

Total No. of Questions : 4]

SEAT No. :

P8616

[Total No. of Pages : 1

Oct-22/TE/Insem-634

T.E. (Artificial Intelligence & Data Science)

PATTERN RECOGNITION

(2019 Pattern) (Semester - I) (Elective -I)(317522B)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) Describe with neat diagram feature extraction for 3D objects? [5]
b) Explain the concept of feature vector and feature space. [5]
c) Illustrate the syntactic pattern recognition Approach? [5]

OR

- Q2)** a) Describe the black Box Approaches of pattern Recognition?. [5]
b) Describe the structure of a typical pattern Recognition system? [5]
c) Relate Decision Regions, decision Boundries & Discriminant function?[5]

- Q3)** a) Identify the different approaches to develop statistical pattern Recognition classifiers? [5]
b) Which are the metrics to measure classification performance explain in brief. [5]
c) Explain discriminant function with suitable example. [5]

OR

- Q4)** a) Describe the general measures of classification Risk? [5]
b) Describe the general structure of the statistical pattern Recognition Approach. [5]
c) Illustrate statistical pattern Recognition in Image processing? [5]

