



ANSWER KEY – 9

TOPIC – LOGIC GATES & COMBINATIONAL CIRCUITS

SUBJECT: COMPUTER APPLICATION

F.M.: 15

CLASS: XII

DATE: 12.05.2020

➤ Choose the correct option:

(1X15=15)

1) A Decoder circuit has:

(a) one input, many outputs

(b) many inputs, one output

(c) one input, one output

(d) many inputs, many outputs

2) A decoder circuit can be used to decode:

(a) Octal data

(b) Binary data

(c) Decimal data

(d) Hexadecimal data

3) In decoder, m control signals can be used to activate any one of the _____ outputs:

(a) 2^m

(b) m

(c) 2m

(d) m^2

4) For a 2X4 Decoder, what is the number of outputs?:

(a) 2

(b) 4

(c) 6

(d) 8

5) If input line of a DE-MUX is made equal to _____ then a DE-MUX can be used as a Decoder:

(a) 0

(b) 1

(c) 2

(d) 3

6) The number of AND gate(s) needed for circuit diagram of 3X8 Decoder will be:

(a) 4

(b) 6

(c) 8

(d) 10

7) What is the number of inputs for a 2X4 Decoder?:

(a) 4

(b) 2

(c) 8

(d) 3

8) If the input combination is 11 for a 2X4 decoder, which output will be high?

(a) D_1

(b) D_2

(c) D_3

(d) D_4

9) For 3 inputs, what will be the number of outputs of a Decoder?:

(a) 8

(b) 5

(c) 4

(d) 1

10) With no separate data input lines, a Decoder is similar to a:

(a) Multiplexer

(b) De - multiplexer

(c) Encoder

(d) None of these

11) If there are 16 outputs in a Decoder, what will be the number of inputs?:

- (a) 2 (b) 3 **(c) 4** (d) 5

12) In a 2X4 Decoder, 1 0 as input combination will activate the following output:

- (a) D_0 (B) D_1 **(c) D_2** (d) D_3

13) Address Decoder decodes the address bits on the address bus to access a particular _____ location:

- (a) Memory** (b) File (c) CD Drive (d) None of these

14) 3 bit input signals can be used to activate _____ number of outputs:

- (a) 2 (b) 4 (c) 6 **(d) 8**

15) If the number of outputs is 10, the number of input signals required is:

- (a) 2 **(b) 4** (c) 6 (d) 8

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