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## **DIT-04**

### Fundamental of Web Technology

Diploma in Information Technology (DIT-17)

Second Semester Examination, 2021 (Winter)

Time: 2 Hours] Max. Marks: 100

**Note:** This paper is of Hundred (100) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

# SECTION-A

(Long Answer Type Questions)

**Note:** Section 'A' contains Five (05) long answer type questions of Twenty six (26) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 26 = 52)$ 

- 1. What is a transmission medium? Explain its types in detail.
- 2. Discuss and differentiate between OSI and TCP/ IP model.

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- 3. (a) Explain in detail about the Client and Server in World Wide Web.
  - (b) Explain in detail about the Physical layer in the Fast Ethernet.
- **4.** Explain all the types of switching techniques.
- **5.** (a) Describe the significance of error detection and error correction mechanisms in data link layer.
  - (b) What is the use of Uniform Resource Locater for the Client ? Explain.

#### **SECTION-B**

### (Short Answer Type Questions)

**Note:** Section 'B' contains Eight (08) short answer type questions of Twelve (12) marks each. Learners are required to answer any Four (04) questions only.

 $(4 \times 12 = 48)$ 

- **1.** What is the difference between SLIP and PPP?
- **2.** State the advantages of XML. Write a detailed note on XML syntax rules, XML elements and XML attributes.
- 3. Create, test, and validate an HTML document to describe an unordered list of at least four states. Each element of the list must have a nested list of at least three cities in the state.

- **4.** Explain about the term FDM and WDM.
- **5.** Discuss and differentiate between IPv4 and IPv6.
- **6.** Explain various TCP congestion control mechanism.
- 7. What are the modes of communications? Explain in detail.
- **8.** Write short notes on : Switch, Hub, Router and gateway.

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