



RF-3955-56

B. Sc. (I.T.) (Sem. II) Examination
April / May – 2010
Electronics & Digital Communication

Time : 3 Hours]

[Total Marks : 70

RF-3955

Instructions :

(1)

नीचे दशांशवेक निशानीवाणी विगतो उत्तरवडी पर अवश्य कभवी.
Fillup strictly the details of signs on your answer book.

Name of the Examination :

Name of the Subject :

Subject Code No. : Section No. (1, 2,.....) :

Seat No. :

Student's Signature

- (2) Write sections I and section II in separate sheet (with different subject code)
- (3) Draw the figure and give example whenever necessary.

1 Answer following questions :

- (1) Explain following definitions (any **five**):- **5**
- (i) Permeability
 - (ii) Modulation
 - (iii) Frequency
 - (iv) Electric current
 - (v) Magnetic field
 - (vi) capacitance
- (2) Explain Insulator, conductor, N-type extrinsic semiconductor **6**

2 Answer the following questions in detail (any two):- **12**

- (1) What is intrinsic semiconductor and explain PN-Junction diode with its biasing. (forward bias and reverse bias).
- (2) Explain Zener diode as a voltage Regulator.
- (3) Explain AC generator working principle and LDR.

3 Answer the following questions in detail (any two):- **12**

- (1) Explain bridge rectifier with the help of circuit diagram.
- (2) Explain common emitter-configuration for transistor
- (3) Explain Resistor, inductor, Transformer

Instructions :

(1)

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Name of the Examination :	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
<input type="text" value="B. Sc. (IT) (Sem. 2)"/>	<input type="text" value="Student's Signature"/>
Name of the Subject :	
<input type="text" value="Electronics & Digital Communication"/>	
Subject Code No. : <input type="text" value="3"/> <input type="text" value="9"/> <input type="text" value="5"/> <input type="text" value="6"/>	Section No. (1, 2,.....) : <input type="text" value="2"/>

- (2) Write sections I and section II in separate sheet (with different subject code)
- (3) Draw the figure and give example whenever necessary.

4 Answer the following questions.

(1) Answer the following questions:- 6

- (i) Explain ohms law
- (ii) What is conduction loss, radiation loss?
- (iii) What are the needs of modulation?

(2) Answer the following questions 4

- (i) Find the Resistance value of resistor from the color code given bellow
 - (a) red, violet, green, silver
 - (b) red, blue, orange, gold
- (ii) What is FSK (frequency shift key)

5 Answer the following question in detail (any three) 15

- (i) Explain Receiver in brief with the help of block diagram,
- (ii) Explain MOSFET with the help of its characteristics
- (iii) Explain ASK (Amplitude shift key) and N-channel JFET
- (iv) Explain SCR (silicon control Rectifier) with the help of its characteristics.

6 Explain Amplitude modulation in detail with the help of wave form and sideband. 10

OR

6 Answer following questions in detail:- 10

- (1) Time division multiplexing
- (2) explain RLC series circuit and resonance frequency.