

Name : .....

Roll No. : .....

Invigilator's Signature : .....

**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 ..... layout.
    - a) Piece
    - b) Design
    - 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.
  - a) two
  - b) three
  - c) four
  - d) five.



**GROUP – B**  
**( Short Answer Type Questions )**

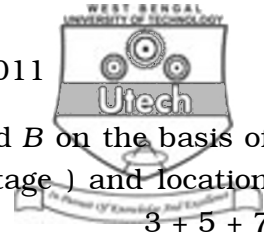
Answer any *three* of the following.  $3 \times 5 = 15$

2. State the objectives of production management.
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 :  $2 \times 7 \frac{1}{2}$
- i) Performance rating
  - ii) Six sigma
  - iii) Kaizen philosophy
  - iv) Materials handling system.