

Offline Mid- Sem Examination (BTech 2024, CS / IT / CSAI / CSB) Object Oriented Programming & System Design (OOP2301C)

27-Feb-25, Thursday, 10:30am - 12:30pm (Bibek Singh)

Total Questions: 7(seven)

Total Marks: 30 (thirty)

Question-1:

(4+4 marks)

- (a) Explain different types of inheritance. Elaborate using examples or diagrams.
- (b) Create a table to explain 4 types of access modifiers & their range.

Question-2:

(3 marks)

Write three key differences between the System Software and Application Software.

Question-3:

(2+3 marks)

- (a) Why is a Class also known as an Object Factory?
- (b) What are the three key differences between a Class and an Object?

Question-4:

(3 marks)

Write at least 3 differences between Method Overloading and Method Overriding.

Question-5:

Explain at least 3 advantages of Object Oriented Programming over Procedure Oriented

Question-6:

(3+3 marks)

- (a) Explain any three OOPs principles and how they help the programmers in addressing the corresponding Non-Functional Requirements (NFRs).
- (b) Compare Abstraction vs Encapsulation. Write at least 3 differences.

Question-7:

In general, which method / function is always declared as 'public' and why? Explain your