PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc(SS) DEGREE EXAMINATION MAY 2025
(Sixth Semester)

Branch – SOFTWARE SYSTEMS (Five Year Integrated)

AGILE SOFTWARE DEVELOPMENT

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 × 1 = 5)

1   What is the primary goal of Agile Computing?
    (i) Delivering software as quickly as possible
    (ii) Enhancing flexibility, collaboration, and continuous improvement in software development
    (iii) Strictly following a predetermined software development plan
    (iv) Reducing the number of developers required for a project

2   Why is effective team communication important in Agile development?
    (i) It helps teams strictly follow predefined processes
    (ii) It reduces the need for collaboration among team members
    (iii) It enables quick decision-making and smooth workflow
    (iv) It eliminates the need for daily stand-up meetings

3   What does it mean for an Agile team to be self-adapting?
    (i) The team follows a fixed, unchangeable process
    (ii) The team continuously improves by inspecting and adapting its processes
    (iii) The team depends on external management for all decisions
    (iv) The team avoids changes to prevent disruptions

4   What is Extreme Programming (XP)?
    (i) A rigid software development methodology
    (ii) An Agile framework that emphasizes continuous feedback, simplicity, and frequent releases
    (iii) A traditional Waterfall-based approach to software development
    (iv) A process that eliminates customer involvement

5   Which type of testing is most commonly used in Agile development?
    (i) Waterfall Testing
    (ii) Automated and Exploratory Testing
    (iii) Testing only at the end of development
    (iv) Relying only on manual testing

SECTION - B (15 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks   (5 x 3 = 15)

6   a   Explain the three levels of listening in Agile teams.
OR
    b   Justify how Agile teams work better in some ways than traditional methodologies.

7   a   Discuss how Agile teams function as a community and why this is important?
OR
    b   Illustrate the concept of "conversion currents of information" in Agile team communication.

8   a   Analyze what it means for Agile to be self-adapting and how it impacts development.
OR
    b   Evaluate the application of Agile methodologies outside software development.

9   a   Determine the key components of Scrum in Agile.
OR
    b   Classify the characteristics of Feature-Driven Development (FDD) in Agile.

10 a   Explain the concept of Acceptance Tests in Agile and justify their importance.
OR
    b   Discuss Continuous Integration (CI) and show how it benefits Agile teams.

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a   Analyze the reconstruction of software engineering in Agile methodologies.
OR
    b   Assess the common failure modes in Agile and how teams can overcome them.

12 a   Evaluate how Agile teams function as communities and why this is essential for their success.
OR
    b   Criticize the impact of communication gaps in Agile teams and suggest ways to address them.

13 a   Interpret the concept of "Programming as Theory Building" and its significance in Agile development.
OR
    b   Differentiate the characteristics of the Crystal methodologies in Agile and explain their importance.

14 a   Enumerate the key practices of Extreme Programming (XP) and explain their benefits.
OR
    b   Classify Agile Modeling (AM) and determine its role in improving software development.

15 a   Formulate the Agile Testing Lifecycle and analyze its impact on software quality.
OR
    b   Design the process of writing a User Acceptance Test (UAT) in Agile and justify its importance.

Z-Z-Z   END