

MARKER CODE			

STUDENT ENROLMENT NUMBER									



Samoa School Certificate

DESIGN TECHNOLOGY 2015

QUESTION and ANSWER BOOKLET

Time Allowed: 3 Hours & 10 Minute

INSTRUCTIONS

1. You have 10 minutes to read **before** you start writing.
2. Write your **Student Education Number** (SEN) in the space provided on the top right hand corner of this page.
3. Answer **ALL QUESTIONS**. Write your answers in the spaces provided in this booklet.
4. If you need more space for answers, ask the Supervisor for extra paper. Write your SEN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

STRANDS	Page Number	Time (minutes)	Weighting
STRAND 1: - DESIGNING AND DRAWING	2	45	25
STRAND 2: SAFETY OF TOOLS	7	27	15
STRAND 3: MATERIALS	11	36	20
STRAND 4: PROCESSES	15	54	30
STRAND 5: TECHNOLOGY	21	18	10
TOTAL		180	100

Check that this booklet contains pages 2-22 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

STRAND 1**DESIGNING AND DRAWING****WEIGHTING 25**

1. State an example of a problem before designing a Design brief.

Skill Level 1	
1	
0	
NR	

2. Name a type of line that is very useful when working on sketches

Skill Level 1	
1	
0	
NR	

3. Define the term Oblique projection.

Skill Level 1	
1	
0	
NR	

4. Name two things that are very useful when we prepare a situational problem.

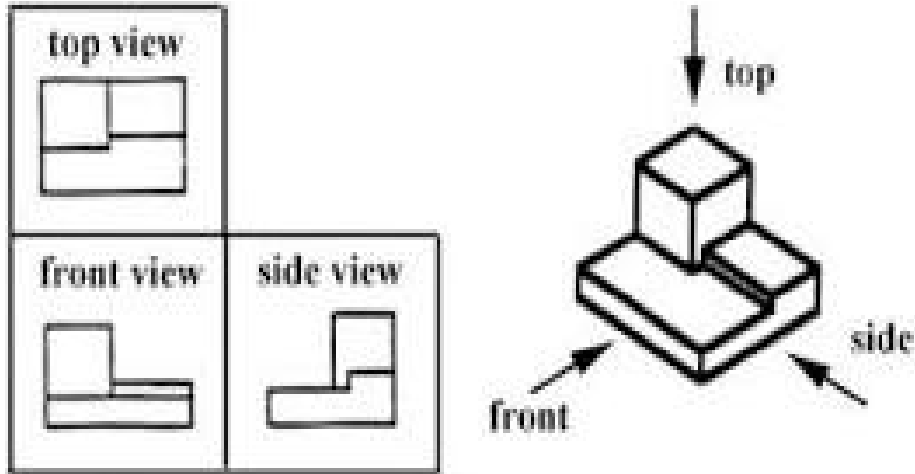
(i) _____

Skill Level 1	
1	
0	
NR	

(ii) _____

Skill Level 1	
1	
0	
NR	

The drawing below is an Orthographic Drawing. Study the diagram and answer questions provided.



- 5.1 The best unit or units that are very important to measure the top view of a floor plan is _____

Skill Level 1	
1	
0	
NR	

- 5.2 List down two advantages of using Orthographic Drawing in planning for a project.

Skill Level 2	
2	
1	
0	
NR	

- 6 Before the completion of a project design brief will be the first criteria to be assessed. Design a good paragraph for the preparation of your **design brief**.

Skill Level 3	
3	
2	
1	
0	
NR	

- 7 Name one line which is very useful when working on a technical drawing.

Skill Level 1	
1	
0	
NR	

8. Explain the purpose of using **Extension lines in Drawing**?

Skill Level 3	
3	
2	
1	
0	
NR	

9. Summarize in three sentences the purposes of using sketches and how can we include in the process of finishing project.

Skill Level 3	
3	
2	
1	
0	
NR	

10. Define the term **Isometric Drawing**.

Skill Level 1	
1	
0	
NR	

11. Design brief is very important whenever we want to make a product. One criterion that is needed in the process is the specification. Discuss in your own words the meaning of specifications.

Skill Level 4	
4	
3	
2	
1	
0	
NR	

12. Measurements are very important in designing pictorial drawings. How do you measure the straight and height of a construction project in terms of units?

