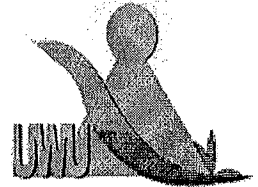


Uva Wellassa University, Sri Lanka  
End Semester Examination – February/March 2012  
SCT 465-2 Manufacturing Technology - Repeat



Time: Two (02) Hours

Total 04 Questions  
Answer All questions

1.

I. Name the three main types of extrusion and describe them briefly.

(25 marks)

II. What are the main types of defects that you can see in the extrusion process?

(25 marks)

III. Consider the extruded part shown in Fig. Q1.

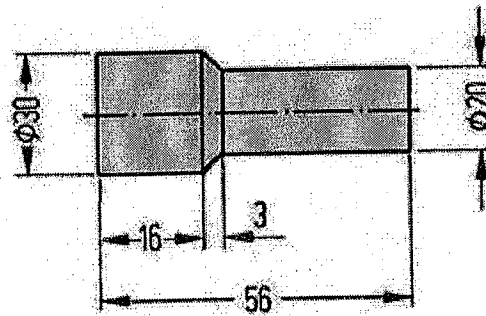


Fig. Q1

- What is the volume of the finished item?
- What is the most suitable method of extrusion for this part?
- How many stages of extrusion needed?
- What is the most suitable initial stock?

(50 marks)

2.

I. What is wire drawing?

(25 marks)

II. What are the applications of wire drawing?

(25 marks)

III. What determines the number of stages?

(25 marks)

IV. Explain why the drawing speed is important.

(25 marks)

3. A Group Technology Cell has five machines. From – To data for machines are as follows.

		From				
		Machines	1	2	3	4
To	1	0	10	80	0	0
	2	0	0	0	85	0
	3	0	40	0	0	0
	4	70	0	20	0	0
	5	0	75	0	20	0

I. Determine the sequence of machines according to/from ratio.

(25 marks)

II. Construct a flow diagram.

(25 marks)

III. Where do the parts enter the cell and exit the cell? How many parts in each place enter and exit?

(25 marks)

IV. Management decided to add an additional machine to increase the output of the cell. What type of machine to be used? Give reasons to your answer.

(25 marks)

4.

I. What are the basic components of FMS?

(25 marks)

II. What are the flexibilities can you achieve from a FMS?

(25 marks)

III. What are the different types of layouts possible in FMS?

(25 marks)

IV. What are the factors affecting the layout of the FMS?

(25 marks)

