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DATE: 10th OCT 2014 SY B.Sc. SEM: III **SUB: ELECTRONICS** Day: Friday **SUB CODE: US03CELE01** TIME: 2:00 pm to 3:30 pm **TOTAL MARKS: 25** Q. 1 Choose the correct answer. [03] (1) Reactance of Inductor X_L= (A) 2πfL (C) 2πfC 1/2πfC None of above (B) (D) (2) Doped Semiconductor material is termed as _____ (A) Intrinsic (C) Insulator Extrinsic None of above (B) (D) (3) The output of a voltage doubler is a ______ voltage. (A) AC (C) Zero DC (B) (D) None of above [04] Q.2 Answer the following in short.(Attempt Two) Write a note on wire-wound Resistor. Explain the time constant of RL circuit drawing necessary diagram. Define modulation. (3) Q.3 (A) List different types of fixed resistors & Explain any two in detail. [06] (A) List different types of fixed Capacitor & Explain any two in detail. Q.3 [06] Q.4 (A) Give an account of step voltage Response of RL-circuit. [06] Q.4 (A) Explain in detail Forward biased PN-junction diode. [03] (B) Explain in detail Reverse biased PN-junction diode. [03] Q.5 (A) Explain working of any two of the following drawing necessary circuit diagram. [06] (1) Peak-Rectifier (2) The Diode Clamper (3) Voltage Doubler OR Explain Amplitude Modulation drawing necessary diagram & derive necessary [06] Q. 5

derivations.

Exta