

- 2 In a factory there are three machines and they produce respectively 200,300 and 500 units of an item daily. The proportion effectiveness of these machines are 2% 4% and 3% respectively. An item is taken random from the days production and it is found to be defective. Find the probability that the item is produced by second machine. 7

OR

- Q-3 1 Explain grouped data and ungrouped data with example 7
2 Write Note:Bayes Theorem 7

SECTION – II

- Q-4 **Attempt the Following questions** (07)

- a. What is coefficient of skewness? 1
b. What is probability? 1
c. What is trial? 1
d. What is co-relation? 1
e. What do you mean by descriptive statistics 1
f. Define grouped data? 1
g. Define range. 1

- Q-5 **Attempt all questions** (14)

- 1 A manager has to allocate 3 different jobs to 3 workmen. Depending on the efficiency and the capacity of the individual the times taken by each differ as shown in the table. How should the tasks be assigned one job to a worker so as to minimize the total man-hours?

PERSON	PROJECT		
	1	2	3
ADAM	11	14	6
BROWN	8	10	11
COOPER	9	12	7

- 2 Find the the correlation coefficient. 7

Wages	100	101	102	102	100	99	97	98	96	95
Cost of Living	98	99	99	97	95	92	95	94	90	91

OR

- Q-5 1 What is the difference between nominal scale and ordinal scale? 7
2 Differentiate between descriptive statistics and inferential statistics. 7
Q-6 **Attempt all questions** (14)



- 1 Calculate the population variance and standard deviation of grouped data by original formula of given data. 7
- | Class interval | Frequency |
|----------------|-----------|
| 1-3 | 16 |
| 3-5 | 2 |
| 5-7 | 3 |
| 9-11. | 9 |
| 11-13. | 6. |

- 2 Write note: Exhaustive event with example 7

OR

Q-6

Attempt all Questions

- 1 Explain different types of data with example. 7
- 2 What are the different forms of inventory? 7

