

KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2012 Admission
Ist Semester Final Examination- January/February -2013

Cat. No: Meen.1101

Title: Production Technology (2+1)

Marks: 80

Time: 3 hours

Part A

Answer all the questions

(10 x1.0 =10)

Fill up the blanks

- 1.Cast iron contains about _____ percent carbon
- 2.Steel is fundamentally an alloy of _____
- 3.The process of joining similar metal by application of heat is known as _____
- 4.The temperature of oxy-acetelene flame in its hottest region is _____
- 5.Seam welding is a type of _____ welding
6. _____ patterns are used for mass production of small casting.
7. _____ is used to make a series of small holes to permit gases to escape while molten metal is poured.
- 8.The working of metals above their recrystallisation temperature is known as _____
- 9.The property of a material by virtue of which it can be rolled or hammered into thin sheets is called as _____
- 10.The _____ provides various movements to the cutting tool to perform various operations on the lathe.

Part- B

Write short notes(Any ten)

(10x 3 = 30)

- 1.Mechanical properties of metals.
- 2.Iron carbon equilibrium diagram.
- 3.Define heat treatment and brief about carburizing.
- 4.Mention types of welding and explain anyone welding joint.
- 5.Pattern materials.
- 6.Moulding sand properties.
- 7.Principal parts of a lathe.
- 8.Basic operations performed by a drilling machine.
- 9.Differentiate between milling and grinding.

10. Differentiate between brazing and soldering
11. List the various tools used in fitting process.
12. Brief about the sheet metal working process.

Part-C

Write short essay (Any six)

(6 x5 = 30)

1. Case hardening and surface hardening with merits and demerits.
2. Explain types of pattern and allowances..
3. Explain different types of moulds and methods of moulding
4. Explain in detail about the basic operations in forging.
5. Explain in detail about the hot working processes.
6. Explain in detail about the equipments required for gas welding.
7. Define seasoning and explain wood working processes.
8. Explain in detail about kinds of grinding machines.

Part-D

Write essay (Any ONE)

(1x10 = 10)

1. List the types of lathe and explain the basic operations performed.
2. a. Explain in detail about carpentry joints.
b. Explain in detail about the defects of welding..