



सत्रीय कार्य / Assignment Work – 2020-21
B.Sc. (CS) 2nd 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.)

Object Oriented Programming in C++-I

1. What is POP? What are the various limitations of POP paradigms.
2. What are the processes involved in the development of C++ program?
3. What is class? How do you make data hiding using class?
4. What is destructor? Explain with example?
5. What is pure-virtual function? Explain properties and disadvantage of pure virtual function.

Operating System –II

1. Define OS? Explain the importance of System Call in OS.
2. What are the different methods used for performance evaluations?
3. Explain the protection domain and its structure in detail.
4. Explain partitioning technique of memory management.
5. What do you understand by file sharing?

Fundamentals of Algorithms and Data Structure –III

1. Explain implementation of stack using linked list.
2. What do you mean by stack? Explain.
3. What do you mean by array? Explain its memory representations.
4. What is the difference between DFS and BFS? Explain with example.
5. Define hash table?

Numerical Analysis –IV

1. Define absolute, relative and percentage error in approximation.
2. Explain the or algorithm.
3. Solve the Linear System
 $J(F^{(m)}) \Delta x = -F^{(m)}$ for Δx
Using Gaussian elimination.
4. State Simpson 1/3 rule? What the different sources of errors are in find the approximate result?
5. Find the general solution of system of equations:
 $\frac{dx_1}{dt} = x_1, x_2, \frac{dx_2}{dt} = -x_1, x_2$

General Physics –V

1. Explain Conductors & insulators with examples.
2. Derive an expression for the electric potential due to one point charge.
3. What is meant by magnetic flux? Define eddy current.
4. State Coulomb's Law. State and explain Faraday's Law.
5. What is electric generator?

System Analysis and Design –VI

1. What is information system? How is it useful?
2. What do you mean by managerial and operating MIS Plan?
3. What are called logical and physical design ?
4. What are the levels of quality assurance? Explain briefly.
5. What is conversion? Which activities does it consist of?