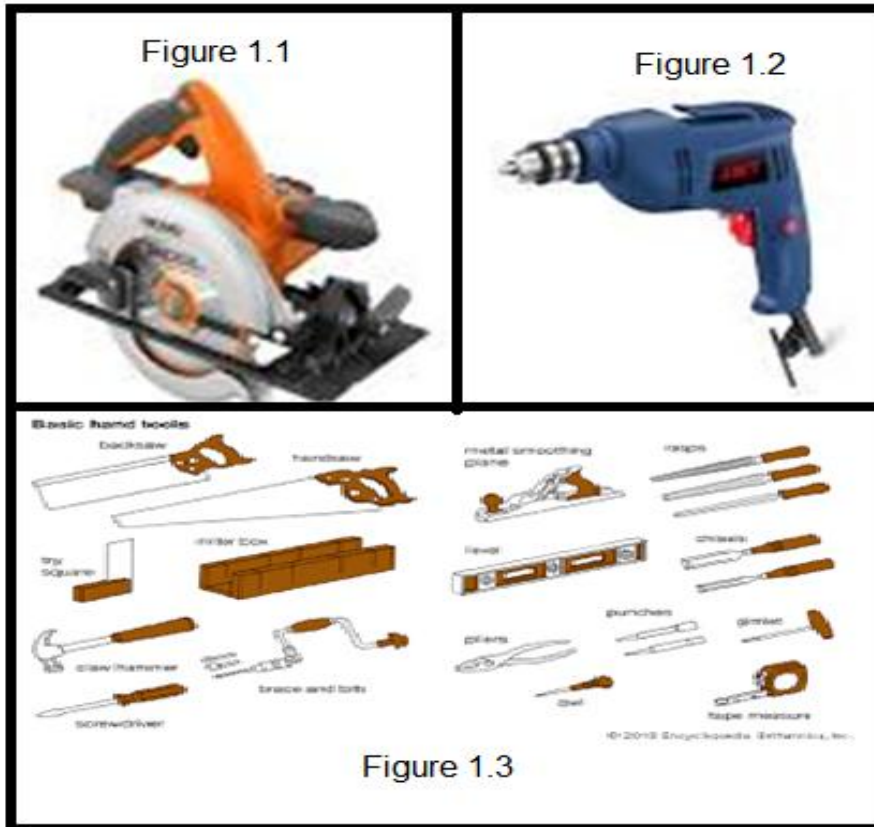
Skill Level 2	
2	
1	
0	
NR	

STRAND 2:

TOOLS AND SAFETY

WEIGHTING 15

1. The pictures below show some power tools and basic hand tools. Study the pictures and answer question followed.



Some power tools and hand tools are shown above. Differentiate between Hand tools and Power tools in your own words.

Skill Level 3	
3	
2	
1	
0	
NR	

Study the diagram below and then answer the following questions.



2. A set of tools used are placed above constructive purposes. Name the tools as pointed by arrows in the above diagram

A: _____

Skill Level 1	
1	
0	
NR	

B: _____

Skill Level 1	
1	
0	
NR	

C:

Skill Level 1	
1	
0	
NR	

D: _____

Skill Level 1	
1	
0	
NR	

3. Formulate the function of the tool marked B is

Skill Level 2	
2	
1	
0	
NR	

Study the diagram below and answer questions followed.



4. Fill in the table below with the name and functions of the tools in the picture

	Name of Tool	Function
I		
II		
III		
IV		

Skill Level 4	
4	
3	
2	
1	
0	
NR	

5. Below are some of the basic tools in our schools workshops. Each of the tools have been grouped according to their functions.



6. Name any two tools used in marking designs of edges of furniture

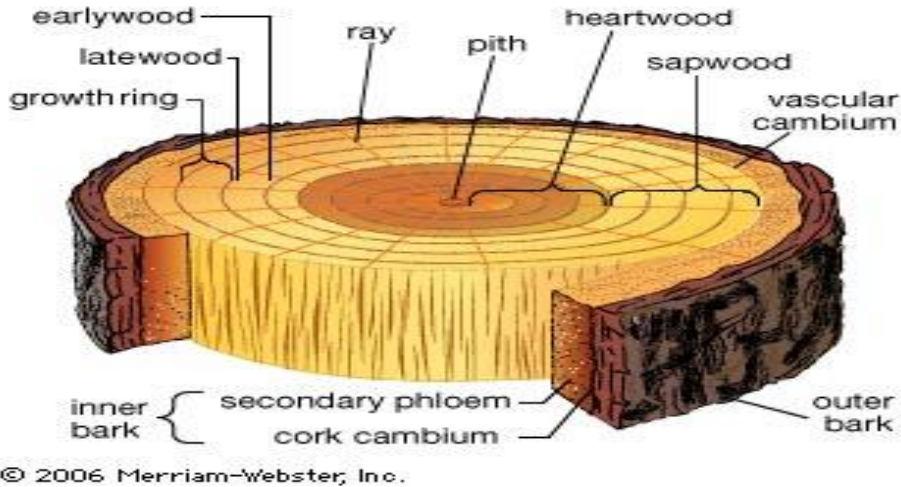
Skill Level 2	
2	
1	
0	
NR	

STRAND 3

MATERIALS

WEIGHTING 20

The Cross Sections of a tree is shown. Study the figure below and answer the following questions.



