No. of Printed Pages—2

12 N (FNWT)

[22-HKPD1SN-23A]

DCA/PGDCA/MScIT 1st Semester (New) Exam. 2022 (W)

(*Fundamentals of Networking and Web Technology*)

[PGCA/SCIT S1-04]

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks.

1. Answer any *four* from the following questions : $2 \times 4 = 8$

   (a) What is Ethernet ?

   (b) What is form object ? How to create it ?

   (c) What are the basic differences between half-duplex and full-duplex modes of communication ?

   (d) What is web server application ? How is it different from a web browser ?

   (e) What is the principal difference between connection-less and connection oriented communication ?

2. Answer any *two* of the following questions : $4 \times 2 = 8$

   (a) In which layer Repeater works ? What is the role of a repeater in a computer network ? What is MAC address ?

   (b) Mention the characteristics of XML. Also write the basic differences of XML and HTML.

(*c*) Briefly discuss the functioning of web server and web browser. Also give two examples each for web server and web browser.

3. Answer any *three* from the following questions : $6 \times 3 = 18$

(*a*) What are the characteristics of circuit switching ? How does a guided media differ from unguided media ?

(*b*) Write the advantages and disadvantages of star topology. Discuss briefly the functions of switches and routers in a network.

(*c*) What is an IP address ? Discuss the function of domain name system. Mention the purpose of URL.

(*d*) What is rowspan and colspan ? Explain with an example. Also mention the use of cell padding and cell spacing in a HTML table.

4. Answer any *two* from the following questions : $8 \times 2 = 16$

(*a*) What is protocol and layer in terms of network model ? Describe the functions of various layers of the TCP/IP model.

(*b*) Define the term WWW. What are the various features of WWW ?

(*c*) Write a function to reverse the digits of a number using Java Script. What is client side and server-side programming ?