Program:	**BCA**	**Semester: IV**		
Program(Specific):	**BCA(Science)**		**SET:**	**B**
Class:	**SYBCA**		**Course Type:**	**CC**
Name of the Course:	**Object Oriented Software Engineering (OOSE)**		**Max. Marks:**	**70**
Course Code:	**23-BCA-243**		**Time:**	**3hours**
Paper:				

Instructions to Candidates: -

1. **There are 4 sections in the question paper. Write each section on a separate page.**
2. **All Sections are compulsory.**
3. **Figures to the right indicate full marks.**
4. **Draw a well labelled diagram wherever necessary.**

SECTION: A

Q1) Multiple choice questions.

[1X5=5M]

I) Polymorphism is achieved through ___

    a) Heritance   b) Poly programming

    c) Encapsulation   d) Overloading

II) Which of the following diagram is time oriented??

    a) Collaboration   b) Sequence   c) Activity   d) None of the mentioned

III) Model selection is based on _____?

    a) Requirements   b) Development team & user

    c) Project type & associate risk   d) All of the above

IV) What is the first step of requirement elicitation?

    a) Identifying Stakeholder   b) Listing out Requirements

    c) Requirements Gathering   d) All of the mentioned.

V) Functional testing is a _____?

    a) Test design technique   b) Test level   c) SDLC model   d) Test type

b) Answer the following in one or two sentences.   **[1X5=5M]**

    a) What are attributes and method in software engineering?

    b) Define Object oriented modelling.

    c) Define Build and fix model.

d) What is facilitated application technique?

e) Define unit testing.

SECTION: B

Q2) Attempt ANY FIVE the following.

[3X5=15M]

a) Explain characteristic of software.

b) Define conceptual model of UML?

c) Describe prototyping model.

d) Explain identification of stakeholders?

e) Define software matrices.

f) Explain principles of testing?

SECTION: C

Q3) Attempt ANY FIVE the following.   **[4X5=20M]**

a) Explain polymorphism with example.

b) Explain architectural modelling.

c) Explain fountain model with suitable diagram.

d) Explain nature and organisation of SRS documents.

e) Explain test case and test plain with suitable example.

f) Define Bohem's software quality model.

g) Define agile testing.

SECTION: D

Q4) Attempt ANY FIVE the following.   **[5X5=25M]**

a) Explain Rumbaugh methodology.

b) Describe use case diagram, interaction diagram, activity diagram and state machine diagram.

c) Explain requirement elicitation techniques.

d) What is software quality attributes and elements of quality system?

e) Explain integration testing and system techniques.

f) Explain selenium tool and its components.

g) Explain applications and categories of software matrices.