BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2019-21)

CLASS TEST - I

OPERATION MANAGEMENT (18MBA205)

Total Marks : 30 **Time: 1.30 Hours**

Q.1. All Questions are compulsory each questions carry 1 mark (1x10=10)

Q.2.Answers two questions each questions carry 5 marks (5x2=10)

Q.3.Answer one question out of two questions (10x1=10)

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BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2018-20)

CLASS TEST - II

Operation Management (18 MBA 205)

Total Marks : 30 **Time: 1.30 Hours**

Q.1. All Questions are compulsory each questions carry 1 mark (10x1=10)

a) Write the objective of assembly line balancing.
b) What is Fixed Position Layout?
c) What are the main purposes of Inventory Management?
d) Differentiate between Urban Sites Vs. Rural Site.
e) What is Group Technology?
f) What are the basic inputs for CRAFT ?
g) What do you mean by ABC analysis?
h) Write down the two basic objective of Master Production Schedule.
i) What do you mean by JIT (Just in Time)?
j) Which layout is more suitable for mass production.

Q.2. Answers two questions each questions carry 5 marks (2x5=10)

(a) The McDonald Burger, Bhubaneswar is revamping its order preparing and Burger making Process. The demand for buyer is 150 per night (2 pm to 10 pm). In order to deliver fresh Burger fast, the six elements must be completed which is given in the table below. Calculate the efficiency and check the LOB.

Sl. No.	Work Elements	Precedence	Time (Minutes)
1	A. Receive Order	--------	2
2	B. Shape Dough	A	3
3	C. Prepare Topping	A	4
4	D. Assemble Burger	B,C	2
5	E. Bake Burger	D	5
6	F. Delivery Burger	E	2

(b) A company makes bicycles. It produces 450 bicycles a month. It buys the tires for bicycles from a supplier at a cost of Rs.20 per tire. The company's inventory carrying cost is estimated to be 15% of cost and the ordering is Rs. 50 per order. Calculate EOQ and what is the number of orders per year?

(c) Define Material requirement planning (MRP). Describes the Advantages and disadvantages.

Q.3. Answer one question out of two questions (1x10=10)

a) Why we need plant location study ?
A company has to decide on the location of a new plant. It has narrowed down the choice to 3 locations A, B and C; data in respect of which is furnished below:

Data	Locations		
	A (Rs.)	B (Rs.)	C (Rs.)
Wages and Salaries	20,000	20,000	20,000
Power and Water supply expenses	20,000	30,000	25,000
Raw materials and other supplies	80,000	75,000	60,000
Total initial investment	2,00,000	3,00,000	2,50,000
Distribution expenses	50,000	40,000	60,000
Miscellaneous expenses	40,000	25,000	30,000
Expected sales per year	2,25,000	2,50,000	2,25,000

Use a suitable criterion and advise the company on the best choice.

b) What is Plant Layout? What is the major factor that affect the plant layout? Briefly explain the different types of layout.

BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2017-19)

CLASS TEST - II

Operation Management (MNG 205)

Total Marks : 30 **Time: 1 ½ Hours**

[Group – A is compulsory, any one from Group – B and any two from Group – C with at least one problem].

Group - A

1. (I) Short Notes : **[1x5=5]**

a) What is the main objective of line balancing ?
b) Write the priority rules used on scheduling.
c) Write all the steps involved in method study.
d) Who gives the ideas about sequencing ?
e) How many decision are followed generally in the organization & what are they ?

2. a) ST = NT + _____. **[1x5=5]**
b) SIMO Chart stands for _____.
c) The full form of ISO is _____.
d) CT = _____ ÷ Demand per period.
e) An activity that consumes _____ called dummy activity.

Group-B **[5x1=5]**

3. Explain the concept and benefits of TQM.
4. Discuss all the pure strategies used in Aggregate planning.

Group – C **[7.5x2=15]**

5. What is SQC. Explain how SQC used for product control.
6. Considering one case / example, Explain how PLC (Project life cycle) is used.
7. Given the following :

Activity	I.P(S)	Duration (Days)
A	-	9
B	-	20
C	-	10
D	A	11
E	C	10
F	B.C	4
G	F	2
H	D,F	5
I	E, F, K	18
J	G, H	14
K	-	24
L	K	6

(a) Draw the CPM diagram
(b) Find out critical activities
(c) Compute TF, FF, & IF for activities E, D, G, H, L.

