Mock Examination

CAREER TECHNOLOGY 2 & 1

Essay, and Objective 2 hours 5 minutes **2 & 1**

Name:.....

Index Number:.....

SUPERB MOCK

Basic Education Certificate Examination

CAREER TECHNOLOGY 2 & 1 **2 hours 5 minutes**

*Write your **name, index number,** in **ink** in the spaces provided above and complete the title block and the **A3** drawing sheet(s) provided.*

*This booklet consists of two papers: Paper **2** and Paper **1**.*

***Paper 2** is in two parts: **A** and **B**. Answer **four** questions only:*
*Question **1** and any other one in Part **A**:*
*Question **4** and any other one in Part **B**:*

*Answer **Part A** of Paper **2** in this booklet and answer **Part B** of Paper **2** on the **A3** drawing sheet(s) provided.*
*Both sides of the **A3** drawing sheet(s) may be used. All diagrams or drawings should be in **pencil**. Any other answer should be written in **ink**.*

***Any** candidate who tears off any part of this question paper will be **severely** penalized.*

*Paper 2 will last **1** hour 15 minutes after which this booklet and the drawing sheet(s) will be collected.*

Answer Paper 1 on your Objective Test answer sheet.
*Do not start Paper **1** until you are told to do so. Paper **1** will last **50** minutes.*

INSTRUCTIONS FOR OBJECTIVE TEST

Answer all the questions on your Objective Test answer sheet. **50 minutes**

1. Use 2B pencil throughout.
2. On the pre–printed answer sheet, check that the following details are **correctly** printed: Your **surname** followed by your **other names**, the Subject Name, your Index Number, Centre Number and the Paper Code.
3. In the boxes marked *Candidate Number; Centre Number* and *Paper Code*, **reshade** each of the shaded spaces.
4. An example is given below. This is for a candidate whose name is Erica Afiba MANU. Her *index number* is 772384188 and she is writing the examinatcn at *Centre Number* 77234 She is offering *Career Technology* 1 and the *Paper Code* is 0541.

BASIC EDUCATION CERTIFICATE EXAMINATION
OBJECTIVE ANSWER SHEET

CANDIDATE NAME:	SUBJECT NAME:
MANU ERICA AFIBA	CAREER TECHNOLOGY 1

1. Use 2B pencil, press firmly.
2. Answer each question by choosing one letter and then, shade through the letter chosen like this [A] [B] [C] [D] [E]
3. If you want to change an answer, erase your first mark completely.
4. If only four alternative answers are given for each question, ignore the letter E.
5. Your question paper may have fewer than 60 questions.

CANDIDATE NUMBER								
7	7	2	3	8	4	1	8	8
[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]
[1]	[1]	[1]	[1]	[1]	[1]	■	[1]	[1]
[2]	[2]	■	[2]	[2]	[2]	[2]	[2]	[2]
[3]	[3]	[3]	■	[3]	[3]	[3]	[3]	[3]
[4]	[4]	[4]	[4]	[4]	■	[4]	[4]	[4]
[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]
■	■	[7]	[7]	[7]	[7]	[7]	[7]	[7]
[8]	[8]	[8]	[8]	■	[8]	[8]	■	■
[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]

CENTRE NUMBER				
7	7	2	3	4
[0]	[0]	[0]	[0]	[0]
[1]	[1]	[1]	[1]	[1]
[2]	[2]	■	[2]	[2]
[3]	[3]	[3]	■	[3]
[4]	[4]	[4]	[4]	■
[5]	[5]	[5]	[5]	[5]
[6]	[6]	[6]	[6]	[6]
■	■	[7]	[7]	[7]
[8]	[8]	[8]	[8]	[8]
[9]	[9]	[9]	[9]	[9]

PAPER CODE			
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■	[0]	[0]	[0]
[1]	[1]	[1]	■
[2]	[2]	[2]	[2]
[3]	[3]	[3]	[3]
[4]	[4]	■	[4]
[5]	■	[5]	[5]
[6]	[6]	[6]	[6]
[7]	[7]	[7]	[7]
[8]	[8]	[8]	[8]
[9]	[9]	[9]	[9]

For Supervisors only. If candidate is absent shade this space. ☐

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PAPER 2
ESSAY
PART A
[30 Marks]
*Answer Question **1** [**Compulsory**] and **any** other **one** question.*

