23CMU419

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – **COMPUTER SCIENCE**

SOFTWARE ENGINEERING & TESTING

Time: Three Hours Maximum: 50 Marks

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

1 _____ cohesion occurs when a module performs one and only one computation and then returns a result.
(i) Functional (ii) Layer
(iii) Communicational (iv) Control

2 White-box testing is sometimes called as _____.
(i) glass-box testing (ii) structural testing
(iii) behavioral testing (iv) both (i) and (ii)

3 In SPI support constituencies, which of the following group wants to understand process workflow?
(i) quality certifiers (ii) formalists
(iii) tool advocates (iv) practitioners

4 The mechanism of sending the product that is under test to the customers and receiving the feedback is known as ____.
(i) alpha testing (ii) beta testing
(iii) defect testing (iv) use case testing

5 _____ quantifies the actual amount of testing that needs to be done.
(i) size estimate (ii) effort estimate
(iii) schedule estimate (iv) cost estimate

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

6 a Outline the principles of agility.
OR
b Explain about software architectural descriptions and decisions.

7 a Outline the different functional specifications.
OR
b How will you test OOA and OOD models?

8 a Bring out the different approaches to SPI.
OR
b Explain the fundamentals of software testing.

9 a Narrate the various methods that achieve static testing by humans.
OR
b Describe about use case scenarios.

10 a Explain about activity breakdown and scheduling.
OR
b Outline the steps required for preparing a test plan.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

11 a Discuss the various steps of requirements elicitation.

OR

b Discover the use case development process with an example.

12 a Compare the various black-box testing strategies.

OR

b Highlight the process of forward engineering and reverse engineering.

13 a Identify the various activities of the SPI process.

OR

b Discuss the different tasks of requirement engineering.

14 a Elucidate the types of code coverage testing.

OR

b Discuss in detail about non-functional testing.

15 a Highlight the importance of size and effort estimation in testing.

OR

b Outline the design and architecture for automation.

Z-Z-Z END