8. Following is the record of the defectives observed during the inspection process of an automatic machine producing small bolts of standard size :

Sample No.	Sample Size	No. of defective bottles
1	25	3
2	50	5
3	45	1
4	55	2
5	35	-
6	40	9
7	50	2
8	65	3
9	30	2
10	25	

(a) Find $\bar{p}$
(b) Are the UCL & LCL constant ?
(c) If not, what is the reason ?

Best of Luck

BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2016-18**)**

CLASS TEST - II

Operation Management (MNG 205)

Total Marks : 30 **Time: 1.30 Hours**

No. 1 & 2 compulsory **[1x10=10]**

Q1. (i) What is the difference between manufacturing & service operation ?
(ii) What are the different cycles of supply chain management (SCM) ?
(iii) Differentiate between producer (α) and consumer's risk (β).
(iv) Write two advantages of process layout.
(v) What is the difference between designed capacity and effective capacity ?

Q2. (i) The different time estimations used in PERT are _____, ____ and _____.
(ii) When a good lot is rejected, the error is known as _____.
(iii) The system that pushes materials into down stream workstations regardless of their time-lines, Or availability of resources to perform the work is called ____.
(iv) Quality control aims at preventing the defect rather than ____.
(v) _____ are used to check the quality of the process.

Q3. Answer any two : **[5x2=10]**

a) Priority Dispatching Rule
b) Economic and diseconomic of scale.
c) Explain the different views in supply chain.

Q4. Answer any one : **[10x1=10]**

a) What is project management and write all the steps used in project life cycle.
b) Discuss the concept of supply chain views in supply chain. Also explain types of supply chain.
c) Define SQC. How SQC used for process control as well as product control.

BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2015-17**)**

CLASS TEST - II

Operation Management (MNG 205)

Total Marks : 30 **Time: 1.30 Hours**

Group 'A' & Group 'B' Compulsory. Any <u>two</u> from Group 'C' and <u>one</u> from Group 'D'.

<u>Group 'A'</u> (5 × 1 = 5 marks)

1. (a) Define capacity.
   (b) Define Dummy Activity.
   (c) What is Quality Conformance?
   (d) What is Quality Trilogy?
   (e) Name the techniques used to measure the work.

<u>Group 'B'</u> (5 × 1 = 5 marks)

2. (a) The number of phases in project life cycle is ……..
   (b) CT in Balancing Efficiency can be calculated by using the formula:
   CT = ……..
   (c) The strategies used in aggregate planning are …… & ……..
   (d) ISO stands for ……
   (e) Standard Time (ST) = …….. × …….

<u>Group 'C'</u> (Any two) (2 × 5 = 10 marks)

3. Write short note on TQM.
4. Write short note on OC curve.
5. What is process analysis?

<u>Group 'D'</u> (Any one) (1 × 10 = 10 marks)

6. Define SQC. Explain SQC for process control and product control.
7. Define work measurement. Write the benefits of work measurement and also write the techniques used in work measurement.
8. For the following data, construct fraction defective (**P**) chart.

Group Nos.	Sample Size	No. of defective
1	32	2
2	32	3
3	50	3
4	50	3
5	32	1
6	80	4
7	50	2
8	50	0
9	32	2
10	32	1

Best of luck!

BIJU PATNAIK INSTITUTE OF IT & MANAGEMENT STUDIES

2nd SEMESTER (BATCH: 2015-17**)**

CLASS TEST

Operation Management (MNG 205)

Total Marks : 30 **Time: 30 minutes**

Group 'A' (5 × 1 = 5 marks)

1. (a) Define capacity.
   (b) Define Dummy Activity.
   (c) What is Quality Conformance?
   (d) What is Quality Trilogy?
   (e) Name the techniques used to measure the work.

Group 'B' (5 × 1 = 5 marks)

2. (a) The number of phases in project life cycle is ……..
   (b) CT in Balancing Efficiency can be calculated by using the formula:
   CT = ……..
   (c) The strategies used in aggregate planning are …… & ……..
   (d) ISO stands for ……
   (e) Standard Time (ST) = …….. × …….

Group 'C' (Any two) (2 × 10 = 20 marks)

3. Explain TQM.
4. Explain OC curve in Acceptance Sampling.
5. Explain Process Analysis?

Best of luck!