Printed Pages: 3	235	NMCAE33
(Following Paper ID and Roll No. to be filled in your Answer Book)		
Paper ID : 214559	Roll No.	

#### MCA

# (SEM. V) THEORY EXAMINATION, 2015-16 SOFTWARE PROJECT MANAGEMENT

[Time:3 hours] [MaximumMarks:100

### **SECTION-A**

**Note:** Attempt <u>all</u> parts. Write answer in brief.  $(2 \times 10 = 20)$ 

- Q1. (a) Who may be the stakeholders in a software project?
  - (b) What are the different methods of work breakdown structure?
  - (c) Effective software management focuses on three P's. Explain.
  - (d) Explain the project monitoring and control process.
  - (e) When should "Regression Testing" be performed?
  - (f) What are Software Quality attributes?
  - (g) What do you understand by the terms Change control and Version control.

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- (h) What are different test levels?
- (i) Specify the various people involved in the SQA group.
- (j) Define different types of risks involved in software project management.

### **SECTION-B**

Note: Attempt any five questions from this sections.

 $(10 \times 5 = 50)$ 

- Q2. What do you mean by 'Code Review'? Discuss the differences between Code Inspection and Walkthrough?
- Q3. What do you mean by Vision and Scope Document? Define the use of it.
- Q4. Write a short note on SEI Capability Maturity Model (CMM). Explain it with its structure and levels?
- Q5. Describe Cyclomatic Complexity with an example. Explain the significance of Cyclomatic complexity and describe how the Cyclomatric number is calculated?
- Q6. Compare PERT and CPM for similarities, differences. Describe their advantages and disadvantages.
- Q7. Discuss the different steps of preparing the schedule. What are the inputs and outputs required by schedule?

- Q8. What is meant by Software Configuration management? What are the principal activities involved in SCM?
- Q9. Explain Project Monitoring and controlling process. Expalin different dimensions of project monitoring and control.

## **SECTION-C**

Note: Attempt any two questions from this section.

 $(15 \times 2 = 30)$ 

- Q10. Explain any three of the following
  - (a) Automation Testing
  - (b) SQAApproaches
  - (c) Validation and verification
  - (d) Unit testing and system testing
- Q11. What do you understand by "Earned value Analysis"? Discuss the following progress indicators:
  - (a) Cost variance
  - (b) Schedule performance Index(SPI)
  - (c) Cost Performance Index (CPI)
- Q12. What do you understanc by the term "CASE" tools? What are the main advantages of using CASE tools? Discuss and draw the architecture of CASE environment.