





**(ENGLISH)**

[ TIME ALLOWED—3 HOURS ]

(MARKS—100)

**MACHINING WORK (THEORY-II)****Marks**

1. (a) Fill in the blanks from given options :—

10

(i) Which part of milling machine the feed motor and gear box are accommodated ?

(a) Base      (b) Knee      (c) Saddle      (d) Column.

(ii) What is the helical angle of light duty plain milling cutter.

(a)  $20^{\circ}$       (b)  $25^{\circ}$       (c)  $35^{\circ}$       (d)  $45^{\circ}$ .

(iii) Cutting tool in milling machine mounted on .....

(a) Spindle      (b) Arbor      (c) Column      (d) Knee.

(iv) Which of the following metal have a fibrous structure ?

(a) Mild Steel    (b) Wrought Iron    (c) Cast Iron    (d) Bronze.

(v) Which machines Jigs are used ?

(a) Lathe                                      (b) Milling Machine  
(c) Drilling Machine                      (d) Grinding Machine.

(b) State *true* or *false* :—

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(i) Least count of vernier caliper is 0.01 mm.

(ii) Up milling is also called as conventional milling.

(iii) Gears can cut on shaper.

(iv) Fixture does not guide the tool.

(v) In machining cast iron no cutting fluid is required.

(c) Match the following :—

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**' A ' Group****' B ' Group**

(i) 1 mtr.

(a) 0.01 mm.

(ii) 1 cm.

(b) 0.001 mm.

(iii) 1 mm.

(c) 1,000 micron

(iv) 1 micron

(d) 10 mm.

(v) 10 micron

(e) 1,000 mm.

[ Turn over

2. Attempt any *two* of the following :— 16
- (a) Write safety precautions to be taken in machine shop.
  - (b) Explain heat treatment process and its important.
  - (c) With the help of neat sketch explain principle of milling machine.
3. Attempt any *two* the following :— 16
- (a) Explain types of milling cutters.
  - (b) Write down the various operation performed on milling machine and explain it.
  - (c) Explain the properties of lubricant.
4. Write brief answers (any *two*) :— 16
- (a) Explain following terms.—
    - (i) Annealing      (ii) Hardning.
  - (b) What is mean by interchangeability explain it.
  - (c) Explain the term limit fit tolrence.
5. Write short note (any *four*) :— 16
- (a) Vertical milling machine.
  - (b) Vernier caliper.
  - (c) Depth micrometer.
  - (d) Accessories of milling machine.
  - (e) Shearing machine.
6. Attempt any *two* of the following :— 16
- (a) With the help of neat sketch explain shaping machine with parts and construction.
  - (b) Explain in detail any one type of press machine.
  - (c) Explain with neat sketch power saw machine.
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