(a) The passage below are steps in the preparation of **kakro.** Fill in the blank spaces with the suitable words provider below. [10marks]
Pound, mortar, lumps, kitchen paper, peel, clean, ground, deep pan, mixture, golden brown
Wash over-riped plantain and ..... Cut into pieces and put into ....until free from .....Put pounded plantain into a ..... bowl. Add .....onion, ginger, pepper and salt, mix in flour and leave for a while. Put cooking oil into a ....., place on fire until hot. Mould the ..... into the hot oil, turn Kakro when necessary. When well-cooked and..... remove from oil. Drain on a..... placed in a colander. Dish up and serve.

(b) (i) Explain frying as a method of cooking. [1mark]
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(ii) State two reasons for draining oil from food after frying [2marks]
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(iii) Mention two rules or techniques of frying food [2marks]
.....
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.....

(a) (i) Explain abrasive [1mark]
.....
.....
.....

(ii) List two examples each of the following types of abrasives [4marks]
(α) Commercial abrasive
.....
.....
(β) Local abrasive
.....
.....

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(b) (i) Explain a menu [1mark]

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.....

(ii) Mention two importance of planning a menu for school children [2marks]

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(c) (i) Explain career opportunities [1mark]

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(ii) State two factors to consider when you want to start and run your own business [2 marks]

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(iii) Mention two disadvantages of working for self [2marks]

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(d) The M.P for Afigya Kwabre has donated the following types of cook stoves to some citizens in his constituency. List the types of fuels used for each of the following stoves. [2marks]

(i) Kerosene stove

.....

.....

(ii) Pellet stove

.....

.....

(iii) Traditional three stone stove

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(iv) Microwave oven

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3. (a) Adama was tasked to produce a prototype of a toy car with a paper. Describe the method used to produce the artifact. [6marks]

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(b) State two differences between smart/modern materials and compliant/resistant materials [2marks]

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(c) A contractor was tasked to construct a bridge on the Oda river at Damango. Four months after completion, the bridge collapsed. List three factors that led to the collapse of the bridge. [3marks]

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(d) Monica; a seamstress in Kumasi was taken to the police station for spoiling someone's fabric. When the fabric was brought to her, she didn't take the body measurement of the one going to wear the dress. Mention four importance of taking body measurements before sewing a garment [4marks]

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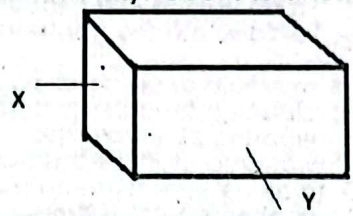
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PART B

[30 marks]

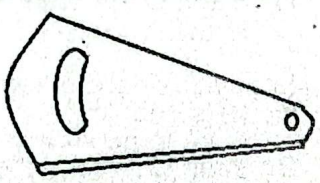
*Answer Question **4** [Compulsory] and **any** other **one** question*

4. The figure below shows the drawing of a block to be used to construct KVIP for the Adonten community. Use it to answer the questions that follow



(a) Mention three materials for moulding the block above [3marks]
(b) List four tools for moulding the block [4marks]
(c) State two reasons for using blocks to construct the KVIP and not bricks [4marks]
(d) Name the parts lettered X and Y respectively [2marks]
(e) Why was sand used in mixing mortar for moulding the block? State two reasons [2marks]

5. The figure below is an artifact to be manufactured at the school workshop from 3mm mild steel plate. Use it to answer the following questions



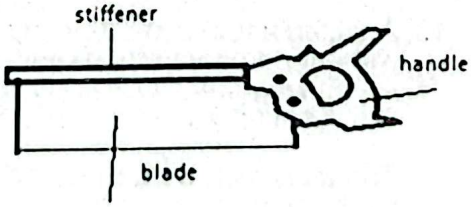
(a) Name the figure above [1mark]
(b) State two uses of the figure above [2marks]
(c) As a designer, you were asked to manufacture the figure in question (5) above. List three tools for marking–out the curve edge [3marks]
(d) Mention three tools for cutting the 3mm mild steel plate [3marks]
(e) List any three techniques to be used when manufacturing the artifact above [3marks]
(f) A primary four learner was asked to produce different items using aluminium. Mention six items made from aluminium [3marks]

