



**ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009**  
**INDUSTRIAL MANAGEMENT**  
**SEMESTER - 6**

Time : 3 Hours ]

[ Full Marks : 70

**GROUP - A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for the following : 10 × 1 = 10

i) In torque measurement with strain gauge, the strain gauge is kept at  
a) 45 degree to the axis of the shaft  
b) 60 degree to the axis of the shaft  
c) 90 degree to the axis of the shaft  
d) 30 degree to the axis of the shaft.

ii) A D/P transmitter works on the principle of  
a) Free balance b) Motion Balance  
c) Both (a) & (b) d) None of these..

iii) For measuring current an ammeter reads 10 amps. actual reading should be 15 amps. The error in the measurement is  
a) 5A b) - 5A  
c) 12A d) -12A.

iv) A D/P transmitter can be used to measure  
a) flow b) pressure  
c) level d) all of these.

v) A 4 gm mass is suspended from a spring. The deflection is 10 nm. The natural frequency of the system is  
a) 1.4 Hz b) 44 Hz.  
c) 4.4 Hz d) None of these.

**6784 (11/06)**



vi) In the Commercial Weighing system "Steel yard" works on the principle of

- a) Class I Lever
- b) Class II Lever
- c) Class III Lever
- d) None of these.

vii) A toothed type tachogenerator has 120 teeth. The speed of the shaft on which the disc is mounted is 1500 rpm. The no. of pulse will be available

- a) 3000
- b) 1500
- c) 2000
- d) 1000.

viii) The measurement of resistance of a resistor is given the following results :

101.2, 101.7, 101.3, 101.0, 101.5, 101.3, 101.2, 101.3, 101.4, 101.1 ohms. The arithmetic mean of the error is

- a) 101.30
- b) 101.2
- c) 101.5
- d) None of these.

ix) A voltmeter of range 0 -10V has guaranteed accuracy of 2% for full-scale reading. What is the percentage of the limiting error, when this meter reading is 5V ?

- a) 6%
- b) 1%
- c) 5%
- d) 10%.

x) Pneumatic relay is used to

- a) increase the pneumatic signal
- b) increase the time lag
- c) reduce the noise
- d) reduce the time lag and increase the signal output.

6784 (11/06)



**GROUP - B**

**( Short Answer Type Questions )**

Answer any *three* of the following.

3 × 5 = 15

2. Determine Fixed Cost and Profit from the following information :

P/v ratio = 50%

Sales Value = Rs. 10,00,000

Margin of Safety = Rs. 4,00,000

- 3. Distinguish between Marketing and Selling.
- 4. Define TQM. What are its essential elements ?
- 5. Classify the different levels of Management. Give example.
- 6. 'Training is a part of Development.' — Discuss.

**GROUP - C**

**( Long Answer Type Questions )**

Answer any *three* questions.

3 × 15 = 45

7. What do you mean by SQC ? Write short notes on Control charts.

'Determine the control limits for R-Chart from the following data and draw the control charts :

Sample No.	Value of Sample items inspected			
	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
1	15.58	18.82	15.45	15.71
2	15.94	15.07	15.02	15.81
3	15.63	15.67	15.60	15.54
4	15.17	15.08	14.81	15.02
5	15.18	15.40	15.34	15.36

[ Conversion factors for a sample of size n = 4 are given D3 = 0 and D4 = 2.282 ]

4 + 4 + 7

8. Define Leadership. What are the characteristics of Leadership ? Discuss the importance of Leadership. Explain concept of Managerial Grid with diagram.

3 + 3 + 4 + 5

**6784 (11/06)**



9. Discuss the steps in Planning processes. What are the limitations of Planning ? 8 + 7
10. What is 'Human Resource Management' ? Discuss the importance and scope of 'Human Resource Management'. Distinguish between HRM & Personnel Management. 2 + 6 + 7
11. Define Trade Union. Discuss the functions of Trade Union. Give the reasons for failure of TU movement. 2 + 8 + 5
12. Write short notes on any three of the following : 3 × 5
- a) Maslow's theory of Motivation
  - b) Delegation of Authority
  - c) Controlling
  - d) Objectives of Financial Management.

---

END

6784 (11/06)