Program: B.S.c. Computer Science Code(BScComp05) **Semester:** III   **SET: A**
Program (Specific): Computer Science   **Course Type:** CC
Class: S.Y.B.Sc(Computer Science)   **Marks:** 35
Name of the Course: Software Engineering   **Time:** 2 Hrs
Course Code: 23-CS-232
Paper: II

Instructions to the 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 labeled diagram wherever necessary.*

SECTION: A

Q1) Solve the following Multiple-Choice Question [5]

i) _____ is responsible for conducting daily scrums.

a. Product owner   b. Team members   c. Scrum Master   d. Programmer

ii) Which of the following is not the layer of software engineering?

a. Tools   b. Quality   c. Process   d. Maintainability

iii) _____ technique for translating user requirements into technical requirements.

a. SRS   b. QFD   c. UML   d. None of the above

iv) A model is a _____ of reality.

a. blueprint   b. detail   c. Software   d. description

v). The acronym FURPS stands for _____

a. Functionality,Usability,Responsibility,Performance,security.
b. Functionality,Usability,Reliability,Performance,Supportability.
c. Functionality,Understandability,Responsiveness,Performance,Supportability.
d. Functionality,Usability,Relationships,Performance,Security.

Q2) Attempt ANY FOUR of the following in one sentence: [4]

i.   State the full form of QFD.

ii. Define Use case.

iii. Describe Functional Requirements and Non-Functional Requirements

iv.   List Umbrella activities in Software Framework.

v.   Define Project Velocity.

vi.   Define Actors.

SECTION: B

Q3) Attempt ANY FOUR of the following: **[8]**

i.   Explain Unified Process.

ii.   Explain Industrial XP.

iii. Describe the object model. Draw object diagrams for online shopping of books.

iv.   List and explain the human factors in the agile process.

v.   Explain prototyping.

vi.   Explain Requirement elicitation?

SECTION: C

Q4) Attempt ANY FOUR of the following: **[8]**

i.   Describe the Generic Process Model.

ii.   State the Agility Principles in agile development.

iii. Define artifacts.

iv.   Prepare the Use case Diagram of the Library Management System.

v.   Describe the phases of ASD?

vi.   State the benefits of Analysis patterns.

SECTION: D

Q5) Attempt ANY TWO of the following: **[10]**

i.   Explain the Waterfall Model with a suitable example.

ii.   Give an example to depict separation of concerns in an application.

iii. Explain in brief Scrum in Agile Development.

iv.   Sketch the Sequence Diagram for Online Career Guidance Portal.