2019

MBA

2nd Semester Examination

PRODUCTION MANAGEMENT

PAPER – MBA-206

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group – A

Answer any ***EIGHT*** questions 8 X 2=16

1. What do you mean by Median?
2. What will be the standard Deviation for the following data set?
   60,78, 83, 85, 68, 71, 70, 89, 63, 65, 66, 61, 62, 73, 77, 81, 90.
3. The Mean and Standard Deviation (S.D) of a distribution is 25 and 12 respectively. What is the value of the Coefficient of Variation (CV)?
4. What is Range? Give an example.
5. One Card is randomly drawn from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen or King)?
6. Bag I containing 6 white and 4 black balls while another Bag II contains 3 white and 4 black balls. One Ball is drawn at Random from one of the Bags and it is found to be Black.What is the probability that it was drawn from Bag II?
7. Match the followings:

Quality Gum	Quality Concept
(i) W. Edwards Deming	1. Good quality means a predictable degree of uniformity and dependability in the quality standard suited to the customer.
(ii) Kaoru Ishikawa	2. A quality process or product is fit for its purpose.
(iii) Armand V Feigenbaum	3. To practice quality control is to develop, design, produce and service a quality porduct which is most economical, most useful and always satisfactory to the consumer.
(iv) Joseph M. Juran	4. Total quality Control is an effective system for integrating the quality development, quality maintenance and quality improvement efforts of the various groups in an organisation.

8. What is the formula of Defective Parts Per Million (PPM)?

9. What is done in 'Define ' Phase?

10. State any two advantages of Lean Six Sigma.

11. In a Post office an employee has to complete 24 accounting forms in a day.
Assuming that the working hours in the Post Office is 9 hours including 1 hour of lunch break. What will be the task time?

12. What is Process Flowchart?

13. What is meant by Time Study?

14. What is EOQ?

15. What do you mean be Line Balancing?

16. What is ABC analysis?

Group – B

Answer any ***EIGHT*** questions 8 X 4=32

17. Write down the advantages of mass production.

18. State the characteristic of Job production.

19. State the major points of difference between Production management and Operation management.

20. To test if there is significant difference between the proportion of men and the proportion of women who will go for higher studies after their graduation. We have collected following data.

Sample	Total number of Students	No. of students who have opted for higher studies
1	80 men	42 men
2	70 women	49 women

What would be the result of hypothesis test at 0.05 level of significance?
(The critical value of Z statistic is ± 1.96)

21. You are a Quality Analyst at automobile manufacturing firm. You want to compare the quality of bearings received from two vendors (Vendor1 and Vendor 2). You have collected the following data for a CTQ (Critical To Quality) characteristic "Outer Diameter" of the bearing.

	Vendor 1	Vender 2
Number	21	25
Mean	3.27	2.53
Std Dev.	1.25	1.00

Compute the value of F-Statistic.

22. Find out the mean, median, mode and range for the following list of values.
13,18,13,14,13, 16, 14, 21, 13.

23. State the importance of Project charter in executing complex projects.

24. Mention the define phase tool in six sigma process.

25. What do you mean by cluster sampling? Give an example.

26. From the following data find out lower quartile, upper quartile and median.
12, 5, 22, 30, 7, 36, 14, 42, 15, 53, 25

27. Write a short note on Chebyshev's Theorem.

28. State the objectives of Inventory Control.

29. Mention the benefits of "JIT".

30. What are the Significance of Industrial Safety?

31. Write a short note on Disablement.

32. State the methods of measuring Accident.

Group – C

Answer any ***FOUR*** questions: 4 X 8=32

33. Discuss the importance of Production Management.

34. State the Factors that affect plant location.

35. Explain the objectives, importance and strategies of Aggregate planning.

36. Discuss the Critical ratio method with an example.

37. State the objectives of production management.

38. State the factors that affect productivity in an organisation.

39. Discuss Unsafe Act and Unsafe Condition with example.

40. What do you mean by Productivity Analysis? State the different types of analysis that can be done to improve productivity in an organisation.

[Internal Assessment : 20]