सत्रीय कार्य / Assignment Work – 2014-15

B.C.A.(FINAL YEAR)

Max Marks – 30   **Min Marks-12**

निर्देश :   सत्रीय कार्य के प्रत्येक विषय में कुल 30 अंक हैं। सभी प्रश्नों के अंक समान होंगे। सभी प्रश्न हल कीजिए।
(Assignment Work of each paper carries 30 Marks. All questions carry equal marks. Attempt all questions.)

Computer Graphics

1. What is computer Graphics?
2. Define vector generation?
3. Write short notes on:
   a. (a) Reflection   (b)   Shearing transformation.
4. Write a short note on 3D primitives?
5. Write a short note on interpolating polygons.?

Discrete Mathematics

1. Prove that the following statements about two sets A and B are equivalent :
   (a) A   B (b) A   B= B (3) A   B = A (4)
2. What do you understand by combinations?
3. Explain existence of inverse function (mapping)?
4. Find a generating function for the recurrence relation
   $a_{n+1} - a_{n} = n^2, n \geq 0$ and $a_0 = 1$ Hence solve it.
5. Define homomorphism of ring and give an example?

Management Information System

1. Explain relation between DSS and Management information system?
2. Write down features of planning?
3. Write down various types of development activities?
4. Define conversion activities?
5. What is E-business?

Internet Technology and Web Application

1. What is Packet switching? Explain datagram packet switching.
2. Write short note on the following: (1) Communication media (2) Network Types (3) DNS.
3. What is CGI? Write common use of CGI.
4. How do you create tables using HTML? Explain with example?
5. Write short notes on the following: (1) spyware (2) Cookie (3) Information privacy.

Java programming

1. Describe basic features of java programming language?
2. Compare the statements break and continue in Java? Explain with examples.
3. What is recursive method? Explain with example.
4. Write a program to demonstrate the use of array copy ( ) function.
5. Explain "user-defined exceptions" with example?

Simulation and Modeling

1. What are the basic steps to be followed while making a model?
2. What is a Monte Carlo technique? Explain with example.
3. What is continuous simulation?
4. How various arrival patterns are generated for the queues? Explain with examples.
5. A small manufacturing company specializes in the production of sleeping bags. Based on the
   Past records, it is estimated that the company wil be able to produce 5000 bags during the next year
   If the raw materials is available, when needed. Raw material for each bag costs Rs.50.00. Assuming that bags are produced at constant rate during the year of 300 working days. It is estimated that the annual holding cost of the inventory of raw material is 20% of the raw material cost. Also each time order is placed, company has to pay Rs.25.00 as reordering cost. If lead time is 7days, calculate total annual inventory cost, and total cost?

Software Engineering

1. Why is requirements engineering so important and why is it so difficult?
2. What are different perspectives on user interface design?
3. Write a loop that repeats ten times, first using a while statement, then using goto?
4. Explain class-responsibility-collaborator cards?
5. Sketch out the code for a method to search an array of integers to find some desired integer. Write two versions - one using the **break** mechanism and one without **break**.

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