THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF ENGINEERING TECHNOLOGY
DIPLOMA IN TECHNOLOGY – LEVEL 4
FINAL EXAMINATION 2007/2008

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

DATE : 15th MAY 2008
TIME : 1030 HRS. – 1230 HRS.
DURATION : TWO HOURS

ANSWER ANY FIVE (5) QUESTIONS ONLY. ALL QUESTIONS CARRY EQUAL MARKS.

Part – B

1. (a) List out the set of documents required to achieve a good control over the maintenance

   (b) What is a "Work Order"?

   (c) How would you evaluate whether the maintenance system installed in your plant is working effectively?

2. (a) What are the advantages and drawbacks of decentralization of maintenance?

   (b) How can you overcome some of the disadvantages typically present in the decentralised maintenance?

3. (a) What is "Break Down Maintenance"?

   (b) Discuss how you would identify the resources required for setting up a planned preventive maintenance system in a plant?

4. (a) What is "Contract Maintenance"?

   (b) Name and briefly describe any equipment or services, which could be given on contract maintenance?

5. (a) What is "Failure Rate"?

   (b) Draw the "Failure Curve" and explain its different phases

   (c) What should be the aim of the maintenance with regard to the second and the most important phase of the curve?

6. (a) List out the objectives of the plant lay out.

(b) You are employed in a ship building company similar in nature to the Ceylon Dockyards Ltd. Recently a foreign company placed an order with you for a large size pleasure boat (Yacht). What type of plant layout is most suitable for the fabrication of the yacht on order? Justify your solution stating the reasons.

(c) State the instances when plant layout problem may arise in an existing plant.

7. (a) What is "Vibration Isolation"?

(b) List out the important points to be considered to avoid excessive vibration of machinery.

8. (a) What is the role of the lubricant in maintenance of equipment?

(b) What precautions are necessary for storing lubricants?

(c) List out the steps necessary to plan a proper lubrication schedule in a plant.

9. (a) What are the recovery methods available in maintenance to restore worn out or broken parts of a production machine?

(b) Explain the recovery of worn out parts by "Metal Spraying".

(c) What are the differences between the Oxyacetylene Cutting Torch and the Oxyacetylene Welding Torch?

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