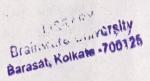




## **BRAINWARE UNIVERSITY**

Term End Examination 2023-2024
Programme – MCA-2022
Course Name – Software Engineering using UML
Course Code - MCA302
( Semester III )



Full Marks: 60

Time: 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

- 1. Choose the correct alternative from the following:
  - (i) Rewrite the Full form of SRS is
    - a) Software Requirement Specification
- b) Scenario Requirement Specification
- c) Software Re-engineering Specification
- d) Software Recycle Specification
- (ii) Trace the noise in term of software development.
  - a) Giving unnecessary details in SRS
  - c) Specifying the requirement
- b) Writing concise SRS
- d) None of these

- (iii) Illustrate SMI
  - a) Software Mature Indicator
  - c) Software Mature Index

- b) Software Maturity Index
- d) Software Maturity Indicator
- (iv) Identify the testing technique, under which Bottom Up approach counts.
  - a) Acceptance testing

b) Integration testing

c) Unit Testing

- d) None of these
- (v) Which of the following manuals is not a user documentation
  - a) Beginner's Guide

b) Installation guide

c) Reference Guide

- d) SRS
- (vi) If an Indirect approach is taken, then the sizing approach is represented as
  - a) LOC

b) FP

c) Fuzzy Logic

- d) LOC & FP
- (vii) Classify Statement and branch coverage metrics.
  - a) Testing

b) Source Code

c) Design Model

- d) None of these
- (viii) Programming language experience is a part of which factor of COCOMO cost drivers?
  - a) Personnel Factor

b) Product Factor

c) Platform Factor

- d) Project Factor
- (ix) What is the final outcome of the requirements analysis and specification phase.
  - a) drawing the data flow diagram
- b) the SRS document

c) testing the project (x) Which selective retest technique selects ever to produce a different output than its original.	d) none of these y test case that causes a modified program I version?	
a) Coverage c) Safe (xi) Define UML.	b) Minimization d) Maximization	
a) Unified Modeling Language c) Unique Modeling Language (xii) Define PERT.	b) Unified Management Language d) United Modeling Language	
a) Project Evaluation and Review Technique     c) Project Equation and Review Technique     (xiii) Judge the characteristics of SRS and identify the state of the state o	b) Project Estimation and Review Techni     d) None of these the odd one	que
a) Verifiable c) Black Box View (xiv) When testing should be stopped	b) Detailed View d) Traceable	Compri
a) When managers asked to stop     c) It depends upon the risk associated with     the project	b) When time runs out d) None of these	
(xv) Explain the basic tool used in structured desi	gn is	
a) Structure Chart c) DFD	b) ERD d) CASE Tools	
Group-B (Short Answer Type Questions)		3 x 5=15
<ol> <li>List various object modeling using UML</li> <li>Discuss different verification techniques.</li> <li>Explain available software project estimation techniques.</li> <li>Recommend various methods of evaluating a System's Performance?</li> <li>correlate between Cohesion and Coupling.</li> </ol>		(3) (3) (3) (3) (3)
	OR	
What are the basic concepts of Total Quality Management (TQM)?		(3)
	roup-C r Type Questions)	5 x 6=30
7. Explain when you should use PERT chats and are performing the duties of a project manage		ı (5)
<ol> <li>Briefly describe the different levels of CMM N</li> <li>Simulate Top-down and Bottom-up design wit</li> <li>Frame the main features of ISO standards.</li> <li>Explain about Coupling and classify various ty</li> <li>Identify and illustrate the content of an effect</li> </ol>	Model along with its key points area.  The diagram.  The pes of coupling	(5) (5) (5) (5) (5)
What are the key components and content ty Requirements Specification (SRS) document, a development of a software system?	pically found in an effective Software	(5) ul

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