

B.Tech. Civil (Construction Management)

Term-End Examination

00285

December, 2014

**ET-523(B) : OPERATION AND MAINTENANCE OF
CONSTRUCTION EQUIPMENT**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **seven** questions.

1. (a) What do you understand by equipment planning ? How do you select the number and size of a machine ? 5
- (b) What are the conditions under which the contractor goes for purchase or hire decisions and why ? Explain. 5

2. (a) Why do breakdowns occur in construction equipment ? How will you handle breakdowns ? Explain. 5
- (b) How are the job and management factors considered in obtaining the average output of an equipment ? 5

3. (a) What are erection charges ? How are these charges for shifting an equipment accounted for in the operating cost ? 5
- (b) How are compressed air requirements for a number of equipments and tools assessed ? Explain. 5
4. (a) What are the sources of electric power at a construction project ? How will you route supply and distribution cables in a project area ? 5
- (b) What are the objectives of carrying out inspections ? Explain the D-type of inspections. 5
5. (a) What do you understand by spare parts inventory ? Describe the various costs associated with inventory procurement. 5
- (b) What information do you obtain from an effective maintenance record system ? Explain. 5
6. (a) What are the objectives of preventive maintenance ? Discuss the advantages and disadvantages of preventive maintenance. 5
- (b) Suggest the services to attend the tyre problems in the field. 5

7. (a) How are pumps classified ? Describe the working of any one pump. 5
- (b) What is an axial compressor ? Explain the working of centrifugal compressor. 5
8. (a) What are the functions and requirements of the ignition system in petrol engines ? 5
- (b) What do you understand by priming ? What are the different methods of priming a pump ? 5
9. (a) Where is a vibratory pile driver preferred ? What are its advantages ? 5
- (b) What do you understand by a blower ? How does a single-stage blower operate ? 5
10. (a) How does a double acting steam hammer operate ? Explain its advantages and disadvantages. 5
- (b) What are the different types of driving rigs available ? Explain the working of any one driving rig. 5
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