



KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg.) 2016 Admission
II Semester Final Examination-July-2017

Fpme.1201

Workshop Technology and Practices (1+2)

Marks: 50

Time: 2 hours

(10x1=10)

I **Fill up the blanks**

- 1 The resistance of material to elastic deformation is called -----
- 2 The maximum stress that any material will withstand before destruction is called its ----- strength.
- 3 ----- are separate shapes of sand that are required to form the hollow interior of the casting.
- 4 ----- is that property of a material which enables it to draw out into thin wire.
- 5 ----- is the major constituent of gun metal.

State True or False

- 6 All iron and steel products are derived originally from pig iron.
- 7 Phosphorus in cast iron aids fusibility and fluidity.
- 8 Flux is charged into a blast furnace to increase the melting point of the ore.
- 9 Brass is used in patterns, particularly when metal patterns are large.
- 10 Boring is the process of producing round holes, through or blind, in the wood.

II **Write short notes on any FIVE**

(5x2=10)

- 1 Discuss advantages and disadvantages of various types of plant layouts.
- 2 Types of welding
- 3 Sand additives used in foundry.
- 4 Soldering
- 5 List out the classifications of lathes.
- 6 List out the process involved in production of castings.
- 7 Hardness and brittleness.

III **Answer any FIVE**

(5x4=20)

- 1 Discuss on types and advantages of core prints in casting process.
- 2 Discuss on safety in industrial workshops.
- 3 Discuss on 'oxygen cutting' process of iron and steel.
- 4 Discuss on moulding tools and equipments.
- 5 Discuss on types of cores.
- 6 Discuss on seasoning of wood.
- 7 Discuss on carpentry joints

V **Write essay on any ONE**

(1x10=10)

- 1 Explain the constructional details of a standard shaper machine and describe the main operations done by a shaper.
- 2 Discuss in detail various types of patterns used in foundry.
