

Punjab Technical University
Master of Computer Application Examination

MCA 3rd Semester SOFTWARE ENGINEERING

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Attempt any one question from each Section - A,B,C & D.**
- 2) Section - E is compulsory**

Section – A (1 * 10 = 10)

Q1) What are the various parameters which define the quality of software? How it can be measured?

Q2) Discuss the limitations of software process models. Which according to you is the best model of software development? Justify your answer.

Section – B (1 * 10 = 10)

Q3) When is cost estimation done? Discuss the COCOMO model along with the parameters defined in it.

Q4)

(a) What is the need of software planning? Explain the objectives of software planning.

(b) What are principles of structured analysis?

Section – C (1 * 10 = 10)

Q5) Discuss object oriented concepts in details.

Q6) (a) What are the various design methodologies?

(b) What does abstraction in software design provides.

Section – D (1 * 10 = 10)

Q7) Differentiate between the following.

(a) Unit Testing and Integration Testing.

(b) White Box Testing and Black Box Testing.

Q8) Why testing is necessary phase of software development? Discuss the relevance of various types of testing.

Section – E (10 * 2 = 20)

- Q9) a) Why there is need of stastical quality assurance?
- b) What is need of design methodoliges?
- c) Define the term Internal documentation.
- d) What are evolutionary process model users?
- e) What is purpose of DFD?
- f) What is the role of metrices in the software development.
- g) List some software design objectives?
- h) What is software equation?
- i) What is the use of linear process models?
- j) Define Prototyping