

# KERALA AGRICULTURAL UNIVERSITY

B.Tech. Food Engg. 2016 Admission

1<sup>st</sup> Semester Final Examination- February 2017

Cat. No: Meen.1101

Marks: 50

Title: Production Technology (2+1)

Time : 2 hours

I. Fill up the blanks:

(10 x 1=10)

1. Small cavities found on the casting surface are called -----
2. Green sand contain ----- per cent clay.
3. Bell metal is an alloy of ----- and -----
4. For -----operation in a lathe the spindle speed will be minimum.
5. Heat treatment operation involving heating of steel above critical temperature and cooling it in air is -----
6. Melting temperature of cast iron is -----
7. Toughness is related to ----- strength.
8. The type of hammer used for extracting nail in a carpentry shop is -----
9. Cutting inside thread is called -----
10. In welding----- tool is used for removing slag.

II. Write short notes/answers on ANY FIVE:

(5x 2=10)

1. Define heat treatment and list three main stages of heat treatment.
2. What is galvanizing, explain the process of galvanizing.
3. Casting defects.
4. Seasoning of wood.
5. Basic operations in a drilling machine.
6. Pattern materials.
7. Applications of sheet metal working.

III Write answers on ANY FIVE:

(5 x 4=20)

1. What are the mechanical properties of metals.
2. What do you mean by alloying.
3. What are the types of welded joints and what are their failures.
4. Differentiate brazing and soldering.
5. What are the advantages of casting over welding.
6. Explain forging.
7. What are the principle parts of a planning machine.

IV. Write essay on any ONE

(1 x 10=10)

1. Blast furnace.
2. Name and explain the different operations that can be done in a lathe.

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