6. (a) (i) Explain the term seasoning [1 mark]
(ii) State four reasons for seasoning timber [2marks]

(b) Copy and complete the table below [5marks]

TIMBER	One property	Two uses
Wawa		
Odum		

(c) Use the figure below to answer the questions that follow



(i) Name the tool shown above [1mark]
(ii) Mention two ways to care for the blade [2marks]
(iii) Mention one purpose of the stiffener [1mark]
(iv) List two materials that can be used for making the handle [2marks]
(v) State one use of the tool above [1mark]

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CAREER TECHNOLOGY
OBJECTIVE TEST

1. The main reason for buying food in season during meal planning is that, they are.....
   A. cheap and fresh
   B. easily preserved
   C. easy to cook
   D. easy to identify

2. Tools are oiled after use to
   A. ensure they remain accurate
   B. prevent them from rusting
   C. preser ve the cutting edges
   D. m aintain their attractiveness

3. Madam Baaba who is to prepare jollof rice and chicken for her family's meals, decided to steam the chicken before frying to enhance its
   A. shape and colour
   B. shape and appearance
   C. flavour and taste
   D. longi vity

   Water is very essential in the human body because it
   A. nourishes the body and keep it cool
   B. helps the body to gain weight
   C. helps the bo dy to fight against kwashiorkor
   D. keeps the bod y dry for the daily activities

5. The best kitchen knife for spreading and smoothening soft mixtures like icing of cake is the
   A. utility knife
   B. boning knife
   C. paring knife
   D. palette knife

6. The type of restaurant menu which allows customers to order individual dishes from a range of choices, with each dish priced separately is referred to as.....
   A. table d'hote
   B. special party menu
   C. ethnic menu
   D. a la carte

7. When tools, equipment and materials are kept away from the floor of the food laboratory it helps to
   A. stay healthy
   B. prevent accident
   C. save e nergy and time
   D. helps to promote the likelihood of injuries

8. When boiling food, it is advisable to use a tight fitting lid saucepan in order to
   A. enhance the flavour of the food
   B. increase the temperature of water
   C. prev ent food from breaking
   D. none of the above

9. All the following are equipment and materials for laying tables for Mr. Kumi during his 60th birthday party except .....
   A. crockery set
   B. cutlery set
   C. mat
   D. napkins

10. Ama decided to sew a dress for her friend's birthday party with facing along the edges. What was the reason for her to face the edges?
    A. To maintain the correct posture of the dress
    B. For the dress to fit well
    C. To be able to join t wo or more fibers
    D. To decorate the gar ment

11. An example of personal hygiene practice is
    A. cleaning food items before use
    B. wearing clean clothes
    C. w ashing utensils after cooking
    D. m aking sure fish and meat are well cooked before eating

12. An entrepreneur needs all the following qualities to be successful except
    A. ignorance
    B. confidence
    C. innovative
    D. problem solving

13. All the following are reasons for taking body measurement to sew a dress for a four year girl except
    A. for the dress to look beautiful on her
    B. helps to waste fabrics
    C. for the dress to fit well
    D. to kno w the amount of yards of fabrics to use

14. In any business enterprise, motivating workers enables
    A. them to be lazy
    B. them to misuse their resources
    C. the m to work tirelessly
    D. the m to be late at work

15. The basic ingredients used for the preparation of maple syrup for salads includes
    A. apple cider vinegar, salt and pepper
    B. diluted milk, sugar and flour
    C. egg, black pep per and diluted milk
    D. Dij on mustard, sugar and flour

16. The best way to maintain the appearance and efficiency of kitchen essentials is to.....
    A. store in a drawer after use
    B. leave it for days before washing
    C. keep them on the floor of the kitchen
    D. w ash where necessary and wipe before storage

17. Baaba decided to plan a nice surprise cake for her friend's wedding. Which of the ingredients below can she use to garnish the cake?
    A. Salad syrup
    B. Icing
    C. Margarine
    D. Appetizer

18. A suitable tool used for cutting open threads without damaging the fabric is called
    A. pinking shears
    B. seam ripper
    C. sewing machine
    D. French curve

19. The treadle sewing machine is operated by the human .....
    A. hand
    B. chest
    C. foot
    D. elbow

20. Adamu eats a well-balanced diet, avoids negative peer pressure, and has regular exercise. He is said to be practicing
    A. good grooming
    B. good manners

