# THE OPEN UNIVERSITY OF SRI LANKA FACULTY OF ENGINEERING TECHNOLOGY DIPLOMA IN TECHNOLOGY – LEVEL 4 FINAL EXAMINATION 2006/2007

MEX 4234/MED 2205 PLANT MAINTENANCE & WORK SERVICES. – Part B

DATE

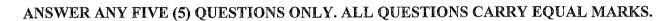
29th MARCH 2007

TIME

1030 HRS. – 1230 HRS.

DURATION

TWO HOURS



# PART - B

### **Question 01**

- a) Discuss the responsibilities of the Maintenance Department in a large Industrial Organization.
- b) Explain what is meant by the system approach to maintenance.

#### **Ouestion 02**

- a) What are the objectives of maintenance?
- b) Discuss the benefits of maintenance.

#### **Question 03**

- a) Describe the "types of maintenance" being practiced in present day industrial setups.
- b) Explain what you understand by the terms "maintainability" and "reliability"?
- c) What parameters are used to express maintainability and reliability?

## Question 04

- a) Describe the "Condition Monitoring Technique" used in maintenance practice.
- b) List the advantages to be expected from a condition-monitoring programme.
- c) What are the four different levels of condition monitoring?

#### Question 05

- a) List out the materials used in making a journal bearing and describe their properties.
- b) What are the advantages of rolling bearings compared to journal bearings?

# **Question 06**

- a) Explain the function of cyclone separator using a sketch.
- b) Name the common units used for the removal of air pollutants.

## Question 07

- a) Produce the Gantt chart for a product of your choice, starting from the design stage and ending its storage in a finished goods store.
- b) Explain the Product and Process layouts used in facilitate planning, providing clear sketches for each type.

# Question 08

- a) Explain the difficulties in welding an alloy steel and precautions to be taken to overcome them.
- b) Name the non-destructive methods of testing the quality of a weld.

## Question 09

- a) What are the general requirements of a machine foundation?
- b) Explain the difference between "machine foundations" and "general foundations".