

1265311

No. of Printed Pages : 3

BIMEE-012

**B. TECH.-VIEP-MECHANICAL
ENGINEERING (BTMEVI)**

Term-End Examination

June, 2019

**BIMEE-012 : PRODUCTION AND OPERATIONS
MANAGEMENT**

Time : 3 Hours

Maximum Marks : 70

*Note : Attempt any five questions. All questions
carry equal marks. Use of calculator is
permitted.*

1. (a) What do you understand by Production and Productivity ? Explain with suitable examples. 7
- (b) Define production management and operations management. Describe the production system with the help of a suitable example. 7
2. (a) What is meant by Aggregate Planning ? List and explain the various pure strategies and mixed strategies. 7

(A-33) P. T. O.

- (b) What are the basic inputs for MRP ? Discuss the similarities and differences between the traditional MRP and MRP II. 7
3. (a) Explain the various steps involved in time study. 7
- (b) What is Break-even Analysis ? Discuss how break-even analysis helps in plant location identification. Take suitable examples. 7
4. (a) Discuss the factors governing the location selection for a textile company. 7
- (b) Explain the steps involved in capacity planning. 7
5. The precedence relationship for nine activities is given in table : 14

Activity	Duration (Days)	Precedence
A	9	—
B	9	—
C	10	—
D	4	A
E	7	B
F	3	C
G	8	DEF
H	7	C
I	2	G, H

Draw the network diagram. Find the critical path, total completion time and floats.

6. (a) What is Job Design ? Explain the method of a job design, with the help of a suitable example. 7
- (b) What is Performance Rating ? What are the different rating techniques ? Explain any *one* of them briefly. 7
7. (a) How is quality defined ? Differentiate between quality control and quality assurance. 7
- (b) Describe the concept of world manufacturing with the help of suitable example. 7
8. Write short notes on any *four* of the following : $4 \times 3 \frac{1}{2}$
- (a) Statistical Quality Control (SQC)
- (b) SPT Sequence
- (c) Production System
- (d) Operation Capacity
- (e) Good Plant Layout
- (f) Work Study