

(DME 324)

B.Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Third Year)

MECHANICAL ENGINEERING

Paper - IV : Basic Electronics and Microprocessors

Time : 3 Hours

Maximum Marks : 75

Answer question No.1 compulsory

(15)

Answer ONE question from each unit

(4 × 15 = 60)

- 1) a) Draw the circuit diagram of a Diode connected in forward bias.
- b) Draw the output characteristics of Transistor.
- c) What is meant by feed back?
- d) Draw the symbols of JFET, MOSFET.
- e) Convert $(7F)_{16}$ to Decimal and Octal?
- f) Write Demorgans Theorems.
- g) Realize a three input NAND gate using basic gates.
- h) Write Flags in 8085 Microprocessor?
- i) What is Microprocessor?

UNIT - I

- 2) a) Discuss PN diode V-I characteristics with neat sketch.
- b) Explain about formation of PN junction.

OR

- 3) a) With circuit and necessary wave forms explain the operation of HWR.
- b) Explain the comparison between BJT and FET.

