

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2023
(Fifth Semester)
Branch – COMPUTER SCIENCE

SOFTWARE ENGINEERING & DESIGN

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions
ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 _____ is not a process framework activity.
(i) Communication (ii) Planning
(iii) Maintenance (iv) Modeling
- 2 _____ translates the needs of the customer into technical requirements for software.
(i) DFD (ii) QFD
(iii) ER diagram (iv) SFD
- 3 _____ is defined as an activity to check whether the actual results match the expected results.
(i) Testing (ii) Designing
(iii) Validation (iv) SRS
- 4 Which one is not a size measure for software product?
(i) LOC (ii) Halstead's program length
(iii) Function Count (iv) Cyclomatic Complexity
- 5 _____ software development couple's domain-specific modeling languages with transformation engines.
(i) Event-driven (ii) Function-driven
(iii) User-driven (iv) Model-driven

SECTION - B (15 Marks)

Answer ALL Questions
ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Outline Management myths with an example.
OR
b Outline any 3 agile modeling.
- 7 a Explain the characteristics of non-functional requirements.
OR
b Describe the concept of refactoring with an example.
- 8 a Differentiate black-box testing with white-box testing.
OR
b Summarize OOD model with example.
- 9 a How do you define problem decomposition?
OR
b Differentiate forward engineering with reverse engineering.
- 10 a Explain risk management in SPI.
OR
b Explain collaborative development with an example.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Summarize various principles of agility.
OR
b Discuss the various activities of process framework with example.
- 12 a Examine any 3 task of requirements engineering with an example.
OR
b Discuss the coupling and cohesion with its types.
- 13 a Analyse the working principles of any 2 system testing.
OR
b Examine State-Box Specification and Clear-Box Specification with example.
- 14 a Analyse COCOMO model with example.
OR
b Evaluate RMMM with suitable example.
- 15 a Evaluate CMM levels with an example.
OR
b Analyse any 2 framework of SPI.

Z-Z-Z

END