TED (15) 6042
(Revision-2015)

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Reg.No.....
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DIPLOMA EXAMINATION IN ENGINEERING/ TECHNOLOGY/ MANAGEMENT/ COMMERCIAL PRACTICE, APRIL-2021

COMMUNICATION SYSTEM

[Maximum marks: 75] (Time: 2.15 Hours)

PART – A

(Answer any ***three*** questions in one or two sentences. Each question carries 2 marks)

I. (1). Define Transmit time effect.

(2). Define geostationary satellite.

(3). List any two optical sources used in optical communication.

(4). Define a cell.

(5). Draw the output characteristics of Gunn diode (3 x 2 = 6)

PART – B

(Answer any ***four*** of the following questions. Each question carries 6 marks)

II. (1). Compare Klystron and TWT.

(2). List the features of TDMA.

(3). List any six application of satellite.

(4). Describe the optical fibre communication system with block diagram.

(5). Write any six advantages of optical fibre communication.

(6). Compare 3G and 4G.

(7). Write a short note on Bluetooth. (4 x 6= 24)

PART – C

(Answer ***any of the three units*** from the following. Each question carries 15 marks)

UNIT –I

III. (a). Describe the working of magnetron with neat diagram (8)

(b). Discuss the operation of Tunnel diode with a diagram (7)

OR

IV. (a). Explain the Microwave receiver using block diagram (8)

(b). Write a short note on Horn Antenna (7)

UNIT-II

V. (a). Discuss the block diagram of satellite communication system (8)

(b). List any advantage and disadvantage of FDMA (7)

OR

VI. (a). Explain the DTH system. (9)

(b). Discuss about various type of communication satellite orbit. (6)

UNIT-III

VII. (a). Describe single mode, multimode mode grade index fibre with the help of diagram (8)

(b). Describe the working of avalanche diode (7)

OR

VIII.(a).Illustrate the working of laser with energy state diagram (9)

(b).Explain the given terms.

(i) Refraction (ii) Angle of Acceptance (iii) Numerical Aperture (6)

UNIT-IV

IX. (a). Describe the terms Frequency reuse and Handoff (8)

(b). Discuss about RFID (7)

OR

X. (a). Describe GSM network Architecture. (9)

(b). Discuss about Wi-Max. (6)

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