

University of Mumbai
Examinations Summer 2022

Software Engineering

Time: 2 hour 30 minutes

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	The process of developing a software product using software engineering principles and methods is referred to as _____.
Option A:	Software Engineering
Option B:	Software Evolution
Option C:	System Models
Option D:	Software Models
2.	Which of the following is not a maturity level in CMM.
Option A:	Repeatable
Option B:	Design
Option C:	Managed
Option D:	Optimizing
3.	project usually has a timeline chart which was developed by
Option A:	Barry Boehm
Option B:	Henry Gantt
Option C:	Ivar Jacobson
Option D:	None of the mentioned
4.	The process to gather the software requirements from client, analyze and document them is known as _____.
Option A:	Feasibility Study
Option B:	Requirement Gathering
Option C:	Requirement Engineering
Option D:	System Requirements Specification
5.	Which may be estimated either in terms of KLOC Kilo Line of Code or by calculating number of function points in the software.
Option A:	Time estimation
Option B:	Effort estimation
Option C:	Cost estimation
Option D:	Software size estimation
6.	Risk management is one of the most important jobs for a.
Option A:	Client
Option B:	Investor
Option C:	Production team
Option D:	Project manager

7.	Which of the following is not a Software Configuration Management Activity.
Option A:	Release management
Option B:	Configuration item identification
Option C:	Risk management
Option D:	Branch management
8.	Software Configuration Management can be administered in several ways These include
Option A:	Software Configuration Management distributed among the project members
Option B:	A single software configuration management team for the whole organization
Option C:	A separate configuration management team for each project
Option D:	All of the mentioned
9.	Test cases should uncover errors like
Option A:	Incorrect logical operators or precedence
Option B:	Nonexistent loop termination
Option C:	Comparison of different data types
Option D:	All of the mentioned
10.	Cyclomatic Complexity method comes under which testing method.
Option A:	Yellow box
Option B:	White box
Option C:	Gray box
Option D:	Black box

Q2. (20 Marks Each)	Solve any Two Questions out of Three	10 marks each
A	<i>With a neat diagram explain the Spiral model of software development. How prototyping used in spiral model.</i>	
B	<i>Explain Scrum agile development model.</i>	
C	<i>Build an SRS document for online student feedback system. It should contains following: 1. objective and scope 2. Functional Requirement 3. Non Functional Requirement</i>	

Q3. (20 Marks Each)	Solve any Two Questions out of Three	10 marks each
A	<i>Explain different specialized Estimation Techniques.</i>	
B	<i>What is Earned Value Analysis in Project tracking concept. Explain with example.</i>	
C	<i>Design Architecture for E-commerce System.</i>	

Q4. (20 Marks Each)	Solve any Two Questions out of Three	10 marks each
A	<i>Explain the steps involved in setting up or generating RMMM plan and also give RMMM plan for risk management.</i>	

B	<i>Describe how change control and version control is carried out during Software Configuration Management.</i>
C	<i>Write a short notes on Alpha and Beta Testing.</i>