

Workshop Concept (TCA-S102)

Semester: 2022-23 (Odd Semester)

Year: 1st Year (2K22)

End Semester Examination (1)

Time: 3 h

Maximum marks: 50

All questions are compulsory

Section A

10 marks (10 questions of 1 mark each)

1. Brass is an alloy of _____.
2. The object of normalising a steel specimen is _____.
3. What is use of riser?
4. What is use of chaplet?
5. What is use of chisel?
6. Melting point of pure iron _____.
7. Annealing is done at _____ temperature.
8. Composition of pearlite _____.
9. Composition of Bainite _____.
10. Test use to check hardness of material?

Section B

1. Explain the meaning of the following terms:
(a) Stiffness (ii) Toughness and (iii) Hardness
2. What is a pattern? Name the various allowances associated with patterns and why are they provided?
3. Make a sketch of a centre lathe and label its main parts.
4. Why quick return motion is provided in shapers and planers?
5. What is the difference between “ up milling” and “ down milling”? [5 x 4]

Section C

1. Describe the principle of oxyacetylene gas welding. How many types of flames are used for welding?
2. Sketch Iron-Carbon diagram and mark AC₃. [2 x 10]