1. The part of the tree which determined the **growth** is:

Skill Level 1	
1	
0	
NR	

2. Differentiate in three sentences the differences between foreign timbers and local timbers.

Skill Level 3	
3	
2	
1	
0	
NR	

3. State four properties of wood

1. _____

Skill Level 1	
1	
0	
NR	

2. _____

Skill Level 1	
1	
0	
NR	

3. _____

Skill Level 1	
1	
0	
NR	

4. _____

Skill Level 1	
1	
0	
NR	

4. There are many properties of timbers. State one property your have been experienced.

Skill Level 1	
1	
0	
NR	

5. Describe any two good methods why we always selected local timbers in our construction materials.

1 _____

2 _____

Skill Level 2	
2	
1	
0	
NR	

6. List two advantages of using metals in construction projects than using timbers.

1 _____

2 _____

Skill Level 2	
2	
1	
0	
NR	

7. Explain briefly the term durability and give good reasons why we preserve timbers.

Skill Level 3	
3	
2	
1	
0	
NR	

8. Discuss four different types of local materials (Samoan timbers) that are really needed for making furniture's.

1 _____

2 _____

3 _____

4 _____

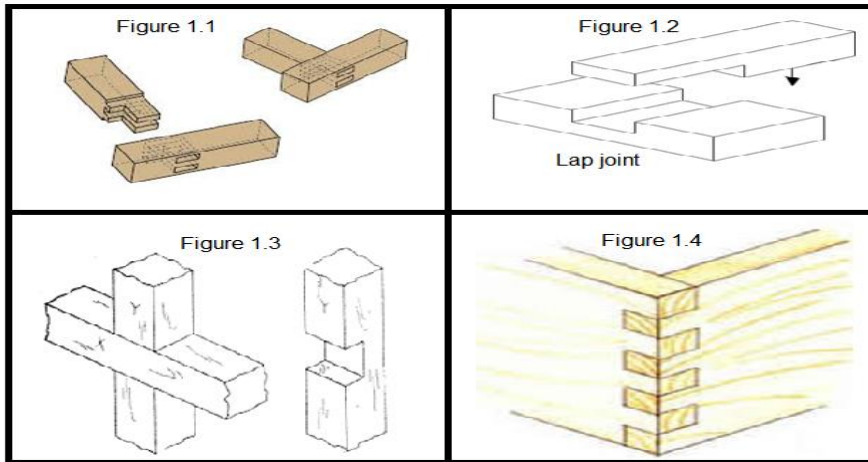
Skill Level 4	
4	
3	
2	
1	
0	
NR	

STRAND 4

PROCESSES

WEIGHTING 30

The figures below are joints that we always used in our construction works. Study the four figures below and answer the given questions.



1. Complete the table below with names and functions of joints.

	Name of joint	Purpose or used of joint
1		
2		
3		
4		

(8 marks)???

4. List two important paints that are very useful in finishing works and state the advantages of each paint name to our finishing works.

	Name	Advantage
i		
ii		

Skill Level 2	
2	
1	
0	
NR	

Skill Level 2	
2	
1	
0	
NR	

5. Which type of material that will most needed for legs of a dining table?

Skill Level 1	
1	
0	
NR	

7. The table below shows some useful drawing for the process of making. Study the table and complete by filling spaces.

Process of drawing: In the space provided below make a brief detailed drawing of a coffee table of your own dimensions.

Eg. Isometric etc

Show all dimensions and lines.

Name of drawing	Technical drawing

Skill Level 3	
3	
2	
1	
0	
NR	

8 Explain the following terms.

Expectations

Skill Level 1	
1	
0	
NR	

Durable

Skill Level 1	
1	
0	
NR	

Extension Lines

Skill Level 1	
1	
0	
NR	

STRAND 5

TECHNOLOGY

WEIGHTING 10

1. In the space below, sketch a sliding bevel, and explain how and why it is used.

Sketch	Explanations

Skill Level 2	
2	
1	
0	
NR	

2. Define the following terms and give example if possible

Cutting list

Skill Level 2	
2	
1	
0	
NR	

Air Seasoning

Skill Level 2	
2	
1	
0	
NR	

Block Plane

Skill Level 2	
2	
1	
0	
NR	

Marking Knife

Skill Level 2	
2	
1	
0	
NR	

STUDENT EDUCATION NUMBER									

DESIGN TECHNOLOGY

(For Markers only)

STRANDS	Weighting	Marker	Check Marker	Final Weighting
TOTAL	100			