

Time Allowed: 3 Hrs.

MM: 60

Section –A**Note: Multiple Choice questions. All questions are compulsory.****6x1=6**

- Q.1 Which of the following is used in conjunction with the surface plate?
(A) Digital micrometer (B) Vernier height gauge
(C) Power saw (D) Screw gauge
- Q.2 The rake angle of a cutting tool may be
(A) Positive (B) Negative
(C) Zero (D) All of the above
- Q.3 In the reverse polarity
(A) Work is negative and electrode is earthen
(B) Electrode holder is positive and work is negative
(C) Electrode holder is negative and work is positive
(D) None of the above
- Q.4 Taper turning can be done by
(A) Form tool (B) Facing tool
(C) Knurling tool (D) Drill
- Q.5 For the harder materials, the point angle of drill is
(A) 125°-150° (B) 12°-15°
(C) 18°-25° (D) 60°-70°
- Q.6 Holes are usually enlarged by
(a) Drills (B) Reamers
(C) Boring bar (D) None of the above

Section-B**Note: Objective/Completion type questions. All questions are compulsory. 6x1=6**

- Q.7 Ball peen hammer is mainly used for chipping riveting (True/False).
- Q.8 -----works on the principle of screw and nut.
- Q.9 Diamond is the hardest of all the cutting tool material (True/False).
- Q.10 Ultrasonic testing is used to inspect surface defects (True/False).
- Q.11 Turret lathe is ----- type of lathe.
- Q.12 Feed is the rate of -----per revolution of drill.

Section –C**Note: Short answer type Questions. Attempt any eight questions out of ten questions.****8x4= 32**

- Q.13 Name different types of micrometers.
- Q.14 What are the effects of a tool signature?
- Q.15 Write the advantages of welded joints over riveted joints.
- Q.16 Write the applications of gas welding.
- Q.17 Classify the lathe machines.
- Q.18 Explain the principle of drilling.
- Q.19 Explain working of table type horizontal Boring machine.
- Q.20 Write the properties of cutting fluid.
- Q.21 What is the surface gauge? How it work?
- Q.22 What are effect of heat produced during the metal cutting.

Section-D**Note: Long answer type questions. Attempt any two questions out of three questions.****2x8=16**

- Q.23 Compare the AC arc welding & DC arc welding.
- Q.24 Explain any five lathe operations in detail.
- Q.25 Name different type of reamers and explain any three.