

**School of University Polytechnic****Diploma in Computer Science and Engineering  
Semester End Examination - Aug 2024****Duration : 180 Minutes  
Max Marks : 100****Sem III - N1DC301B - Fundamentals of Artificial Intelligence and Machine Learning***General Instructions**Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

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|-----|---|--------|
| 1)  | What is knowledge representation in AI?   | K1(2)  |
| 2)  | Compare and contrast precision and recall in the context of evaluation metrics for machine learning models? | K2(4)  |
| 3)  | Explain why to Split the Dataset?   | K2(6)  |
| 4)  | Model the subsets of Artificial Intelligence  | K3(9)  |
| 5)  | Identify the different platforms for Artificial Intelligence (AI) development?                              | K3(9)  |
| 6)  | Evaluate and interpret the purpose of Deep Learning frameworks such as Keras, TensorFlow, and PyTorch?      | K5(10) |
| 7)  | Examine the challenges of Sentiment Analysis.   | K4(12) |
| 8)  | Explain the history of Artificial Intelligence in detail.   | K5(15) |
| 9)  | Determine how does Reinforcement Learning work? Explain with an example.                                    | K5(15) |
| 10) | Discuss in brief the applications of Artificial Intelligence in E-Commerce?                                 | K6(18) |