/16 **0601E991** Candidate's Seat No :_____

B.Sc. Sem.-1 Examination

DSC-M-113T

Electronics

January-2024

Time : 1-00 Hour] **[Max. Marks : 25**

Instructions: **(1) Symbols used here have their usual meanings.**
(2) Figures to the right indicate marks.

1 (A) Explain working of P-N Junction diode. Also explain with figure its V/I characteristic in detail. **05**
(B) Explain real diode in forward and reverse direction with figure. **05**

OR

(A) Explain in detail about eight important P-N Junction diode ratings or specifications. **05**
(B) Explain in detail with figure alloy junction and diffused junction in P-N Junction diode. **05**

2 (A) Draw & explain PNP & NPN transistor biasing in detail. **05**
(B) With diagram explain transistor as an amplifier. **05**

OR

(A) With diagram explain operation of PNP & NPN transistor. **05**
(B) Explain common-emitter (CE) PNP transistor amplifier in detail with figure. **05**

3 Attempt any **Five** out of Six. **05**
(1) A reverse-biased ideal diode looks like an _____ resistance.
(2) A clipping circuit requires a minimum of two components: a diode and a _____.
(3) An ideal P-N junction diode acts like a _____ switch.
(4) The base of transistor is _____ doped.
(5) Common _____ arrangement is generally used for impedance matching.
(6) In saturation region operation of a transistor both junctions are _____ biased.