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C. health lifestyle
D. food hygie ne techniques

21. All the following demonstrate safety practices at the workplace when manufacturing an artifact except
A. replacing broking parts of tools
B. reporting frayed flexes
C. tagging faulty eq uipment
D. lea ving tools on the floor unattended

22. An electrician is preparing to climb a pole to fix a fault. The most appropriate equipment to protect him from falling from height is
A. safety harness
B. face mask
C. goggles
D. helmet

23. Ama Ataa is to produce an artifact to be used in packing her milo in. she needs a material which is soft and easy to be shaped. Which type of material would be the best choice?
A. Modern
B. Resistant
C. Non–resistant
D. Smart

24. It is possible to hold the wooden handle of a frying pan which has caught fire without being hurt .....
A. because wood is a good conductor of electricity
B. because wood is a good conductor of heat
C. because wood is a poor conductor of heat
D. because wood is a poor conductor of electricity

25. A material developed through the invention of new or improved processes is referred to as
A. modern materials
B. smart materials
C. resistant materials
D. co mpliant materials

26. A carpenter intends to create a circular hole on a basin stand to be able to hold the basin. The most appropriate tool for marking-out circular shape is.
A. A pair of compasses
B. A pair of dividers
C. Marking gauge
D. Mortise gauge

27. Cranes, roofs, scaffolding, and suspension bridges are examples of ..... structure
A. wooden
B. metal
C. shell
D. frame

28. Which of the following is the reason for marking-out and measuring a material before use?
A. To avoid wastage of material
B. To improve beauty of the material
C. To make the material strong
D. To obtain a uniq ue design

29. The provision of extra allowance in a garment is called
A. scalloping
B. lacing
C. felting
D. fullness

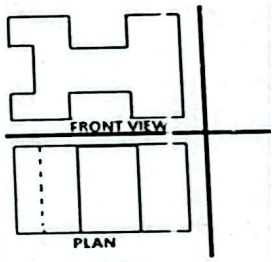
30. A woodworker is to construct an artifact at the workshop. Which of the following safety precaution measures must he abide by
A. eat hygienic food
B. not leaving tools or sharp objects on the floor
C. bathing a t least twice a day
D. not brushing the teeth regularly

31. The most suitable methods of joining electrical components in radio and TV repairs is by
A. gluing
B. riveting
C. soldering
D. screwing

32. In designing and making a metal sign board, the suitable material for preparing the surface to receive final finish is.....
A. emery cloth
B. polyvinyl acetate
C. glass paper
D. scouring sponge

33. The type of force applied to the structural member or an object causing one end to twist with respect to the other end is referred to as
A. compression force
B. tension force
C. twisting force
D. torsion force

34. The type of orthographic projection representing the figure beside is
A. first angle orthographic projection
B. isometric projection
C. obliq ue projection
D. third angl e orthographic projection



35. In designing and making, the question "who will use the unit" comes under.....
A. construction
B. ergonomics
C. aesthetics
D. function

36. There was an issue of theft at Bongo R/C primary school and the head teacher of the school was called to give out a short statement of the incident to the police. Which of the following stages in design process can he apply?
A. Analysis
B. Investigation
C. Design brief
D. Specification

37. Mr. Nimo wants to draw an object in orthographic projection. Which of the following pair of instruments is suitable for drawing the horizontal projection lines?
A. Tee–square and pencil
B. Protractor and set-square
C. Pair of co mpasses and rule
D. Tee –square and set-square

38. The first step to take when producing an artifact is to.....the material
A. mark-out
B. measure
C. cut
D. join

39. All the following are ways to get capital to set up your own business except
A. bank loans
B. personal savings
C. picking p ockets
D. loans fro m potential customers

40. Allotey decided to use sapele to produce a shoe rack to be used at home. What was his reason for the choice of that material?
A. It is available locally
B. It is malleable
C. It is ductile
D. It is brittle

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MARKING SCHEME: CAREER TECHNOLOGY
OBJECTIVE TEST

1.	A	11.	B	21.	D	31.	C
2.	B	12.	A	22.	A	32.	A
3.	C	13.	B	23.	C	33.	D
4.	A	14.	C	24.	C	34.	A
5.	D	15.	A	25.	A	35.	B
6.	D	16.	D	26.	A	36.	B
7.	B	17.	B	27.	D	37.	A
8.	A	18.	B	28.	A	38.	B
9.	C	19.	C	29.	D	39.	C
10.	D	20.	C	30.	B	40.	A

PAPER 2 : ESSAY
PART A: [30marks]

Answer Question **1 [Compulsory]** and **any** other **one** question.

