

DAY - **16**

SEAT NUMBER

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2010

III

17

1100

V - 504

(E)

MECHANICAL MAINTENANCE
PAPER - I (A-2)

Time : 2½ Hours**3 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)

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

(a) _____ is used for producing internal threads.

(i) Tap

(ii) Die

(iii) Drill

(b) For locating centres _____ is used.

(i) File

(ii) Flat Chisel

(iii) Punch

Give reasons :

(c) Cast Iron is used for machine bed or base.

(d) Quick Return Mechanism is used in Shaping Machine.

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[P.T.O.]

State 'true' or 'false' and correct, if false :

(c) Ordinary Centre is used for supporting Open End of Pipes.

(f) Multiple Spindle Drilling Machine has several spindles driven by a single motor.

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

(a) State advantages and disadvantages of All Geared Headstock.

(b) Explain working principle of Milling Machine with the help of a neat sketch.

(c) Give any two names of Tool Holding Devices used on Drilling Machine. Explain any one with neat sketch.

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

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(a) Explain Bench Grinder with a neat sketch.

(b) Draw a neat and proportionate sketch of a Bench Drilling Machine and name its various parts.

(c) Name various types of Mandrels used in Lathe Machine. Explain any one of them with a sketch.

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

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(a) What are the advantages of Preventive Maintenance ?

(b) Enlist Planer Operations.

(c) Write short note on Dial Gauge.

(d) List required properties of Cutting Fluids.

(e) Explain Process of Reaming Operation.

5. Answer the following in short : (Any Three)

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(a) Write short note on Importance of Maintenance.

(b) List main parts of a Slotting Machine.

(c) What do you mean by Dressing of a Grinding Wheel ?

(d) Write short note on 'Electrical Safety Precautions'.

(e) What are the advantages of Twist Drill ?

6. Attempt the following : (Any Two)

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(a) Write different types of Taper Turning Methods used on the Lathe Machine. Explain any one method with neat sketch.

(b) Draw a labelled block diagram of a Shaping Machine and explain its main parts.

(c) Explain any four types of Milling Cutters with the help of neat sketches.