



WORKSHEET – 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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