

Hall Ticket Number :

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R-15

Code: 5G164

III B.Tech. II Semester Supplementary Examinations February 2021

Artificial Intelligence

(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

Marks CO Blooms Level

UNIT-I

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|------------------------------------------------------------------------------|----|---|----|
| 1. a) Define Artificial Intelligence? Explain its importance in modern life. | 7M | 1 | L1 |
| b) Explain the various application domains of AI | 7M | 1 | L2 |

OR

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|---------------------------------------------------------------|-----|---|----|
| 2. What are different types of Agents? Explain them in brief. | 14M | 1 | L1 |
|---------------------------------------------------------------|-----|---|----|

UNIT-II

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|----|
| 3. What is a depth first search of the search tree? Write an algorithm to conduct depth first search explain with example and also mention advantages and disadvantages. | 14M | 2 | L1 |
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OR

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|-------------------------------------------------------------------------------|----|---|----|
| 4. a) What is best first searching? Explain in detail A* algorithm. | 7M | 2 | L1 |
| b) Explain Constraint Satisfaction problem for solving a map Coloring problem | 7M | 2 | L2 |

UNIT-III

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|-----------------------------------------------------------------------------------|-----|---|----|
| 5. Explain in detail about forward chaining and backward chaining with an example | 14M | 3 | L2 |
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OR

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|-----------------------------------------------------------------------------------|----|---|----|
| 6. a) Explain about first order logic and how it differs from propositional logic | 7M | 3 | L2 |
| b) Explain about the unification algorithm | 7M | 3 | L2 |

UNIT-IV

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|---------------------------------------------------------------------------|----|---|----|
| 7. a) Describe about the categories and objects in knowledge engineering. | 7M | 4 | L1 |
| b) Explain in detail about Ontology | 7M | 4 | L2 |

OR

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|----------------------------------------------------|----|---|----|
| 8. a) Explain Partial Order Planning in detail. | 7M | 4 | L2 |
| b) Describe in detail about Hierarchical Planning. | 7M | 4 | L1 |

UNIT-V

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|------------------------------------------------------------------|----|---|----|
| 9. a) What is the need of acting under uncertainty in the agents | 7M | 5 | L1 |
| b) Describe in detail about Dempster-Shafer theory | 7M | 5 | L1 |

OR

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|------------------------------------------------------------------|----|---|----|
| 10. a) Briefly explain about fuzzy logic? | 7M | 5 | L2 |
| b) Describe in detail about Bayesian Theory and Bayesian Network | 7M | 5 | L1 |

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III B.Tech. II Semester Supplementary Examinations February 2021

Data Mining and Data Warehousing

(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

Marks CO Blooms Level

UNIT-I

1. a) Explain briefly about various data mining functionalities. 8M CO1 L2
b) "Data cleaning as a process". Justify. 6M CO1 L5

OR

2. a) What is the need for preprocessing techniques? Summarize Data Transformation Methods. 7M CO1 L2
b) Describe three challenges to data mining regarding data mining methodologies and user interaction issues. 7M CO1 L1

UNIT-II

3. a) Briefly compare Enterprise warehouse, Data Mart, Virtual warehouse. 6M CO2 L2
b) Explain how to generate frequent item sets using FP-growth algorithm. 8M CO2 L2

OR

4. a) Define a data cube. Illustrate different OLAP operations in Multidimensional Data Model. 7M CO2 L1
b) How can we mine multilevel association rules efficiently using concept hierarchies? Explain. 7M CO2 L1

UNIT-III

5. a) Describe the measures for computing classifier accuracy. 6M CO3 L1
b) Explain decision tree induction classification with an algorithm. 8M CO3 L2

OR

6. a) Why is naïve Bayesian classification called "naïve"? Briefly outline the major ideas of naïve Bayesian classification. 8M CO3 L2
b) Compare the advantages and disadvantages of eager classification versus lazy classification. 6M CO3 L2

UNIT-IV

7. Suppose that the data mining task is to cluster points (with x,y) representing location) into three clusters, where the points are $A_1(2, 10)$, $A_2(2, 5)$, $A_3(8, 4)$, $B_1(5, 8)$, $B_2(7, 5)$, $B_3(6, 4)$, $C_1(1, 2)$, $C_2(4, 9)$.
The distance function is Euclidean distance. Suppose initially we assign A_1 , B_1 , and C_1 as the center of each cluster, respectively. Use the K-means algorithm to show only
(i) The three cluster centers after the first round of execution.
(ii) The final three clusters. 14M CO4 L3

OR

8. a) What is cluster analysis? Describe Divisive Hierarchical method of clustering. 6M CO4 L1
b) Explain about DBSCAN algorithm with a neat example. 8M CO4 L2

UNIT-V

9. a) Explain the basic measures for text retrieval. 7M CO5 L2
b) List challenges of web mining. 7M CO5 L1

OR

10. a) What are the differences between mining association rules in multimedia databases Versus in transaction databases? 7M CO5 L1
b) Explain Spatial Databases. 7M CO5 L2

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Code: 5G16B

III B.Tech. II Semester Supplementary Examinations February 2021

Software Project Management
(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. Explain the evolution of waterfall model in detail. 14M

OR

2. a) Explain in detail about the three levels of software economics. 7M
b) Discuss conventional software management performance 7M

UNIT-II

3. a) Describe inception and elaboration phase in detail. 7M
b) Write a note on management artifacts and pragmatic artifacts. 7M

OR

4. State and explain the principles conventional software engineering. 14M

UNIT-III

5. Discuss in detail about work flows of a software process. 14M

OR

6. a) Write about results of minor milestones in a modern process. 7M
b) Justify the need of periodic status assessments. 7M

UNIT-IV

7. a) Briefly explain about work breakdown structures. 7M
b) Write a detail note on cost and schedule estimating process. 7M

OR

8. a) Define round trip engineering. Write process discriminators that results from differences in architectural engineering. 7M
b) What is the need of process automation? Explain. 7M

UNIT-V

9. Explain different quality indicators with suitable example. 14M

OR

10. a) Illustrate the two dimensions of process discriminators 7M
b) Explain next generation cost models in brief 7M

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III B.Tech. II Semester Supplementary Examinations February 2021

Smart Phone Programming
(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70Marks)

UNIT-I

1. a) Outline the different features supported by Android and explain about them. 10M
- b) List and write about different versions of Android 4M

OR

2. Explain the anatomy of android application and write about intents, linking activities using intents. 14M

UNIT-II

3. Explain in detail about different layout managers in android application with an example? 14M

OR

4. Write about the creation and customization of list views with example code snippets. 14M

UNIT-III

5. Demonstrate with example how to use Gallery, ImageView and GridView in developing android application. 14M

OR

6. How can you retrieve and modify the preferences values programmatically? 14M

UNIT-IV

7. Write about various content providers supported by Android and explain the process of sharing data in android. 14M

OR

8. Explain the procedure involved in sending E-mail with sample code snippets. 14M

UNIT-V

9. How to Display the Google maps with Zoom controls? 14M

OR

10. Explain the process of communication between a service and activity. Write sample required code snippets. 14M
