GIET UNIVERSITY, GUNUPUR – 765022

M. C. A (Third Semester) Regular Examinations, January – 2024

MCA 20304 – Software Engineering

Time: 3 hrs   Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A   **(2 x 10 = 20 Marks)**

Q.1. Answer *ALL* questions

		CO #	Blooms Level
a.	Discuss the concept of Refactoring.	CO4	K2
b.	Why testing is necessary. Explain with an example.	CO4	K2
c.	Define the Cyclomatic Complexity.	CO4	K2
d.	Write a short note on software maintenance.	CO4	K2
e.	List different types of feasibility study.	CO2	K2
f.	How is the V model used in software engineering?	CO1	K2
g.	Differentiate between organic, semidetached and embedded software.	CO1	K4
h.	Write a short note on project scheduling.	CO1	K2
i.	Differentiate between decision tree and decision table.	CO2	K4
j.	Differentiate between function oriented and object-oriented approach.	CO3	K4

PART – B   **(10 x 5 = 50 Marks)**

Answer *ANY FIVE* questions

			Marks	CO #	Blooms Level
2.	a.	Compare and contrast black box testing and white box testing.	5	CO4	K3
	b.	Write the purpose of Software Engineering Institution Capability Maturity Model. Briefly describe all five levels of it.	5	CO4	K3
3.	a.	Describe the different stages of SDLC model with diagram.	5	CO1	K2
	b.	Describe COCOMO model.	5	CO1	K2
4.	a.	Draw activity diagram of Student Management System.	5	CO3	K3
	b.	What is the use of sequence diagram? Draw the sequence diagram of University Management System.	5	CO3	K3
5.	a.	Describe Requirement Engineering process.	5	CO2	K2
	b.	Describe CASE tool.	5	CO2	K2
6.	a.	Differentiate between cohesion and coupling.	5	CO3	K4
	b.	Describe about software design. Explain abstraction & modularization.	5	CO3	K2

7.a. Discuss integration testing and system testing approach.	5	CO4	K2
b. Explain the different types of UML diagrams.	5	CO3	K2
8. a. Discuss the phases of Spiral model with diagram.	5	CO1	K2
b. Describe SCRUM in the development process.	5	CO1	K2

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