# CS/BBA (H), BIRM, BSCM/SEM-4/BBA-401/2011

### 2011

## 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 the following:  $10 \times 1 = 10$ i) Plant location decisions concerned both

  a) Manufacturing & Assembly

  b) Design & Variety

  c) Design & Quality

  d) Design & Value.

  ii) Process layout requires comparatively more space than
- a) Piece b) Design

.....layout.

- c) Product d) Special.
- iii) Hand trucks and trolleys are examples of
- a) materials handling equipment
- b) flow diagram
- c) machine capacity chart
- d) scheduling.
- iv) In method study, "→" symbol represents,
- a) Inspection b) Operation
- c) Transportation d) Delay.

v) Normal time is also called a) Basic time b) Standard time c) Observed time d) none of these. vi) Production is defined as the a) manufacturing of goods b) manufacturing of services c) manufacturing of goods & services d) none of these. vii) To ensure quality of the products, scientific quality control recognizes three distinct functions, a) acceptance, preventive & layout function b) inspection, quality & specification function c) quality, assurance & layout function d) none of these. viii) Multiple sampling plan is a type of a) single sampling b) sequential sampling c) sampling inspection d) none of these. ix) ..... measures the central tendency of the process. a) Average chart b) Range chart c) Standard chart d) Normal chart. x) Old ISO-9000 series had ..... standards.

#### GROUP - B

## ( Short Answer Type Questions )

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

2. State the objectives of production management.

a) two b) three

c) four d) five.

- 3. Analyse the different types of control charts.
- 4. Define the concept of Total Quality Management (TQM).
- 5. How can the effectiveness of PPC function be measured?
- 6. Mention the important factors affecting selection of location of a plant.

#### GROUP - C

### (Long Answer Type Questions)

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

- 7. a) State the inter-relation between inspection and quality control.
- b) State the principle of *X*-bar chart and its use in SQC( Statistical Quality Control ).
- c) What is acceptance sampling?
- d) Draw an operating characteristics ( OC ) curve between the parameters in the curve. 3 + 7 + 2 + 3
- 8. a) State the different factors influencing plant layout.
- b) Tabulate the various merits and demerits of product layout.
- c) A firm has to select between sit A and B on the basis of following factors, factor rating (heritage) and location rating. Give your choice. 3 + 5 + 7

Sl. No	Factor	Factor Rating (1 to 5)	Location Rating ( Scale 1 to 10 )	
			Location A	Location B
1.	Availability and attitude of labour	2	7	6
2.	Proximity to market	3	6	5

3	Community attitude	5	4	3
4.	Transportation	3	10	8
5.	Civic Amenities	4	1	2
6.	Power	2	6	4

- 9. a) Define method study.
- b) Explain the steps taken in method study.
- c) The time study of a machine by operation yielded cycle times of 8, 7, 8 and 9 minutes. The analyst rated the workers observed as 90%. The firm uses a 15% allowance factor. Compute standard time. 2+6+7 10. a) Define 'cost of quality'.
- b) Enumerate the three categories of cost of quality.
- c) Write a short note on ISO 9000 series of standards on quality management systems. 3 + 6 + 6
- 11. Write notes on any two of the following:
- i) Performance rating
- ii) Six sigma
- iii) Kaizen philosophy
- iv) Materials handling system.

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