

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL Paper Code: BBA-401

PRODUCTION MANAGEMENT

Time Allotted: 3 Hours

Full Marks: 70

The figures in the margin indicate full marks.

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

GROUP - A

(Multiple Choice Type Questions)

- 1. Choose the correct alternatives for any ten of the following: $10 \times 1 = 10$
 - i) Production is defined as
 - a) manufacturing of goods
 - b) manufacturing of services
 - c) manufacturing of goods and services
 - d) none of these.

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- ii) For an integrated steel plant, the plant location decision will be chiefly influenced by the consideration of
 - a) proximity to the market
 - b) proximity to the raw material supply source
 - c) availability of good transportation system
 - d) all of these.
- iii) Which of the following is a material handling equipment that could be used in a plant?
 - a) Fork lift truck
- b) P-4 computer
- c) Mercedes-Benz car d) Air conditioners.
- iv) MPS is
 - a) Materials Planning System
 - b) Materials Placement Sequence
 - c) Master Production Schedule
 - d) none of these.
- v) Line balancing is a technique for
 - a) Job assignment
- b) Layout planning
- c) Location planning d) Method study.

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ri)	∇	7 refers to		
	a)	Transport	b)	Waiting
	c)	Delay	d)	Store.
rii)	Mat	terials Handling involve	C8	
	a)	movement and packa	ging	
	b)	movement and storin	g	
	c)	movement, storing ar	ıd p	ackaging
	<u>a</u>)	storing, sorting, pack of materials.	cagi	ng and transportatior
riii)	SIM	IO chart is used in		
	a)	machine loading	b)	method study
•	c)	quality control	d)	none of these.
x)	Old	ISO-9000 series had .	•	standards.
	a)	two	b)	three
	c)	four	d١	five

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- x) 'Cost of quality' is the
 - a) cost of creating a quality product
 - b) cost of maintain quality instruments
 - c) cost of not creating a quality product
 - d) all of these.
- xi) At Break-even point
 - a) Profit > Loss
- b) Profit > Loss
- c) Profit > Total Cost d) none of these.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

- 2. Distinguish between method study and work measurement.
- 3. Pinpoint the difference between Process and Product layout. Name two major criteria for a good plant layout.
- 4. What are the objectives of Production Management?
- 5. Explain the concept of Acceptance Sampling.
- 6. Discuss the factors you would consider for selection of Materials Handling Equipment.

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GROUP - C

(Long Answer Type Questions)

Answer any three of the following. $3 \times 15 = 45$

7. Briefly outline the scope of Maintenance Management.
Write a short note on Breakdown Maintenance. Briefly underline the concept of Preventive Maintenance.

5 + 5 + 5

8. What is meant by work study? State its advantages.

A work-study sample of a manufacturing activity conducted over a 40-hour period shows that a worker with an 85% rating produced 12 parts. The worker's idle time was 10% and the allowance factor was 12%.

Find the Normal and Standard time for this activity.

2 + 5 + 8

- 9. a) What do you mean by Production Planning and Control (PPC)? State its main objectives.
 - b) What do you understand by p-chart and c-chart in statistical quality control? The following are the number of defects noted in 20 hundred-yard pieces of woollen goods:

3, 3, 6, 3, 0, 1, 3, 5, 7, 8, 4, 10, 5, 5, 4, 3, 4, 5, 4, 1

Find \overline{c} and the control limits for the number of defects. (2+4)+(4+5)

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- 10. a) Briefly discuss the factors influencing plant location.
 - b) Explain the main principles of plant layout.
 - c) A company has to decide on the location of a new plant. It has narrowed down the choice to 3 sites

 A, B, C data in respect of which is furnished below:

	<u>Particulars</u>		Site A	Site B	Site C
i)	Total investment in				
	land, building and				
	plant		250	325	270
ii)	Revenues		410	515	360
iii)	Expenses on raw				
	materials		89	100	98
iv)	Distribution cost		40	60	30
v)	Expenses on utilitie	:s	50	40	25
vi)	Wages and salaries		25	30	28
vii) Community facility	lı	ndifferent	good	bad
vii	i) Community attitud	de li	ndifferent	good	bad

Use a suitable criterion and advise the company on the best choice. 6+6+3

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- 11. Write notes on any three of the following: 3×5
 - a) Process Layout
 - b) Method Study
 - c) Material Handling System
 - d) Kaizen Philosophy.

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