

DAY - 19

SEAT NUMBER

2019

III

16

1100

V - 404

(E)

MECHANICAL MAINTENANCE
PAPER - I (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. are permitted.
 - (5) Assume suitable data, if necessary.

1. Answer the following : (Any Four)

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Fill in the blanks :

(a) _____ is used to hold round bar on drilling machine.

(i) Angle Plate

(ii) T-Bolt

(iii) 'V' Block

(b) Half centre is used on lathe machine during _____ operation.

(i) Turning

(ii) Facing

(iii) Knurling

State true or false; and correct it, if false :

(c) Loading means glass like appearance of a grinding wheel.

(d) While machining angular surface on a shaper vertical slide of the tool head is swivelled.

Match the following :

(e) Spirit Level

(f) Feeler Gauge

- (1) (i) To check clearance
(ii) To check horizontal surface
(iii) To check vertical surface

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

✓(a) Explain Lathe Bed with neat sketch.

(b) Explain Standard Marking System of a grinding wheel.

(c) Explanation working principle of Milling Machine with neat sketch.

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

(a) Differentiate between Steady Rest and Follower Rest.

✓(b) What are the tool holding devices used on a drilling machine ?

Explain any one with neat sketch.

✓(c) Explain Double Housing Planer with neat sketch.

4. Answer the following in about 5 to 6 lines each : (Any Three)

(a) Write a short note on Gang Drilling Machine.

(b) Draw neat labelled diagram of Tail Stock.

✓(c) Enlist the operations performed on a Slotter.

(d) What is meant by Dressing ?



✓(e) Give specifications of a Shaper.

5. Answer the following in about 5 to 6 lines each : (Any Three)

✓(a) Draw any four shapes of Grinding Wheel.

✓(b) Explain facing operation on a lathe with neat sketch.

(c) Why fuse is necessary in Electrical Circuit ?

✓(d) What is meant by Breakdown Maintenance ?

(e) Enlist the equipments used for testing of machine.

6. Attempt any two : <https://www.maharashtrastudy.com>

(a) Explain Radial Drilling Machine with neat sketch.

✓(b) Explain construction and working of back geared mechanism used in a lathe with neat sketch.

✓(c) Differentiate between Shaping and Planing Machine.