

249405

May, 2019

**MBA (ITM) - IV SEMESTER
Software Engineering (MBA/ITM 213)**

Time : 3 Hours]

[Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) Define verification and validation testing. (1.5)
(b) Define software engineering. (1.5)
(c) List out various methods for finding out cyclomatic complexity. (1.5)
(d) Differentiate between coupling and cohesion. (1.5)
(e) Define the following terms :
Error, fault and bug. (1.5)
(f) Why LOC is not a better metric to estimate a software. (1.5)

- (g) Define functional testing in short. (1.5)
- (h) List out the principles of project scheduling. (1.5)
- (i) List the errors associated with black box testing. (1.5)
- (j) Explain data dictionary. (1.5)

PART-B

- 2. (a) Explain spiral model in detail with the advantages and disadvantages. (10)
- (b) Give the brief description of prototyping. (5)
- 3. (a) Discuss about the design concepts in a software development process. (5)
- (b) Explain software quality assurance activities in detail. (10)
- 4. What is a software process. Write the software metrics for the software development. Explain RAD model and also describe the situations where RAD model might create difficulty. (15)
- 5. (a) Explain the factor that cause difficulty in software testing. (5)
- (b) Explain in detail about the risk management in software development cycle. (10)

- 6. (a) An application has the following : 10 low external input, 8 high external output, 13 low internal logical file, 17 high external interface file, 11 average external inquiry and complexity adjustment factor of 1.10. What are the adjusted and unadjusted function point count. (5)
- (b) What is modularity ? State its importance. Also explain different type of cohesion and coupling. (10)
- 7. Write short notes on :
 - (a) Cocomo II.
 - (b) Unit and Integration testing.
 - (c) Function point analysis with example. (15)