

SECONDARY SCHOOL ANNUAL EXAMINATIONS 2004

Educational Assessment Unit – Education Division

FORM 4

TECHNOLOGY EDUCATION

Time: 2 hours

Name: _____

Class: _____

1. Complete the last two stages of the design process

1. Situation

2. Brief

3. Investigation

4. Planning

5. _____

6. _____

6 marks

2. Wood is classified as either NATURAL or MAN MADE.

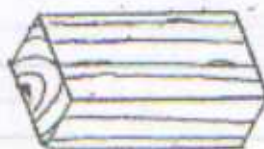
Give two examples of each.

(i) NATURAL: _____

(ii) MAN MADE: _____

4 marks

3. On the strip of wood shown indicate with an arrow the grain and the end grain.



4 marks

4. By means of a sketch explain the inverted end grain method used when gluing three strips of wood together.

4 marks

5. Name the two types of glues that are used on wood. One for inside work and the other for outside work.

(i) _____

(ii) _____

4 marks

6. Draw a V mark on the strips of wood shown. Explain the use of the V mark.



The V mark is drawn on wood so that _____

6 marks

7. Name 3 types of information a working drawing should include.






(i) _____

(ii) _____

(iii) _____

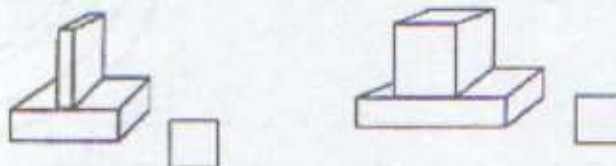
6 marks

8. Name the hand tools shown below.

	_____
	_____
	_____
	_____
	_____

10 marks

9. Mark with an 'X' in the space provided which is the stronger joint when using the same material and glue.



4 marks

10. State two safety precautions that must be observed when working on an electrical project.

- (a) _____
- (b) _____

2 marks

11. Classify these metals as ferrous or non-ferrous metals.

- (a) Mild steel _____
- (b) Brass _____
- (c) Copper _____
- (d) Cast iron _____
- (e) Aluminium _____
- (f) Zinc _____

12 marks

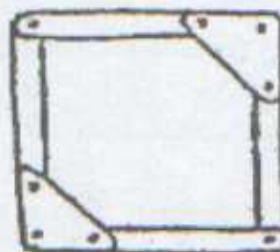
12. Given the components shown connect the circuit.



6 marks

13. Which of these structures shown below is the MOST rigid?

Indicate the correct answer by marking an 'X' in the answer box.

☐☐

2 marks

14. State two methods of joining metals together.

(1) _____

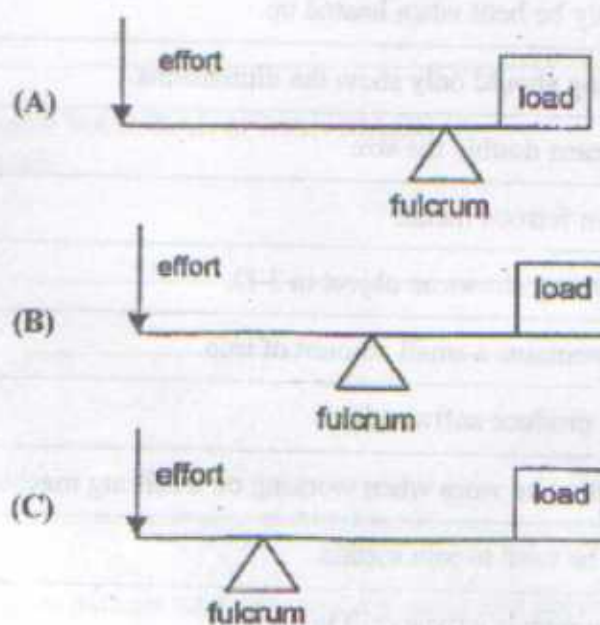
(2) _____

2 marks

15. From levers shown,

(i) Which requires the least effort to lift?

(ii) Which requires the most effort to lift?



8 marks

16. Write whether each of the following statements is **True** or **False**.

		True or False
1	A hand file must always be used with a handle.	
2	A file is used to remove metal.	
3	All types of files are of a smooth grade.	
4	The wood worker vice has rough teeth on its jaws.	
5	A tenon saw is used to cut wood.	
6	Mild steel is very seldom used in workshops.	
7	Mild steel is cut with a hacksaw.	
8	A hack saw blade is also made of mild steel.	
9	Wood can be soft or hard.	
10	Metals cannot be joined by welding.	
11	Mild steel can only be bent when heated up.	
12	A working drawing should only show the dimensions.	
13	A scale of 1:3 means double the size.	
14	Copper is a brown ferrous metal.	
15	An Isometric drawing shows an object in 3-D.	
16	A ferrous metal contains a small amount of iron.	
17	Coniferous trees produce softwoods.	
18	Safety goggles must be worn when working on a drilling machine.	
19	P.V.A. glue can be used to join metals.	
20	To make holes in metals a twist drill is used.	

20 marks