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Course Code: CSE 112 (SET A)
Class Test: 2

Course Tittle: Computer Fundamentals
Time: 30 minutes Date: 23.10.2025

No	Question	Marks
1	**Given a Boolean function:** **F(A,B,C)=A'B+AC** **Implement** the function using NAND gate only (Logical Diagram).	5
2	Given some real-life problems: 1. An online shopping platform like Amazon wants to understand different types of customers to recommend products and improve marketing strategies. 2. A university wants to predict whether a student will pass or fail **a** course based on attendance, internal marks, and assignment scores. 3. A photo storage company wants to reduce image file sizes without losing much visual quality. 4. A real estate company wants to predict house prices based on different features. 5. Doctors want to automatically detect whether a patient has diabetes **or** heart disease based on test result. 6. A city's transport department wants to predict the severity of a traffic accident based on road and vehicle conditions. 7. A supermarket wants to find products that are frequently bought together. 8. Medical researchers study thousands of genes to find hidden biological relationships. 9. A cybersecurity system monitors network traffic to detect new or unknown types of attacks. 10. An AI tutor adapts lessons based on a student's learning speed and accuracy. **Suggest** a **machine learning** model to solve each problem.	8
3	**Compare** between **Google Docs** and **Microsoft word**.	2

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Course Code: CSE 112 (SET B)
Class Test: 2

Course Tittle: Computer Fundamentals
Time: 30 minutes Date: 23.10.2025

No	Question	Marks
1	**Given a Boolean function:** **F(A,B,C)=(A+B')C+A'B** **Implement** the function using **NOR** gate only (Logical Diagram).	5
2	Given some real-life problems: a. A music streaming app wants to recommend songs based on the user's listening history. b. A bank wants to detect fraudulent credit card transactions in real-time. c. A weather department wants to forecast rainfall using past temperature and humidity data. d. A company wants to group employees based on their skill levels and project performance. e. A hospital wants to classify medical images into normal or abnormal categories. f. A logistics company wants to optimize delivery routes to minimize travel time. g. A movie rating platform wants to identify fake reviews automatically. h. A smart home system adjusts lighting and temperature based on user behavior. i. A language learning app personalizes lessons based on user progress. j. A telecom company wants to predict customer churn based on service usage patterns. **Suggest** a **machine learning** model to solve each problem.	8
3	Compare between **Google Sheets** and **Microsoft Excel**.	2

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