



**SLIAE**

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION  
(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

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**Higher National Diploma in Technology (Agriculture)**

**Second Year, 2<sup>nd</sup> Semester Examination – 2016**

**AG -2208 Manufacturing Technology**

**Instructions for Candidates:**

Answer all questions from part I and any two (02) from part II  
All questions do not carry equal marks

No. of questions : 05

No. of pages : 04

Time : One hour and thirty minutes.

**Index Number**.....

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**Part 1**

Q1) i) Draw sketch diagrams to show the following weld joints.

- a) But joint   b) Lap joint   c) Corner joint

(6 marks)

ii) Write two examples for each.

- a) Arc welding

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b) Resistant welding

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c) Gas welding

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(6 marks)

iii) Draw sketch diagram to show the following flames in gas welding.

a) Carborizing flame

(3 marks)

b) Neutral flame

(2 marks).

c) Uneven flame

(3 marks)

(Total 20 marks)

Q2) i) Draw the flow diagram to show the manufacturing process according to the “Economical Process”

(4 marks)

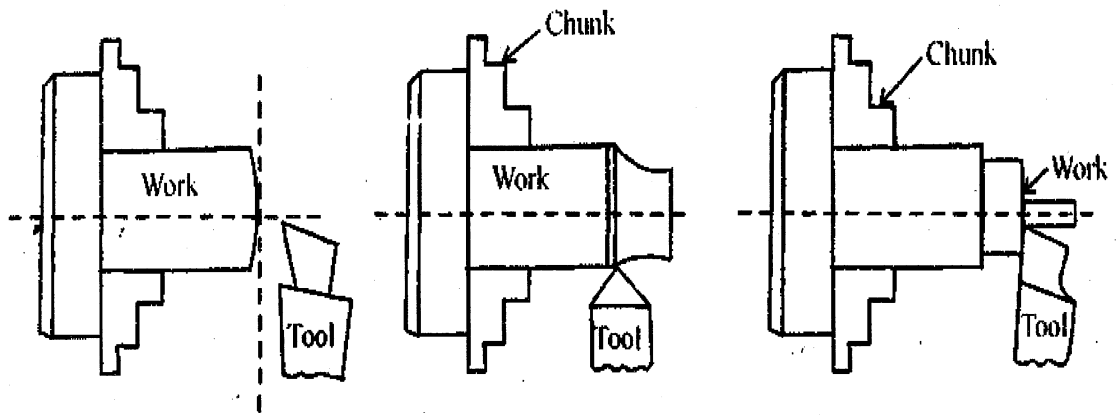
ii) Define the term “Apprenticeship” in manufacturing process.

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(4 marks)

iii) Name the three lathe operations given below.

a) ..... b) ..... c) .....



(12marks)

(Total 20marks)

## Part II

Answer two questions only.

- Q3) i) List the four different techniques which are used in manufacturing process. (10 marks)
- ii) Briefly explain the main features of “American system of manufacturing process” (10 marks)
- iii) How does “Mass Customization” help to face business competition? (10 marks)
- (Total 30 marks)

- Q4) i) Define carpentry. (10 marks)
- ii) Draw sketch diagram to show two types of “lap” joints. (10 marks)
- iii) Write short notes on the following wood working tools. (10 marks)
- a) Marking gauge.
- b) Iron jack plane.
- (Total 30 marks)

- Q5) i) List usages of the following components in lathe machine. (10 marks)
- a) Tool post
- b) Feed road
- c) Lead screw
- d) Lathe bed
- ii) Classify the steel according to the carbon percentage it consists. (10 marks)
- iii) Briefly explain the operational difference when making a drill hole in a work piece with the help of a drill machine and a lathe machine. (10 marks)
- (Total 30 marks)