Code No: R17A0539 **R17**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech - II Semester Supplementary Examinations, April 2024

Software Process & Project Management

(CSE)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION-I

1	***A***	Explain the Principles of Software Process Change?	**[7M]**
	B	Explain the capability Maturity model with its limitations?	**[7M]**
		OR	
2	***A***	Illustrate the Frame work activities of PSP?	**[7M]**
	B	Describe Software Process Assessment Cycle with a neat diagram?	**[7M]**
		SECTION-II	
3	***A***	Describe the improvements to the basic waterfall model that would eliminate most of the development risks?	**[7M]**
	B	Explain Barry Boehm's "Industrial Software Metrics"?	**[7M]**
		OR	
4	***A***	Explain with a neat diagram how various artifacts evolved over the life cycle?	**[7M]**
	B	Explain top ten software management principles?	**[7M]**
		SECTION-III	
5	***A***	Discuss about work breakdown structures?	**[7M]**
	B	What is iteration planning? Explain iteration planning process in brief.	**[7M]**
		OR	
6	***A***	Discuss about major and minor milestones in the life cycle of an iteration.	**[7M]**
	B	Explain about periodic status assessment?	**[7M]**
		SECTION-IV	
7	***A***	What is a seven core metrics? Discuss about pragmatic software metrics.	**[7M]**
	B	What are management indicators? Explain.	**[7M]**
		OR	
8	***A***	What is the need of metric automation? Discuss.	**[7M]**
	B	Explain about Project Control and Process Instrumentation?	**[7M]**
		SECTION-V	
9	***A***	Explain about the Next generation software economics?	**[9M]**
	B	Describe the activities of Software Architecture team?	**[5M]**
		OR	
10	***A***	Explain about Modern Process Transitions?	**[10M]**
	B	What are the Major points CCPDS-R Case Study?	**[4M]**

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Code No: R17A0534 **R17**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech - II Semester Supplementary Examinations, April 2024

Machine Learning

(CSE)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION-I

1	***A***	Discuss one perspective or issue related to machine learning that impacts its effectiveness.	**[7M]**
	B	What is PAC learning, and why is it important in machine learning?	**[7M]**
		OR	
2	***A***	How do you determine the appropriate level of grouping and grading in a machine learning task?	**[7M]**
	B	Describe a scenario where version spaces are particularly useful in machine learning.	**[7M]**

SECTION-II

3	***A***	Explain how the ID3 algorithm builds a decision tree for classification.	**[7M]**
	B	How does Logistic Regression differ from Linear Regression?	**[7M]**
		OR	
4	***A***	Describe the structure of a multilayer perceptron (MLP) in neural networks.	**[7M]**
	B	Discuss the trade-offs involved in using different kernel functions in SVMs.	**[7M]**

SECTION-III

5	***A***	Explain the concept of model combination schemes in ensemble learning.	**[7M]**
	B	Describe the process of AdaBoost and how it improves the performance of weak learners.	**[7M]**
		OR	
6	***A***	What is the KD-Tree, and how does it improve the efficiency of distance computations in nearest neighbour methods?	**[7M]**
	B	Compare and contrast different distance measures used in nearest neighbour methods.	**[7M]**

SECTION-IV

7	***A***	Describe the basic components of a reinforcement learning task.	**[7M]**
	B	What are some experimentation strategies used in reinforcement learning?	**[7M]**
		OR	
8	***A***	Discuss the concept of convergence in the context of hypothesis evaluation.	**[7M]**
	B	Explain how different experimentation strategies can affect the learning process in reinforcement learning.	**[7M]**

SECTION-V

9	***A***	What is the motivation behind using genetic algorithms in optimization problems?	**[7M]**
	B	How is a fitness function used in genetic algorithms, and how does selection work?	**[7M]**

OR

10	***A***	How do models of evolution, such as Lamarkian Evolution and the Baldwin Effect, influence the design of genetic algorithms?	**[7M]**
	B	Discuss the challenges involved in scaling up genetic algorithms to handle large-scale optimization problems.	**[7M]**

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