# **CODING and DECODING**

Coding and Decoding is the method used for transmitting a message from sender to receiver that no third party can understand it. Coding and Decoding can be done in two ways:

- (1) Letter Coding
- (2) Number Coding

#### **LETTER CODING**

Some Important methods used in Letter Coding

Method 1: Moving a letter forward

If the word NELLORE is coded as OFMMPSF, then coded word for HYDERABAD is

**Answer: IZEFSBCBE** 

**Explanation**: Each letter is moved one step forward in the word-**NELLORE**, you can obtain the corresponding

word- OFMMPSF as N -> O,E ->F,L -> M,L -> M,O->P,R->S and E->F. Similarly, HYDERABAD can be

coded as IZEFSBCBE.

Method 2: Moving a letter backward

If the word CHAIR is coded as BGZHQ, then coded word for BENCH is

**Answer: ADMBG** 

**Explanation**: Each letter is moved one step backward in the word- CHAIR, you can obtain the corresponding

word- **BGZHQ** as **B** -> **A**, **E** -> **D**,**N** -> **M**,**C** -> **B** and **H** ->**G**. Similarly,

**BENCH** can be coded as **ADMBG Method 3: Reversing the word** 

If the word MADAM is coded as MADAM, then coded word for LEVEL is

Answer: LEVEL

**Explanation**: Reverse order for **MADAM** is **MADAM**. Similarly for **LEVEL**, it is **LEVEL**.

Method 4: Reversing the word and moving one step forward

If the word INTERNET is coded as UFOSFUOJ, then coded word for MODEM is

**Answer: NFEPN** 

**Explanation:** Given word **INTERNET** should be written in reverse order first i.e. **TENRETNI** and then each

letter should be moved one step forward i.e. T->U, E->F . . . . N->O and I->J and finally it becomes

as UFOSFUOJ. Similarly MODEM first appears as MEDOM and then becomes as NFEPN.

Method 5: Reversing the word and moving one step backward

If the word PERMUTATIONS is coded as RMNHSZSTLQDO, then coded word for COMBINATIONS is

**Answer: RMNHSZMHALNB** 

**Explanation**: Given word **PERMUTATIONS** should be written in reverse order first i.e.,

SNOITATUMREP and then each letter should be moved one step backward i.e. S->R, N->M...E->D and P->O and finally it becomes as RMNHSZSTLQDO. Similarly COMBINATIONS first appears as SNOITANIBMOC

and then becomes as RMNHSZMHALNB.

Method 6: Reversing all letters except first and last

If the word PROCESSOR is coded as POSSECORR, then coded word for KEYBOARD is

**Answer: KRAOBYED** 

**Explanation**: In the given word, first and last letters will remain same and remaining letters are written in

reverse order. Then PROCESSOR -> POSSECORR. Then KEYBOARD becomes KRAOBYED

Method 7: Moving odd letters a step forward, without any change in even letters

If the word **POTATO** is coded as **QOUAUO**, then coded word for **BRINJAL** is

**Answer: CRJNKAM** 

**Explanation**: In the given word **POTATO**, odd letters are moved a step forward while the even letters remains

same i.e. P->Q,T->U and T->U, the new word becomes as QOUAUO. Similarly BRINJAL becomes

as **CRJNKAM** 

## Method 8: Moving even letters a step forward, without any change in odd letters

If the word CHEMICAL is coded as CIENIDAM, then coded word for MEDICAL is

Answer: MFDJCBL

**Explanation**: In the given word **CHEMICAL**, even letters are moved a step forward while the odd letters remains same i.e. **H->I,M->N, C->D** and **L->M, the new word becomes as CIENIDAM**.

Similarly MEDICAL becomes as MFDJCBL.

## Method 9: Moving even letters a step forward and odd numbers a step backward

If the word QUESTION is coded as PVDTSJNO, then coded word for ANSWER is

**Answer: ZORXDS** 

Explanation: In the given word QUESTION, if even letters are moved one step forward (U->V, S->T, I->J and

N->O) and odd letters moved one step backward (Q->P, E->D, T->S and O>N), then the

word QUESTION becomes as PVDTSJNO. Similarly, ANSWER becomes as ZORXDS.

#### Method 10: Moving odd letters a step forward and even numbers a step backward

If the word PENCIL is coded as QDOBJK, then coded word for ERASER is

**Answer: FQBRFQ** 

**Explanation**: In the given word **PENCIL**, if **odd** letters are moved one step forward (**P->Q**, **N->O** and **I->J**) and **even** letters moved one step backward (**E->D**, **C->B** and **L>K**), then the word **PENCIL** becomes as **QDOBJK**. Similarly, **ERASER** becomes as **FQBRFQ**.

- 1. In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?
  - a. QDFHS
  - b. SDFHS
  - c. SHFDQ
  - d. UJHFS
  - e. None of these
- 2. If in a code language, COULD is written as BNTKC and MARGIN is written as LZQFHM, how will MOULDING be written in that code?
  - a. CHMFINTK
  - b. LNKTCHMF
  - c. LNTKCHMF
  - d. NITKHCMF
  - e. None of these
- 3. If in a certain language FASHION is coded as FOIHSAN, how is PROBLEM coded in that code?
  - a. PELBROM
  - b. PRBOELM
  - c. PELBORM
  - d. RPBOELM
  - e. ROBLEMP
- 4. If FRAGRANCE is written as SBHSBODFG, how can IMPOSING be written?
  - a. NQTPJOHJ
  - b. NQPTJHOJ
  - c. NQPTJOHI
  - d. NQPTJOHJ
  - e. None of these
- 5. If FRIEND is coded as HUMJTK, how is CANDLE written in that code?
  - a. EDRIRL
  - b. DCQHQK
  - c. DEQJQM
  - d. FYOBOC

6.	If in a certain language, 943 is coded as BED and 12448 is coded as SWEET, how is 492311 coded in that language?  a. EDSWBS b. TSWBDD c. DSWTEE d. EBDSWE e. EBWDSS
	If white is called blue, blue is called red, red is called yellow, yellow is called green, green is called black, black is called violet and violet is called orange, what would be the colour of human blood?  a. Red  b. Green  c. Yellow  d. Violet  e. Orange
8.	If lead is called stick, stick is called nib, nib is called needle, needle is called rope and rope is called thread, what will be fitted in a pen to write with it?  a. Stick b.Lead c.Needle d.Nib e. Thread
	In a certain code language, 'col tip mot' means 'singing is appreciable'; 'mot baj min' means 'dancing is good' and 'tip nopbaj' means 'singing and dancing', which of the following means 'good' in that code language?  a. Not  b. Min  c. Baj  d. Can't be determined  e. None of these  J. If HEATER is written as KBDQHO, how will you encode COOLER?  a. ALRIHV  b. FLRIHO
11	c. FLIRHO d. FRLIHO e. None of these . If CONTRIBUTE is written as ETBUIRNTOC, which letter will be in the sixth place when counted from
	the left if POPULARISE is written in that code?  a. L b.A c.I d.R
12	2. If PALAM could be given the code number 43, what code number can be given to SANTACRUZ?  a. 75 b.85 c.120 d.123
13	3. If $Z = 52$ and ACT = 48, then BAT will be equal to
	a. 39 b. 41 c.44 d.46 I. If REASON is coded as 5 and BELIEVED as 7, what is the code number for GOVERNMENT? a. 6 b. 8 c. 9 d. 10 I. If LINGER is 123456 and FORCE is 56789, then FIERCE is a. 345667 b. 456678 c. 345677 d. 556789