

2018

COMPUTER SCIENCE

(Major)

Paper : 6.2

(Web Technologies)

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Answer the following questions as directed :

1×7=7

(a) In FTP protocol, client contacts server
using _____ as the transport protocol.

(i) Stream Control Transmission
Protocol

(ii) Transmission Control Protocol

(iii) User Datagram Protocol

(iv) Datagram Congestion Control
Protocol

(Choose the correct option)

(2)

(b) The VSAT technology is based on

- (i) wired satellite technology
- (ii) wireless satellite technology

(iii) both (i) and (ii)

(iv) None of the above

(Choose the correct option)

(c) Which element is used in the <HEAD> section on an HTML page, if external style sheet file is to be used?

(i) <src>

(ii) <link>

(iii) <style>

(iv) <css>

(Choose the correct option)

(d) XML is a/an

(i) imperative language

(ii) declarative language

(iii) standard language

(iv) None of the above

(Choose the correct option)

(3)

(e) What should be used to automatically configure host computers for IP?

(i) DNS

(ii) SNMP

(iii) SMTP

(iv) DHCP

(Choose the correct option)

(f) DCOM stands for _____.

(Fill in the blank)

(g) _____ operator in JavaScript returns true, if operands are of same type and value.

(Fill in the blank)

2. Define the following terms : 2×4=8

(a) Wi-Fi

(b) Proxy server

(c) ODBC

(d) Image map in HTML

3. Answer any five of the following questions : 5×5=25

(a) Write in brief history of TCP/IP.

(b) Explain the architecture of Web server.

(4)

- (c) What is domain name system and how does it work?
- (d) What is firewall and how does it work?
- (e) What is JDBC? What are the four categories of JDBC technology?
- (f) What is XML? Write any four reasons to use XML.
- (g) What are the differences between JavaScript and VBScript?
- (h) Give an introduction to server side scripting languages.

4. Answer any *two* of the following : $10 \times 2 = 20$

(a) Write an HTML code to display first page of the question paper on Web Technologies.

(b) Consider the following list of attributes :

Last name : mandatory

Middle name : optional

First name : mandatory

Phone : optional

E-mail : mandatory

Nationality : 'Indian' in all cases

Write an XML DTD for the above and an XML file having at least three records.

(5)

- (c) Using HTML, design a form to input fields like name, address, phone no, age, sex, blood group, etc. Write VBScript or JavaScript code to validate the input data. Make necessary assumptions.
- (d) Write short notes on COM, DCOM and CORBA.
