

MODEL QUESTION PAPER

DSE2/DSET2

III Semester DIPLOMA Examination, August 2011 ELECTRONICS DEVICES

Time: 3 Hours

Max. Marks: 75

GROUP A : Answer any three questions.

- Q.1 Explain with neat diagram of full wave rectifier.
- Q.2 Write short note on IP Emitter.
- Q.3 Explain the characteristics of UJT and write down its application
- Q.4 Draw the symbol for DIAC & Mention the advantages of DIAC.
- Q.5 Write down the comparison between JFET and BJT.

GROUP B : Answer any three questions.

- Q.6 Comparison between Half wave rectifier, full wave rectifier and Bridge rectifier?
- Q.7 What are the main classifications of electronic components? Explain.
- Q.8 Explain with neat diagram of construction and working of monostable multivibrator.
- Q.9 Draw the input & output characteristics of CC configuration.
- Q.10 Explain with neat diagram of FET as chopper.

GROUP C: All Questions are Compulsory.

Q.11 Fill in the blanks

- (i) UJT as a _____ oscillator.
- (ii) Heart of any oscillator circuit is _____ circuit.
- (iii) In cut off and saturation region transistor acts as _____.
- (iv) The MOSEFT is an abbreviation of _____.
- (v) AC load line is occurred in _____ signal condition.

Q.12 Multiple choice question.

- (i) Range of frequencies over which gain is equal to or greater than 70% of maximum gain is called _____.
 - (a) Beamwidth
 - (b) Bandwidth
 - (c) Positive feedback
 - (d) Negative feedback
- (ii) A device is used in lamp dimmer circuit.
 - (a) Triac
 - (b) Diac
 - (c) MOSFET
 - (d) IGBT

- (iii) A photo conductive cell is also called as _____.
- (a) Light dependent resistor (b) Light emitting diode
(c) Liquid crystal display (d) Seven segment display
- (iv) Total phase shift provided by oscillator circuit is?
- (a) 90° (b) 180°
(c) 360° (d) 2
- (v) A multi-vibrator generators _____.
- (a) Square wave (b) Sine wave
(c) Ramp wave (d) Pulse

Q.13 True or false

- (i) Advantage of positive feedback is to increase the gain.
- (ii) Disadvantage of capacitor input filter is poor voltage regulation.
- (iii) To work transistor as an amplifier both the junctions should work in forward biased.
- (iv) A thin layer of 'N' type material and fuse 'P' material on either side, we will get PNP Transistor.
- (v) Uni junction (UJT) is a three terminal silicon semiconductor.
