

M.C.A. - I (Two Years Programme) (New CBCS Pattern) Semester-II
PSMCAT203 - Paper-III : Software Testing

P. Pages : 2

Time : Three Hours



GUG/W/24/13644

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram wherever necessary.
 3. Avoid vague answers and write the answer specific to questions only.

Either:

1. a) Explain the Testing System and it's strategies. 8
- b) What is the significance of a well-defined Testing? Explain in detail. 8

OR

- c) Explain common reasons for software failure. Also provide potential solutions to mitigate these issues. 8
- d) Write a detail note on metrics in testing phase. 8

Either:

2. a) Define testing levels and approaches. Discuss their role in a comprehensive testing strategy. 8
- b) Explain the significance of smoke testing in software testing also provide an example. 8

OR

- c) Describe the process of static testing through manual reviews. 8
- d) Explain the concept of Black Box testing and it's application in ensuring through software functionality validation. 8

Either:

3. a) What are the key steps in dynamic testing? Explain about activities like review, identification, test, specification, designing test cases and executing it. 8
- b) How does the integration of incident report generation and defect logging contribute to the efficiency of issues resolution in dynamic testing? 8

OR

- c) Explain about Test Documentation standards in detail. 8
- d) Explain following: 8
 - i) Testing process Management.
 - ii) Budgeting and scheduling the Test.

Either:

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| 4. | a) | What is the need of software testing tools? Also explain how they classified in terms of their role in the testing process. | 8 |
| | b) | What are benefits and associated risks of using software testing tools? Explain in detail. | 8 |

OR

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|-----------|----|--|----------|
| | c) | Explain the concept of code of ethics for software professionals. Distinguish between human and professional ethics. | 8 |
| | d) | Discuss the ethical issues commonly encountered in software engineering in detail. | 8 |
| 5. | | Solve all the questions. | |
| | a) | Explain about psychology of testing with choices involved in testing process. | 4 |
| | b) | Write about the benefits of formal code reviews as a static testing technique. | 4 |
| | c) | Write short note on planning the test process. | 4 |
| | d) | Discuss in short about significance and applications of software testing process. | 4 |
