

CS/BBA(H)/BIRM/BSCM/Even/Sem-4th/BBA-401/2015



WEST BENGAL UNIVERSITY OF TECHNOLOGY

BBA-401

PRODUCTION MANAGEMENT

Time Allotted: 3 Hours

Full Marks: 70

*The questions are of equal value.
The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.
All symbols are of usual significance.*

**GROUP A
(Multiple Choice Type Questions)**

1. Answer any *ten* questions. 10×1 = 10

(i) If F = Fixed Cost, V = Variable Cost, S = Sales Revenue then break-even point is

(A) $\frac{F}{(S-V)}$

(B) $\frac{(S-V)}{F}$

(C) $\frac{F}{(S+V)}$

(D) $\frac{(S+V)}{F}$

(ii) The control chart which is used in a situation where defective charts of constant sample size are the criteria for acceptance or rejection is called

(A) \bar{X} - chart

(B) R - chart

(C) P - chart

(D) none of these

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- (iii) One of the important methods of evaluating location alternatives is
- (A) scheduling method
 - (B) project evaluation review technique
 - (C) qualitative factor analysis method
 - (D) routing
- (iv) Productivity is
- (A) input/output
 - (B) input - output
 - (C) output/input
 - (D) none of these
- (v) SIMO chart is used in
- (A) machine loading
 - (B) project scheduling
 - (C) quality control
 - (D) method study
- (vi) Load distance analysis is useful in
- (A) measuring break-even point
 - (B) computing EOQ
 - (C) minimizing transportation costs by evaluating alternate layouts
 - (D) vendor selection
- (vii) After inspection of ten rods, each of length 5 meters, the following numbers of defects are found on each rod: 45, 42, 52, 46, 51, 46, 50, 43, 51 and 49. The control chart suitable will be
- (A) R-Chart
 - (B) P-Chart
 - (C) C-Chart
 - (D) A combination of R-Chart and P-Chart
- (viii) Which of the following material handling equipment operates on a fixed path?
- (A) Lift truck
 - (B) Belt conveyor
 - (C) Hand trolley
 - (D) Pallet

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- (ix) Process layout requires comparatively more space than ____ layout
- (A) Piece (B) Design
(C) Product (D) Special
- (x) TQM stands for
- (A) Total Quality Monitoring (B) Total Quality Management
(C) Total Quality Maintenance (D) None of these
- (xi) In method study “ \longrightarrow ” represents
- (A) Inspection (B) Operation
(C) Transportation (D) Delay

GROUP B
(Short Answer Type Questions)

- Answer any *three* questions. 3×5 = 15
2. State briefly Production as a system. Explain the term Productivity. 3+2
3. State the types of production system. Explain scope of Production, Planning and Control. 2+3
4. Define Quality. Briefly focus on Inspection and Quality control 2+3
5. Pinpoint the difference between Process and Product layout. Name two major criteria for a good Plant layout. 3+2
6. Define and state the objectives of work study. 2+3

CS/BBA(H)/BIRM/BSCM/Even/Sem-4th/BBA-401/2015

GROUP C
(Long Answer Type Questions)

Answer any *three* questions.

3×15 = 45

7. (a) What are the objectives of 'Method Study'?
(b) Discuss the various steps in Method Study procedure.
(c) Point out its advantages.

8. What is work sampling? What are its merits? A group of 10 workmen working 8 hours per day (one shift) on a group of engine lathes produced 320 pieces of a component. During the study, it was observed that workmen were idle for 20% of the total available time and 80% of the time they worked at an average performance of 75%. Calculate Standard Time for the job assuming
(i) the operation to be completely manual
(ii) the workmen are entitled to 20% allowance for this type of work

9. (a) Define 'Cost of Quality'
(b) Explain the three categories of cost of quality.
(c) Write a short note on ISO 9000 series of standards on Quality Management systems.

10. Briefly explain the various quality control tools used in Production management.

11. Briefly describe the various types of maintenance strategies.