



# **HJD Institute of Technical Education and Research**

## **Department of Computer Science and Engineering**

Kera-Mundra Road, At. Gajod, Kera-370430, Kutch

Phone: (02832)281085/87, Fax: 281004

Email: [hjdinstitute@gmail.com](mailto:hjdinstitute@gmail.com) website: [www.hjdinstitute.org](http://www.hjdinstitute.org)

---

SUBJECT : MACHINE LEARNING [3150724]

TERM: ODD 2021-2022

### QUESTION BANK

#### **SEM-VII**

##### **Unit 1**

1. What is machine learning? What is key task of machine learning?
2. What is classification? Explain the key difference between classification and regression?
3. Write a short notes on any of two of the following:
  - a) Supervised learning
  - b) Unsupervised learning
  - c) Reinforcement learning
4. What are the different tools and technology available for solving problems in machine learning? Give details about any two of them.

##### **Unit 2**

5. Differentiate:
  - A) Categorical vs. Numeric attribute
  - B) Dimensionality reduction vs. Feature selection
6. What are the main basic data types in machine learning? Give an example of each one of them.
7. How can we take care of outliers in data?

8. Explain qualitative and quantitative data in details. Differentiate between the two.
9. What are the different causes of data issue in machine learning?

### **Unit 3**

10. Explain, in detail, the process of K-fold cross-validation.
11. What is the main purpose of a descriptive model? State some real-world problems solved using descriptive models.
12. What are predictive models? What are descriptive models? Give examples of both types of models. Explain the difference parameters of measurement.
13. Describe the process of predictive modelling for numerical values. How is it different from predictive modelling for categorical value?

### **Unit 4**

14. What is a feature? Explain with example.
15. What is feature engineering? Why it is needed? state the different approaches of feature selection?

Ms. Priyanka Ahir

Subject Faculty

Ms. Pooja Gunsai

H.O.D.