ester III (B.Tech)

Er. No. 2018308...
Academic Year: 2021-22

Jaypee University of Engineering & Technology, Guna
T-1 (Odd Semester 2021)
18B11HS312 - TECHNIQUES FOR DECISION MAKING

Maximum duration: 1 Hour

Maximum Marks: 15

Notes:
1. This question paper has 04 questions.
2. Write relevant answers only.
3. Do not write anything on question paper.
4. Use of calculators is permitted.

	Marks

Q1. Describe the stages of decision making process with the help of an example. → 3M [04]

Q2. An analysis of production rejects resulted in the following figures: → 4M [04]

No. of rejects per operator	0-20	20-40	40-60	60-80	80-100	100-120	120-140
No. of operators	4	26	22	10	9	6	3

Compute mean and median for the above data.

Q3. As a CEO of your company XYZ Limited, you plan to achieve organizational goal of boosting → 3½ the volume of manufacturing. For this, your company uses automation of assembly line and updates it further. New machineries and tools have been purchased and set up in your company. Next, workers are trained to work on new machineries using new tools and procedure. Although all the technical requirements have been fulfilled and all the machineries have been fixed correctly, but quantity of manufactured products drops. Now, you are concerned about this situation that despite installing new manufacturing technology and methods, production is falling. Therefore you want to investigate this matter. You call all the heads of department for an emergency meeting. Human resource manager informs that employees have the fear of losing their jobs due to automation of assembly line and mechanization. Also extra pay incentives are not provided to the workers for producing more number of units. You are now aware that low morale of employees is the main cause of low production level. As a CEO, you wish to resolve this issue immediately.

(A) What steps will you take to solve this problem? [02]

(B) Explain the conditions under which you are making decisions: - certainty, uncertainty, and risk. [01]

(C) What are the learning outcomes from this case study? [01]

Q4. A welfare organization introduced an education scholarship scheme for school going children [03] of a backward village. The number of students in the age group from 5-7 to 17-19 is calculated as shown in table below: → 3M

	6	9	12	15	18
Age group	5-7	8-10	11-13	14-16	17-19
Number of students	10	8	7	3	2

Compute standard deviation for the above data.