

DAY - 14

SEAT NUMBER

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2015 III 14

1100

V - 638

(E)

MECHANICAL MAINTENANCE  
PAPER - II (A-2)

Time : 2½ Hours

2 Pages

Max. Marks : 40

- Instructions :*
- (1) All questions are compulsory.
  - (2) Figures to the right indicate full marks.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Use of drawing instruments, mathematical tables etc. is permitted.
  - (5) Assume suitable data, if necessary.

1. Answer the following : (Any Four)

4

Fill in the blanks with appropriate words from those given below :

- (a) During Suction Stroke, only air is drawn in case of \_\_\_\_\_ Engine.
  - (i) Petrol
  - (ii) Gas
  - (iii) Diesel
- (b) Multistaged Pumps are used to obtain \_\_\_\_\_ Delivery Head.
  - (i) High
  - (ii) Low
  - (iii) Same

State true or false and correct it, if false :

- (c) An Air Compressor sucks Air from Atmosphere.
- (d) An Overhauling is a part of Breakdown Maintenance.

Match the pairs :

(e) Drip System

(f) Winches

(i) Bath Lubrication

(ii) Oil is fed drop by drop

(i) To lift and lower light weight

(ii) To lift load only vertically

2. Answer the following in about 8 to 10 lines each : (Any Two)

6

(a) Explain 'Air Cooling'. Draw its neat sketch.

(b) Give classification of Centrifugal Pumps according to the type of Casing. Describe any one with neat diagram.

(c) Sketch and explain functioning of Worm and Worm Wheel.

3. Answer the following in about 8 to 10 lines each : (Any Two)

6

(a) "Centrifugal Pump doesnot deliver water when started." State causes and remedies. <https://www.maharashtrastudy.com>

(b) How is Transmission of Vibrations minimised ?

(c) State reasons for failure of Lubrication.

4. Answer the following : (Any Three)

6

(a) State functions of 'Flywheel'.

(b) Sketch and describe 'Reducing Socket'.

(c) What is the basic function of Coupling ?

(d) Sketch and describe 'Sprockets'.

✓(e) Write a short note on 'Overhauling'.



5. Answer the following : (Any Three)

6

(a) What is Priming ? Why it is necessary ?

(b) Write various types of Bearings used in practise ?

(c) Describe 'Rack and Pinion' with a neat diagram.

(d) What are the general rules for Safe Material Handling ?

(e) Write a short note on Belt Conveyor. Draw a neat diagram.

6. Answer the following : (Any Two)

12

(a) Distinguish clearly between Petrol Engine and Diesel Engine.

(b) Draw a neat labelled diagram of 'Reciprocating Pump' and explain its working.

(c) Define 'Lifting Tackles'. Describe 'Screw Jack' with a neat sketch.