to "Craze" as "Phobia" is to _____

- a) Desires b) Hobbies c) Want d) Fear

The related words are synonyms so (d) Fear is the answer.

II. Malaria : Mosquito : : Plague : _____

- a) Rat b) Squirrels c) Cat d) Dog

Malaria is caused by mosquito and similarly Plague is caused by Rat so (a) is the answer.

III. NATION : ANITNO : : HUNGRY : _____

- A) HUNGRY B) UNHGYR C) YRNGUH D) UHGNYR

In the given set, the word is divided in sections of two letters and the letters are reversed,

NA TI ON : AN IT NO

HU NG RY : UH GN YR

1) Stammering is to speech as deafness is to _____

- a) Ear b) Hearing c) Noise d) Silence

2) Secretive is to open as snide is to _____

- a) Forthright b) Hidden c) Outcome d) Forward

3) Ride : Horse : : Smoke : _____

- a) Chimney b) Sparkling c) Pipe d) Ashes

4) Chef : Kitchen : : _____

- a) Spider : Web b) Soldier : Gun c) Admiral : Navy d) Beer : Brewer

5) Good : Bad : : Virtue : _____

- a) Blame b) Sin c) Despair d) Vice

6) Wool is to sheep as silk is to _____

- a) Saree b) String c) Silkworm d) Moth

7) Mother is to Maternal as Father is to _____

- a) External b) Detrimental c) Paternal d) Sentimental

8) Chalk : Blackboard :: _____
a) Door : Handle b) Table : Chair

c) Ink : Paper d) Type : Paint

9) GFC : CFG :: RPJ : _____
a) JRP b) JPR

c) PJR d) RJP

10) BCF : DEG :: MNQ : _____
a) OPR b) PQS

c) OPP d) QRT

11) 18 is to 27 as 22 is to _____
a) 42 b) 39

c) 33 d) 54

12) 8 : 27 :: 64 : _____
a) 277 b) 125

c) 250 d) 99

13) $\frac{1}{7}$: $\frac{1}{14}$:: $\frac{1}{9}$: _____
a) $\frac{1}{88}$ b) $\frac{1}{80}$

c) $\frac{1}{81}$ d) $\frac{1}{18}$

14) 99 : 76 :: 24 : _____
a) 1 b) 13

c) 9 d) 7

15) 65 : 13 :: 180 : _____
a) 93 b) 36

c) 133 d) 102

MENTAL ABILITY ASSIGNMENT No: 6

Blood Relationship

LEVEL: I

While attempting questions on blood relations, one should be clear of all relationship patterns that can exist between any two individuals. In such cases, drawing an arrow diagram to depict the relations is always helpful. Some of the common relations that feature in these questions are as follows:-

Father's father - Paternal Grandfather

Mother's father – Maternal Grand father

Father's Mother - Paternal Grandmother

Mother's Mother – Maternal Grand mother

Father's/ Mother's Son- Brother

Father's / Mother's Daughter – Sister

Father's Brother – Paternal Uncle

Father's Sister – Paternal aunty

Mother's Brother – Maternal Uncle

Mother's Sister – Maternal Aunty

Uncle / Anut's Son / Daughter- Cousin

Son's Wife – Daughter – in – law

Daughter' Husband – Son –in –law

Husband/ Wife's Brother – Brother –in-law

Husband / Wife's Sister - Sister -in-law

Brother's wife – Sister- in –law

Sister's Husband – Brother – in- law

Brother's Son – Nephew

Brother's Daughter – Niece

- 1) A is the father of B and C. But C is not the son of A. What is C's relation to A?

a) Daughter

b) Son

c) Niece

d) Nephew

- 2) Ravi is the brother of Amit's Son's Son. What is the relation of Amit to Ravi ?

a) Cousin

b) Father

c) Grand father

d) son

- 3) Introducing Lily , Raghav said – " Her father is my mother's only son ". How is Lily related to Raghav .

a) Aunt

b) Daughter

c) Mother

d) Sister

- 4) Ajay is the brother of Vijay. Mili is the sister of Ajay. Sanjay is the brother of Rahul. Mehul is the daughter of Vijay. Who is Sanjay's Uncle?

a) Rahul

b) Ajay

c) Mehul

d) None

- 5) A and B are two brothers. C is sister of B. D is the sister of E. E is son of A. who is D's uncle ?

a) D

b) E

c) B

d) C

6) Varun said pointing towards Arun – " He is my sister's only brother's Son/ ". How is Arun related to Varun ?

- a) Son b) Brother c) Nephew d) None

7) A man said to a lady " Rohini's mother is the only daughter of your father". How is the lady related to Rohini.

- a) Daughter b) Sister c) Wife d) Mother

8) Pointing to a man , a woman said " He is the only son of my mother's Mother." He is the woman related to the man?

- a) Aunt b) Daughter c) Niece d) Sister

9) If B's mother was A's mother's daughter. How was A related to B?

- a) Aunt b) Uncle c) Sister d) Either (a) or (b)

10) A man and Woman are sitting in a room. Man's mother – in –law and woman's mother – in – law are mother and daughter respectively Man is the _____ of the woman ?

- a) Father b) Father –in –law c) Uncle d) Grandfather – in-law