Roll No…….. **Total No. of Printed Pages: [1]**

Total No. of Questions: [09]

BBA (Aviation Management) (Semester – 6th)

PRODUCTION AND OPERATION MANAGEMENT

Subject Code: BBADS2605

Paper ID: [20150233]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:
a) Plant Layout
b) Capacity Planning
c) Work Study
d) Assembly Line Balancing
e) Ordering Cost
f) JIT
g) Taguchi Philosophy
h) Quality Circle Cost
i) Reorder Level
j) Functional Areas of Management

Section – B **(5 marks each)**

Q2. Write a detailed note on capacity planning framework.

Q3. Explain the relationship between method study and time study. Can time study be useful in service industry?

Q4. 'Inventory is a part of manufacturing strategy'. Do you agree? If so explain why it should be only a part of the total manufacturing strategy?

Q5. Shubha and Company (SAC) is an automobile ancillary and manufacturing piston rings amongst several other products. Since quality is very important in a highly competitive market, SAC wants to introduce statistical quality control on its shop floor. Sample checks on the diameter (critical dimension for quality) of the piston rings are taken as they are produced. Samples are taken in a bunch of five items, i.e. five rods produced would constitute one sample. The results on 20 such samples yield the following:

$\mu = 0.2244$ cm and $\bar{R} = 0.0023$ cm

What would be the control limits for the process control charts?

Q6. Write a detailed note on the basic premise of group system of incentives.

Section – C **(10 marks each)**

Q7. What do you mean by production and operation management? What are different types of production / operation systems? With suitable examples, explain where would each one of them be applicable?

Q8. Consider an item that is ordered once per month. The daily requirement is 200 and the lead time for supply is two days. There are 25 working days in a month. The cost of ordering is ₹ 300 per order and the cost of carrying is ₹ 150 per unit per year.
You are required to compute:
(a) Economic Order Quantity.
(b) What is the reorder point for this item?
(c) Compute the total ordering and carrying cost.

Q9. What do you mean by Total Quality Management (TQM)? Discuss the role of top management in implementing TQM in an organization. What are the major challenges in successfully implementing TQM in Indian manufacturing firms?