

International Islamic University Chittagong

Department of Electrical and Electronic Engineering

B. Sc. Engineering in EEE

Final Exam, Autumn 2021

Course Code: **MGT-3601**

Course Title: **Industrial Management**

Time: 2 hours 30 minutes

Full Marks: 50

(i) The figures in the right-hand margin indicate full marks

(ii) Course Outcomes and Bloom's Levels are mentioned in additional Columns

Course Outcomes (COs) of the Questions	
CO1	Comprehend how an organization is formed and managed.
CO2	Make plans and budgets in the different functional areas of the organization i.e., marketing, production, etc.
CO3	Understand the legal rights and duties of the workers in a workplace.

Bloom's Levels of the Questions						
Letter Symbols	R	U	App	An	E	C
Meaning	Remember	Understand	Apply	Analyze	Evaluate	Create

Part A

[Answer the questions from the followings]

- | | | | | |
|-------|---|-----|----|---|
| 1. a) | Point out the importance and limitation of budget. | CO2 | R | 5 |
| 1. b) | Budget is an instrument of Managerial Control-Justify the statement. | CO2 | An | 5 |
| 2. a) | Write a short note on:
i) Value and Satisfaction. ii) Style and Fashion. iii). 4Ps of Marketing. | CO2 | R | 6 |
| 2. b) | Inspect profit and sales variation with the change of time in different stages of PLC. | CO2 | An | 4 |

Or,

- | | | | | |
|-------|---|-----|---|---|
| 2. a) | Write short note:
Bureaucratic control and decentralized control ii) Levels of control | CO2 | R | 6 |
| 2. b) | Differentiate various types of operation control with example. | CO2 | R | 4 |

Part B

[Answer the questions from the followings]

- | | | | | |
|-------|---|-----|-------|---|
| 3. a) | What is operation management? Explain five P's of operation management. | CO2 | R, An | 4 |
| 3. b) | You are supplied with the following information of a manufacturing Co. | CO2 | E | 6 |

Sample No.			Sample Size=5		
1	30	32	31	39	33
2	29	40	32	34	30
3	28	27	36	38	32
4	40	42	35	35	30
5	37	28	36	35	38
6	40	38	36	37	39
7	32	30	50	33	35

8	22	36	38	40	41
9	45	28	31	36	50
10	43	30	35	38	34
11	35	38	31	37	28
12	33	39	29	31	35
13	32	36	38	31	39

Assume $A_2 = 0.58$, $D_3 = 0$ and $D_4 = 2.11$. Design the control Charts for X & R Bar Chart. Make a decision for the given condition.

4. a) Define Layout? Mention the types of layouts and Show the relationship and difference between Process and Product Layout. CO2 R, 4
App

4. b) CO2 E 6

Task	Imm. predecessor	Task time (sec)
A	None	50
B	A	20
C	A	17
D	B	25
E	B, C	34
F	C	10
G	D, F	5
H	F	10
I	G	24
J	E, G	25
K	H, I, J	35

A Product is produced through this task network.

i) Draw a precedence diagram.

ii) Determine cycle time—Desired Output rate 64 units/hr

$$\text{Cycle time (sec./unit)} = \frac{\text{available time (sec./day)}}{\text{desired output (units/hr)}}$$

iii). Theoretical Minimum Number of stations.

iv). Bottleneck Task time & maximum Output.

v). Compute Efficiency & balance delay.

5. a) Write a short note on:
i). Dependent. ii). Partial Disablement. iii). Compensation CO3 U 5

5. b) Define Contract. "All agreements are not contracted" prove the statement with the justifications. CO3 R, 5
An

Or,

5. a) Write short note on:
i) PDCA Cycle. ii) 5W2H Method. iii) Bench Marking. CO3 R 5

5. b) Describe ISO 9001 & ISO9014. The philosophy of TQM is customer satisfaction; explain. CO3 R, 5
An