

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

MCA (2012 to 2014 Batch) (Sem.-3)

SOFTWARE ENGINEERING

Subject Code : MCA-303

Paper ID : [B1159]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.
3. Use of non-programmable scientific calculator is allowed.

SECTION-A

1. a) Explain evolution of Software Engineering.
b) Differentiate between Software Development and Software Engineering.
2. a) List out the merits of spiral and prototyping model over waterfall model.
b) Describe Software decay.

SECTION-B

3. a) How SRS is helpful in data design? Describe.
b) What are the issues in requirement elicitation?
4. a) What are Analysis principles in requirement gathering?
b) What are the issues of Procedural design? Compare them with Architectural design.

SECTION-C

5. a) Explain the limitations of LOC over FP as defined by IFPUG.
b) Discuss the contribution of COCOMO-I and II in estimation process. Give mathematical relations.
6. a) What is probability matrix? How is it useful in risk management?
b) Explain Integration and acceptance testing in detail. Give one example of each testing.

SECTION-D

7.
 - a) What is the importance of Software Quality?
 - b) Discuss software quality standards.
8.
 - a) What is change control? How CASE tool helps in change control?
 - b) Define the terms Web Engineering, Reverse Engineering and Re-Engineering.

SECTION-E

9. Write briefly :

- a) Define temporal cohesion.
- b) Compare Data Flow Oriented Design with data structure oriented designs.
- c) What does modality in data modelling indicate?
- d) List the principles of a software design.
- e) What is the benefit of modular design?
- f) How do we compute the Expected Value for Software Size?
- g) Write the formula to calculate the effort in persons-months used in Dynamic multi variable Model.
- h) What is the purpose of timeline chart?
- i) What are the various types of charts used in visualizing progress?
- j) Define Smoke Testing.