

00442

**Diploma in Electrical And Mechanical  
Engineering**

DCLEVI/ACCLEVI

**Term-End Examination**

**December, 2011**

**BET- 045 : CONSTRUCTION PLANTS/  
EARTH MOVING PLANTS/MECHANICAL  
TRANSPORT**

*Time : 2 hours*

*Maximum Marks : 70*

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**Note :** *Out of the Seven questions, only five questions have to be answered. Question 1 is compulsory. All questions carry equal marks.*

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1. Fill up the blanks.

**7x2=14**

- (a) 60/90 TPH capacity of a hot mixed plant means that the plant has the maximum capacity of 60 Tonnes per hour with dry aggregates having initial moisture content of \_\_\_\_\_ percent by weight at 180° C, whereas it has a maximum capacity of 90 TPH at \_\_\_\_\_ percent moisture context.
- (b) Percussion tools used for clipping, rivetting and ramming are known as \_\_\_\_\_ tools.
- (c) Re-appropriation of funds is permissible only in respect of \_\_\_\_\_ category.

- (d) The proposals of lower formation for a surrender of funds, which cannot be economically spent or demands for extra allotment for a particular work, Sub and Minor Head of Account is called \_\_\_\_\_ .
- (e) \_\_\_\_\_ crushers receive the materials directly from the quarry and produce the first reduction of size.
- (f) Compaction of cohesive soil is done by \_\_\_\_\_ roller.
- (g) Major Head code for Defence Service Air Force is \_\_\_\_\_ .

2. Explain the necessity of lubrication. Discuss various trouble shooting due to lubrication. 14
3. (a) What are the major factors on which the output of a Motor Grader depends ? 7
- (b) Discuss the major operations / function of motor grader and its attachments. 7
4. (a) What do you understand by daily, weekly, monthly and mileage tasks for the maintenance of MT. 7
- (b) Discuss the trouble shooting on account of clutch and engine. 7

5. Discuss *any four* of the following documents used in T and P used in MEs. **4x3½=14**
- (a) Machine History Sheet
  - (b) Fan and Meter Register
  - (c) Engineer Plant Routine Order (EPRO)
  - (d) Mechanical Plant Log Book
  - (e) Driver's Car Diary.
6. (a) What are the advantages of pneumatic tools over electrical equipment in construction industry ? **7**
- (b) List various safety measures related to equipment. **7**
7. Write short notes on *any four* of the following :
- (a) Part X and Part XII orders **4x3½=14**
  - (b) Factors affecting the out put of a dozer
  - (c) Pneumatic plants and their application
  - (d) Application of centrifugal pump
  - (e) Pump installations
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