

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg) Degree Programme 2015 Admission

IIInd Semester-Final Examination-June/July-2016

Cat. No: Fpme.1204

Title: Workshop Technology (2+1)

Marks: 50

Time : 2 hours

## I. Write True/False

(10 x 1=10)

1. Normalizing is a heat treatment process in forging.
2. A sheet metal pattern is a full size drawing of the object.
3. The fullers are used for finishing the surfaces.
4. Micrometer is used to measure the thickness of metal sheets up to 10mm.
5. In group lay out, there is reduction in machine setup time and cost.
6. In fixed position lay out handling of major assembly is reduced.
7. Lead is the heaviest of the common metals.
8. Halving joint is also termed as half lap joint.
9. Jig saw is also known as scroll saw.
10. Wood is the most common material used for pattern.

## II Answer the following any FIVE

(5 x 2=10)

1. List the factors influencing plant layouts and mention the types of plant layouts.
2. Brief about the various measuring instruments and gauges.
3. Differentiate between fits and allowances and explain the types of fits.
4. List the advantages and disadvantages of ferrous and non-ferrous metals.
5. What do you mean by heat treatment and differentiate between Annealing and Normalizing
6. What is a pattern and mention the types of it.
7. Differentiate between brazing and soldering.

## III. Write short notes on ANY FIVE of the following

(5x 4=20)

1. Define welding and explain the types of welding along with their merits and demerits.
2. Mention the various tools used for casting process and explain.
3. Explain the various forms of processed wood.
4. What do you mean by tempering and indicate how it differs from case and surface hardening.
5. Explain the role of non-metals with respect of material of construction.
6. Explain the importance of safety in workshop.
7. Explain the various carpentry joints.

## IV. Write essay on ANY ONE of the following

(1 x 10=10)

1. Explain the mechanical and technological properties of material of construction.
2. Explain about the types, advantages and disadvantages of moulding process.