1. (a) Wash over-riped plantain and **peel**. Cut into pieces and put into **mortar**. **Pound** until free from **lumps**. Put pounded plantain into a **clean** bowl. Add **ground** onion, ginger, pepper and salt, mix in flour and leave for a while. Put cooking oil into a **deep pan**, place on fire until hot. Mould the **mixture** into the hot oil, turn Kakro when necessary. When well-cooked and **golden brown** remove from oil. Drain on a **kitchen paper** placed in a colander. Dish up and serve. [One mark each = 10marks]

(b) (i) Frying is a method of cooking food in hot oil or fat [1mark]

(ii) **Two reasons for draining oil from food after frying**
- To remove excess oil that clings to the food after frying
- To prevent the food from soaking the oil
- To prevent the food from being greasy
- Draining the oil helps to control the amount of fat intake and promotes healthier dietary choice
- It makes the food look more appealing [Any two for [2marks]

(iii) **Two rules or techniques of frying food**
- Heat oil well before frying
- Cut food into small pieces and not thick
- Do not overload the frying pan with food
- Avoid frequent turning of food
- Use clean oil with no water
- Drain oil well after frying [Any two for [2marks]

2. (a) (i) **Abrasive** is a material which when applied on the surfaces of wood or metal it wears the surface away [1mark]

(ii) **Two examples each of the following types of abrasives**
(α) **Commercial abrasive:** Vim, brasso, silvo, scouring sponge [2marks
(β) **Local abrasive:** Fine sand, sifeted wood ashes, powdered egg shell, ground sifted charcoal [2marks]

(b) (i) **A menu** is a list of prepared dishes with their prices [1mark]

(ii) **Two importance of planning a menu for school children**
- To save time, money and energy
- To regulate the expenditure on food products
- To provide a balanced meal for customers Any two for [2 marks]

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(c) (i) **Career opportunity** refers to the available options and openings that allow individuals to pursue their career goals and aspirations. [1mark]

(ii) **Two factors to consider when you want to start and run your own business**

- Plan your own business ideal
- Copying an existing business
- Buying an existing business,
- Modifying an existing business

Any two for [2marks]

(iii) **Two disadvantages of working for self**

- Difficult to raise capital
- Working may be longer and irregular sickness results in the business suffering
- Less job security
- Less freedom

Any two for [2marks]

(d) **Types of fuels used for each of the following stoves**

(i) Kerosene stove – kerosene
(ii) Pellet stove – wood pellets
(iii) Traditional three stone stove – firewood/crop residues
(iv) Microwave oven – electricity Half each [2marks]

3. (a)

- Measuring the product; you first have to take measurement of the product or item to be constructed.
- Marking out the measured parts
- Cutting out the marked-out parts
- Folding parts together to obtain the desire shape
- Joining and assembling the parts with an adhesive or fasters
- Surface finishing by applying paint or any type of finishes One mark each [6marks]

(b) **Differences between smart/modern materials and compliant/resistant materials** Any two for [2marks]

Smart/modern materials	Compliant/resistant materials
(i) Can cause material to change shape	Material shape is fixed
(ii) Can cause material to change colour	Material colour is permanent
(iii) They sense condition in their environment and respond to those conditions	They do not sense condition in their environment and cannot respond to any condition
(iv) It can stretch easily without breaking	It cannot be stretched
(v) It reflects light	It does not reflect light

(c) **Factors that lead to the collapse of the bridge**

- Poor selection and wrong use of materials
- A lack of understanding of the forces involved in a design
- Fatigue resulting from changes in the properties of a material over a period of time
- Excessive loads during construction
- Failure of a joint
- Poor design

Any three for [3marks]

(d) **Four importance of taking body measurements before sewing a garment**

- To save time and energy
- To make sewing simple since everything is correct.
- To know the amount of yards of fabrics to buy
- To save money
- For the dress to fit well
- For the garment/dress to look beautiful
- To prevent wastage of fabrics

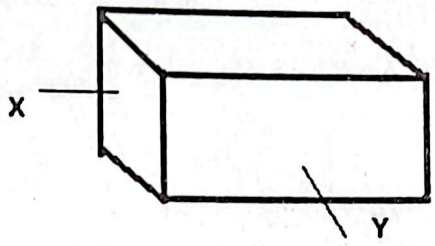
Any four for [4marks]

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PART B: [30 marks]

Answer Question 4 [Compulsory] and any other one question

4.



