



**UNIVERSITI KUALA LUMPUR
Malaysia France Institute**

**FINAL EXAMINATION
JANUARY 2010 SESSION**

SUBJECT CODE : FFD 12101
SUBJECT TITLE : INTRODUCTION TO FABRICATION
LEVEL : DIPLOMA
TIME / DURATION : 8.00pm – 10.00pm
(2 HOURS)
DATE : 27 APRIL 2010

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper **CAREFULLY**.
2. This question paper is printed on both sides of the paper.
3. Please write your answer on the answer booklet provided.
4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
5. This questions paper consists of **TWO (2)** sections. Section A and B. Answer **ALL** questions in section A. For section B, Answer **FOUR (4)** questions only.
6. Answer all questions in English.

THERE ARE 5 PAGES OF QUESTIONS, EXCLUDING THIS PAGE.

SECTION A (Total: 60 marks)

INSTRUCTION: Answer ALL questions.
Please use the answer booklet provided.

Question 1

Twist drills may cause severe injuries, from the picture given in Table 1 list down 6 (six) potential accidents that most likely to occur to the operator.


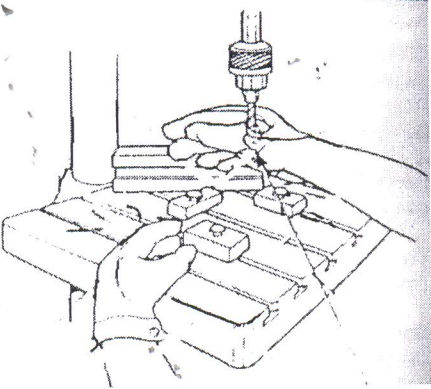
<p>A</p>		<p>i. _____</p> <p>ii. _____</p> <p>iii. _____</p>
<p>B</p>		<p>i. _____</p> <p>ii. _____</p> <p>iii. _____</p>

Table 1

(6 marks)

Question 2

There are three standards file cuts that are in regular (common) use, fill in the name of the cuts and it usage in the column given in Table 2.

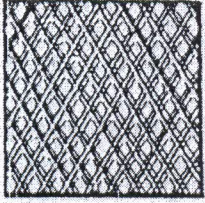
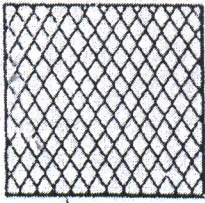
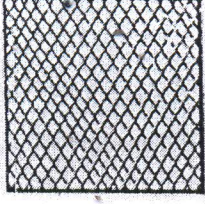
	Type of file cuts	Name	Usage
i.			
ii.			
iii.			

Table 2

(6 marks)

Question 3

Cutting processes which is very similar to shearing includes the following as shown in table

3. Fill in the specific terms in the space provided.

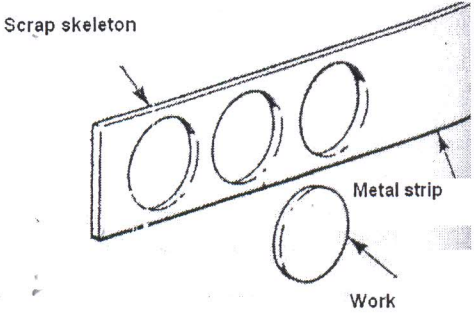
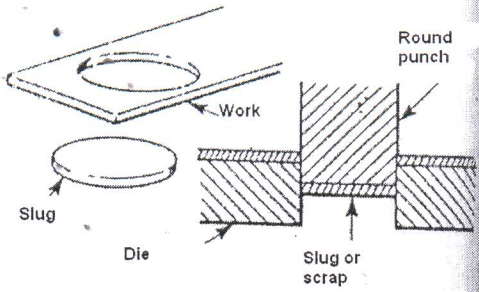
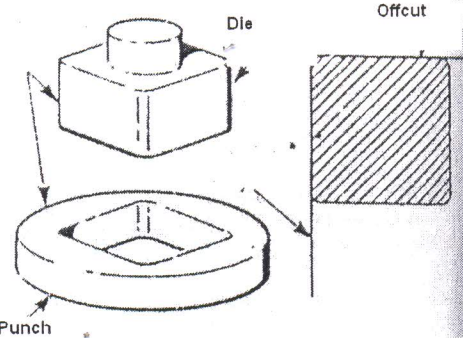
Item	Cutting Processes	Specific Term
i.	 <p>The diagram shows a long rectangular metal strip with three circular holes. An arrow labeled 'Scrap skeleton' points to the remaining material after the holes are cut. Below the strip, a single circular piece is labeled 'Work', and a small circular piece is labeled 'Metal strip'.</p>	<p>.....</p>
ii.	 <p>The diagram shows a cross-section of a cutting process. A 'Round punch' is shown moving through a 'Work' piece. Below the punch, a 'Slug' is shown being cut from the work. The remaining material is labeled 'Die' and 'Slug or scrap'.</p>	<p>.....</p>
iii.	 <p>The diagram shows a cross-section of a cutting process. A 'Die' is shown above a 'Punch'. The punch is cutting through a workpiece, creating an 'Offcut'.</p>	<p>.....</p>

Table 3

(3 marks)

Question 4

Choose and fill in the blanks with the correct answer given

(Breaking, hard, greater, wedging, smaller, hardness, shearing, blunt, break off, softer)

A chisel cuts by a combined _____ (16) and _____ (17) action. To curl and _____ (18) the chips readily, the cutting angle must suit the _____ (19) of the metal being cut. The _____ (20) the angle the less change there is of _____ (21) the cutting edge. For _____ (22) or tough materials, a _____ (23) cutting angle 70° or more may be required. As less cutting power is needed for _____ (24) materials, smaller cutting angles down to 30° may be used. _____ (25) cutting angles require the chisel to be re-sharpened more often.

(10 marks)

Question 5

(a) Name 3 (three) types of folding machine commonly used?

(6 marks)

(b) What is the best way for a fabricator to minimize wastage for large quantity work?

(5 marks)

(c) Name the 4 (four) types of file and their applications.

(8 marks)

(d) Name the 5 (five) common cutting processes

(10 marks)

(e) Name 3 (three) cutting processes which are similar to a shearing process.

(6 marks)

SECTION B (Total: 40 marks)

INSTRUCTIONS: Answer four (4) questions only

Please use the answer booklet provided.

Question 1

Draw and label a schematic oxy-acetylene welding process.

(10 marks)

Question 2

Draw and label a plasma arc cutting process.

(10 marks)

Question 3

Draw and briefly describe a 'pinch-type roll'.

(10 marks)

Question 4

Draw and briefly describe a 'pyramid-type roll'.

(10 marks)

Question 5

Draw and label a 'drill bit'.

(10 marks)

END OF QUESTIONS