The University of Burdwan

BCA(Hons) Semester - VI Examination, 2022
***Paper Name:** Web Programming and .NET Technology*   ***Paper Code:** BCA 602*
Subject: Computer Application

F.M:80   **Time: 3Hrs.**

Answer Q. No.1 and any four from the rest questions.

1. ***Answer any eight questions:***
   (a) What is session tracking?
   (b) Does ASP.NET support any type of databases?
   (c) What are the advantages of HTTP?
   (d) Write down the uses of Canvas in HTML.
   (e) What is DNS server?
   (f) Define Event.
   (g) What is web service?
   (h) What is Query String in ASP?
   (i) Write the differences between the DataSet and RecordSet in ADO.NET.
   (j) What is an assembly in VB.NET?

2. (a) How can you create dynamic array in VB.NET? (b) Explain different features and concept of .net frame-work.   6+10

3. (a) Write a program to create students admission form in one ASP.NET web page and display filled data in another page. (b) Explain msgbox( ) function and message box control in brief. 10+6

4. (a) Explain the concept of ADO.NET with suitable diagram.(b) Write a .NET program to create an employee database(take your own assumption) and display the records.   8+8

5. (a) What are the state management options in ASP .Net? (b) What is the simplest way to write an HTML string to the output of an ASP .Net page? (c) How user controls are dynamically loaded in a webpage? Give example.   4+6+6

6. (a) Explain the components of web browser. (b) How can you create an application domain in ASP.NET? Explain with suitable example. (c) Explain authentication and authorization techniques in ASP.NET?   4+7+5

7. Write short notes(**any two**):   2x8
   (a) Used operators in VB.NET. (b) HTML Server Controls
   (c) ASP.NET page life cycle events (d) FTP and its applications.

Or,

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B.C.A(Hons)Semester VI Examination, 2022

Paper Name: Advance Networking & Communication

Paper Code: BCA 602

Subject: Computer Application

F.M:80   **Time: 3 Hrs.**

Answer Q. no. 1 and any four from the rest.

1. Answer any eight questions: 2x8=16
    a)   What are the differences between network system and distributed system?
    b)   What is point to point network?
    c)   What is the difference between bit rate and baud rate?
    d)   What is multipath fading?
    e)   What is packet?
    f)   What is connection-oriented service? Give one example.
    g)   Write the function of MODEM.
    h)   What do you mean by value added network?
    i)   What do you mean by communication protocol?
    j)   What do you mean by "error detection" and "error correction"?
    k)   What is socket?
    l)   What is differential PSK?

2. a. Write functions of Transport layer, data link layer and physical layer of OSI model.

    b. Compare between 802.3 LAN and 802.4 LAN.
    c. Differentiate between TCP/IP and OSI model.   9+4+3

3. a. Write the transmission characteristics of optical fiber and microwaves.

    b. A noiseless 4-KHZ channel is sampled every 1m sec. what is maximum data rate?
    c. Write two applications of infrared.
    d. What is geostationary satellite? Write the downlink, uplink frequencies of any two-satellite band.
                                                                          7+3+2+4
4. a. Discuss the frame format of ethernet LAN.

    b. Write priority scheme of token bus LAN.
    c. Sketch the Manchester and differential Manchester encoding for string001011001.
    d. What is the baud rate of standard 10 MBPS 802.3 LAN?   7+3+4+2

5. a. Discuss on BSC protocol.

    b. Discuss on the frame format of HDLC protocol.
    c. Write the difference between BSC and HDLC protocol.   6+6+4

6. a. Write down CRC technique with an example.

    b. Write down CSMA/CD protocol of 802.3 LAN.
    c. Discuss stop and wait ARQ technique briefly.   6+5+5

7. Write short note (any two).   8x2
    a.   X.25 network.
    b.   TDM and FDM.
    c.   Token ring LAN.
    d.   PSK and QPSK.