

2018

M B A

2nd Semester Examination

PRODUCTION AND OPERATIONS MANAGEMENT

PAPER—MBA-203

CODE-9

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.

1. Answer any *eight* questions : 8×5
- (a) What is Cellular Manufacturing?
 - (b) Elaborate the concept of Aggregate Planning.
 - (c) Discuss different attributes of 'Batch Production'.
 - (d) Explain the difference between P-chart and C-chart in sampling process.

(Turn Over)

- (e) What are the objectives of production planning and control ?
- (f) Explain preventive maintenance of the plant.
- (g) Describe key principles of T.Q.M.
- (h) Discuss the classification of Audits.
- (i) Discuss briefly the concept and use of s & c.
- (j) What is quality circle ? State the use of quality circle.
- (k) State the uses and benefits of six sigma.
- (l) What is method study ? State how method study differs from process study.

2. Answer any *four* questions : 4×10

- (a) (i) Explain corrective maintenance of the plant.
- (ii) In a textile firm, a worker is capable of tailoring 3 garments per day. Assume the time taken for each garment is the same.

Given : Hiring costs = Rs. 3000/-
Layoff costs = Rs. 4000/-

Current employee strength = 40 Aggregate demand for next four months is given in the following table :

	Jun	Jul	Aug	Sept
Demand	3170	3000	2900	2660
Working days	24	25	23	24
Worker s available	40	44	40	42

Based on the given information, generate a production plan by following the varying workforce strategy.

4+6

(b) Write short notes of the following :

(i) PDCA Cycle

(ii) Kaizen

5+5

(c) Write short notes of the following :

(i) Mass and Flow Production.

(ii) Fixed position Layout.

5+5

(d) A Firm is involved in five types of jobs, each of which must be processed on three machines A, B and C in the order A-B-C.

The processing time of each job (in hours) on the 3 machines is given below :

Jobs Processing Times

	A	B	C
1	18	10	8
2	19	12	18
3	12	5	16
4	16	6	14
5	21	9	10

Determine the sequence for the five jobs that minimizes the total operation time. Also find the idle time of each machine; A, B and C. 10

- (e) Discuss briefly the concept of batch type production. State the characteristics of batch type production.

4+6

- (f) Define work study and state the objectives of work study. Explain the concept of work sampling and state its uses.

[Internal Assessment : 20 Marks]

C/18/MBA/3rd Sem./HR-302

TB-350