



**In Semester Assessment-1
SE (Semester-IV)
Statistical Decision Making**

Branch: AI_ML

Date: 14/02/2022

Timing: 10:30 am to 11:00 pm

Duration: 30 min

Maximum Marks: 10

Instructions –

1. All questions are compulsory
2. Assume suitable data wherever necessary and state the assumptions made.
3. Diagrams / sketches should be given wherever necessary.
4. Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.
5. Figures to the right indicate full marks.
6. Scan the answer sheet in sequence and upload the Pdf. Pdf should be named as SE_Branch_Division_Roll No_Subject abbreviation_Student Name

Subjective Questions:

Q2 (a) A manufacturer claims that only 2% of his products supplied by him are destroyed. A consignment of 200 products contained 36 destroyed pieces. Test the claim of manufacturer at 5% level of significance (L.S.). [5 marks]

OR

(b) In two large populations there are 15% and 12% respectively of fair headed people. Is this difference likely to be hidden in samples of 1,000 and 400 respectively from the two population? [5 marks]

Q3 (a) From the data given below find out if the two means significantly differ at 5% level of significance. [5 marks]

	No. of items	Mean	Standard deviation
Group I	50	170	3.0
Group II	75	160	2.0

OR

(b) Intelligent test of two groups of boys and girls gives the following result: [5 marks]

	Mean	Standard deviation	Sample size
Girls	80	9	64
Boys	71	10	49

Is the difference between the standard deviation significant at 5% level of significance?