



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.C.A.DEGREE EXAMINATION – COMPUTER APPLICATIONS**

**FIFTH SEMESTER – NOVEMBER 2018**

**16PCA5MC05– SOFTWARE TESTING**

Date: 01-11-2018

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**PART – A**

**Answer ALL the questions**

**10x 2= 20**

- 1) What is a test case?
- 2) Write down the agile manifesto.
- 3) How does a test stub help in testing components?
- 4) Mention the advantages and disadvantages of top-down integration testing.
- 5) What is spike testing?
- 6) Say true or False:
  - a. Emulators are preferable whenever the testing team needs to test the mobile's internal behaviour like its internal hardware, firmware and so forth.
  - b. Laboratory testing is carried out by network carriers by simulating complete wireless network.
- 7) Define DevOps as proposed by IBM.
- 8) What is a digital value chain?
- 9) What are the maturity goals at TMM level 4?
- 10) What is defect casual analysis?

**PART – B**

**Answer ALL the questions**

**5 x 8= 40**

- 11) a) Elucidate cause effect graphing.

**(OR)**

b) Explain mutation testing and loop testing.
- 12) a) Explain the issues in testing classes under unit testing.

**(OR)**

b) Describe configuration and security testing

13) a) Elucidate interface and compatibility testing of a web application.

**(OR)**

b) Explain the following types of mobile application testing :

i) Updates ii) Crowd Sourced iii) Interrupt and iv) Memory Leakage Testing

14) a) Describe the three rules of thumb stated by Accenture in adopting mobile DevOps.

**(OR)**

b) Explain the Android and iOS testing frameworks.

15) a) Illustrate the internal structure of TMM maturity levels with a diagram.

**(OR)**

b) Explain measurements needed for TMM levels.

**PART - C**

**Answer ANY TWO questions**

**2 x 20= 40**

16) a) Elucidate Scrum. **(10)**

b) Explain Equivalence class and boundary value analysis with examples. **(10)**

17) a) Give a detailed description on integration testing strategies. **(10)**

b) Compare real device and emulator or simulator based testing. **(10)**

18) a) Describe mobile web, native and hybrid app. **(10)**

b) Explain defect analysis and prevention. **(10)**

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