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Reg. No……………………
Signature …………………

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2022

SOFTWARE ENGINEERING

[Maximum Marks: **75**]   [Time: **3** Hours]

PART-A

I. Answer *all* the following questions in one word or one sentence. Each question carries *'one'* mark.

(9 x 1 = 9 Marks)

		Module Outcome	Cognitive level
1.	List any two examples of embedded systems.	M1.01	R
2.	What is software specification?	M1.02	R
3.	Name any two stages in software validation during the testing process.	M1.08	R
4.	What is meant by collective ownership?	M2.03	R
5.	List any two factors that contribute complexity for large scale software systems.	M2.09	R
6.	Find two properties used for specifying non-functional requirements.	M3.01	R
7.	Choose the stages of software engineering focused by Model-driven architecture.	M3.07	R
8.	Define system context model.	M4.01	R
9.	What is the function of performance testing?	M4.09	R

PART-B

II. Answer any *eight* questions from the following. Each question carries *'three'* marks.

(8 x 3 = 24 Marks)

		Module Outcome	Cognitive level
1.	Classify the stages of waterfall model that reflect the software engineering activities.	M1.03	U
2.	Explain how software is incooperated in large complex systems.	M1.09	U
3.	Relate agile software developments with plan driven development.	M2.01	U
4.	Show the principles of agile software development.	M2.02	U
5.	Why test first development is said to be an important innovation of XP?	M2.05	R
6.	Extend the use of natural language in software specification.	M3.02	U
7.	Compare validity check and consistency check.	M3.03	U
8.	Summarize structural model and dynamic model.	M4.03	U
9.	What are the elements of design patters used in the design of software?	M4.04	R
10.	Classify the three classes of interface errors occurred in complex system.	M4.07	U

PART-C
Answer all questions. Each question carries *'seven'* marks.

(6 x 7 = 42 Marks)

		Module Outcome	Cognitive level
III.	Illustrate integration and configuration of software process models.	M1.05	U
	OR		
IV.	What are the main activities of software specification used in requirement engineering process?	M1.06	R
V.	Summarize the use of prototype in a software development process.	M1.10	U
	OR		
VI.	Explain the general process included in process improvement cycle.	M1.11	U
VII.	Outline the need for refactoring in agile software development.	M2.04	U
	OR		
VIII.	Explain the Scrum terminologies in agile project management.	M2.07	U
IX.	Explain context model for system modeling.	M3.04	U
	OR		
X.	Illustrate use case model and also show the interaction between students and office administration with the help of a use case diagram.	M3.05	U
XI.	Outline the concept of generalization with suitable example.	M3.06	U
	OR		
XII.	Explain the advantages and disadvantages layered architecture.	M3.11	U
XIII.	Relate the levels of software reuse during implementation issues in software engineering.	M4.05	R
	OR	M4.10	R
XIV.	Which are the different types of user testing?		

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