(a) **Three materials for moulding the block above**

- Sand
- Water
- Cement
- Lime

Any three for [3marks]

(b) **Four tools for moulding the block**

- Mould box
- Gauge box, head pan or wheel barrow
- Shovel or spade
- Pallet
- Tamping rod

Any four for [4marks]

(c) **Two reasons for using blocks to construct the KVIP and not bricks**

- Blocks are stronger than bricks
- Heavier
- Long lasting
- Durable

Any two for [4marks]

(d) **Parts lettered X and Y**

- X – Header face
- Y – Stretcher face

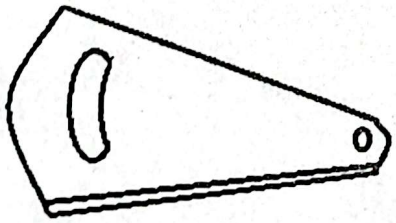
One mark each [2marks]

(e) **Two reasons for using sand in mortar mixture**

- To reduce cracks and shrinkages
- To prevent mortar from sticking on to the trowel or shovel
- To increase the volume and strength of mortar
- To make the mortar workable

Any two for [2marks]

5.



(a)

- Bottle opener
- Key holder [1mark]

(b) **Two uses of the figure above**

- For opening bottle tops
- For holding keys

Any two for [2marks]

(c) **Three tools for marking–out the metallic curve edge**

- Try square
- Chalk
- Sliding bevel
- Mortice gauge
- Scriber

Any three for [3marks]

(d) **Three tools for cutting the 3mm mild steel plate**

- All types of cold chisels eg. Half round chisel, diamond point chisel etc.
- Round and half round file

Any three for [3marks]

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(e) **Three techniques to be used when manufacturing the artifact above**

- Measuring
- Marking out
- Cutting/shaping
- Joining and assembling

Any three for [3marks]

(f) **Six items made from aluminium**

- Louvre frame
- Utensils
- Aircraft bodies
- Roofing sheets
- Ladders
- TV antenna

Any three for [3marks]

6. (a) (i) **Seasoning** is the removal of moisture content (water) from timber [1mark]

(ii) **Four reasons for seasoning timber**

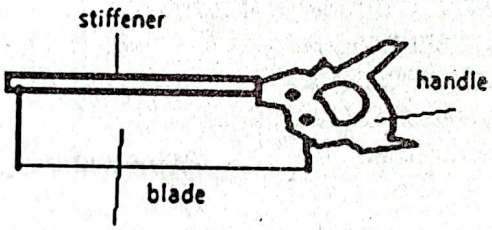
- To reduce weight
- To be workable
- To improve the strength and quality
- To prevent rusting of nails and screws
- To make the surface ready to receive finishes

Any four for [2marks]

(b) One mark each [5marks]

TIMBER	One property	Two uses
Wawa	Light in weight, workable, soft, easy to cut, not expensive, white to pale yellow	Cheap household furniture, boxes, packaging cases, form work construction, temporary structure.
Odum	Durable, oily, workable, Heavy in weight, dark brown in colour, has an attractive grain pattern	Bridge construction, truck and boat building, windows and door frame, for cabinet work

(c)



(i) **Name the tool shown above**

Tenon saw [1mark]

(ii) **Two ways to care for the blade**

- Sharpen the teeth regularly
- Oil metallic parts
- Hang it on racks after use

Any two for [2marks]

(i) **One purpose of the stiffener**

- It stiffens the blade
- It also keeps the blade straight

Any one for [1mark]

(ii) **Two materials that can be used for making the handle**

- Wood
- Plastic

Any two for [2marks]

(iii) **State one use of the tool above**

- For cutting tenon joints
- For sawing the shoulders of tenons
- It can also be used for cutting across the grains of wood

Any one for [1mark]

CamScanner