

Reg. No.



Manipal Institute of Technology
(A Constituent Institute of Manipal University)



**III SEMESTER M. C. A.
END SEMESTER EXAMINATION – NOV/DEC 2015**

SUBJECT: : QUALITY ASSURANCE AND TESTING [MCA – 5103]

30-11-2015

Time : 3 hours

Max. Marks : 50

Instructions to Candidates

1. Answer ANY FIVE FULL questions.
2. Missing data may be suitably assumed.

- 1A Describe the basic concepts of requirements specifications.
1B Write the equivalence class test cases for the commission problem.
1C Which are the different forms of n-connectedness exhibited by data-data interactions?
(5 + 3 + 2)
- 2A Explain boundary value analysis testing with the help of an example
2B Mention the threads for context-sensitive input events in the SATM system.
2C What are the different severity levels for root cause analysis?
(5 + 3 + 2)
- 3A Describe the two fundamental approaches of identifying the test cases.
3B How are the rule counts calculated in a decision table?
3C Give the level1 dataflow diagram of the SATM system.
(5 + 3 + 2)

- 4A Describe the software life cycle with a build sequence.
- 4B How is robust worst case testing different from robustness testing?
- 4C What is event-based thread testing?

(5 + 3 + 2)

- 5A Write the decision table test cases for the Next Date function.
- 5B Explain the weak robust equivalence class testing.
- 5C What is the difference between validation and verification?

(5 + 3 + 2)

- 6A Explain the top down and bottom up integration with the help of an example.
- 6B Describe the interaction among threads by the composition of their EDPNs.
- 6C Give the port input and output event sequence for correct PIN (7653) on third try.

(5 + 3 + 2)