

054/2 & 1 MOCK 2
February 2025
CAREER
TECHNOLOGY
Essay and Objective
2 hours

2&1

Name:

Class:

Date:

Signature:

UNIVERSITY JUNIOR HIGH SCHOOL
UCC - CAPE COAST

MOCK 2 EXAMINATIONS

CAREER TECHNOLOGY

February 2025

(ESSAY AND OBJECTIVES 2 & 1)

2 hours

[100 marks]

Do **not** open this booklet until you are told to do so. While you are waiting, read and observe the following instructions.

Write your **name**, **class**, **date** and **signature** in **ink** in the spaces provided above.

This booklet consists of two papers. Paper **2** and Paper **1**. Answer Paper **2** which comes first, in the booklet.

Paper **2** will last 1 hour 15 minutes.

All diagrams or drawings should be in **pencil**. Any other answer should be written in ink.

All dimensions on the drawing are in centimetres. Credit will be given for clarity of expression and orderly presentation of material.

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 45 minutes.

PAPER 2
ESSAY



SECTION A
Part I
[30 marks]

Answer **question 1**(*compulsory*) in Part **I** and any other **one** question from Part **II**

1. (a) Make a simple table d'hôte menu of two three-course meals in your restaurant in the space below. Marks will be awarded for creativity and presentation.

(10 marks)

- (b) Identify the following tools and state their function in the sewing lab.

| TOOL | NAME | FUNCTION |
|---|------|----------|
|  | | |
|  | | |

(5 marks)

PART TWO

Answer any **one** of the following

2. (a) (i) Define the term deforestation.
-
-
- (1 mark)
- (ii) Explain how urbanisation leads to deforestation.
-
-
-
-
- (3 marks)
- (iii) List any **two** measures that can be taken to prevent deforestation in Ghana.
-
-
-
- (2 marks)
- (b) (i) Define the term menu.
-
-
-
- (1 mark)
- (ii) What is the sequence of a menu?
-
-
-
-
-
-
-
- (3 marks)

(iii) Define the term dessert

.....

.....

.....

(1 mark)

(iv) Briefly explain the **two** types of dessert.

.....

.....

.....

.....

.....

(4 marks)

3. (a) Define the following terms as used in meal planning.

(i) Dish

.....

.....

.....

(ii) Course meal

.....

.....

.....

(2 marks)

(iii) What is a meal?

.....

.....

.....

(1 mark)

(iv) Outline the parts of a meal with an example each

.....

.....

.....

.....

.....

(3 marks)

(v) What is a static menu?

.....

.....

.....

(2 marks)

(vi) State the difference between an a la carte and a table d'hote menu.

.....

.....

.....

.....

.....

.....

(3 marks)

(b) (i) Define the term desertification.

.....

.....

.....

(1 mark)

(ii) Identify which of the following statements below is true and explain the reason for your answer

Desertification leads to deforestation

Deforestation leads to desertification

.....

.....

.....

.....

.....

.....

(3 marks)

SECTION B

[30 marks]

Part I

Answer **question 4 (compulsory)** in Part I and any other **one** question from Part II

4. (a) Certain artefacts operate well with mechanisms being their main components. Explain the main principles of operation of the following mechanisms.

- (i) Chain and sprocket

.....
.

- (ii) Gear system

.....
.

- (iii) Screw mechanism

.....
.

- (iv) Cam and follower

.....
.

6 marks

- (b) (i) Differentiate between sole-proprietorship business and partnership business.

.....
.....
.....
.....
.....

4 marks

- (ii) Ms. Eleanor wants to start-up a small-scale business. State **four** of the resources that she needs to consider for the smooth running of the business.

.....
.....
.....
.....

2 marks

- (c) Work place innovation requires the use of technology to bring about global competition. List **three** technological changes that can be introduced at the workplace to improve productivity and efficiency.
- (i)
- (ii)
- (iii)

3 marks

Part II

Answer **only one** question from Part II

5. (a) Identify the specific mechanism used for each of the following artefact.

| | | | |
|--|--|---|--|
|  |  |  |  |
| | | | |

4 marks

- (b) Blessing made a wooden chair from resistant materials at the schools' workshop.

- (i) Name **one** other resistant material he could have used for the artefact.
..... 1 mark
- (ii) What **two** factors influenced him to select the resistant material in (b) (i) above
.....
.....
..... 2 marks
- (iii) Name any **two** tools that he can use to produce the artefact.
.....
..... 2 marks

(iv) State **two** appropriate materials that could be used to finish the artefact.

.....

.....

2 marks

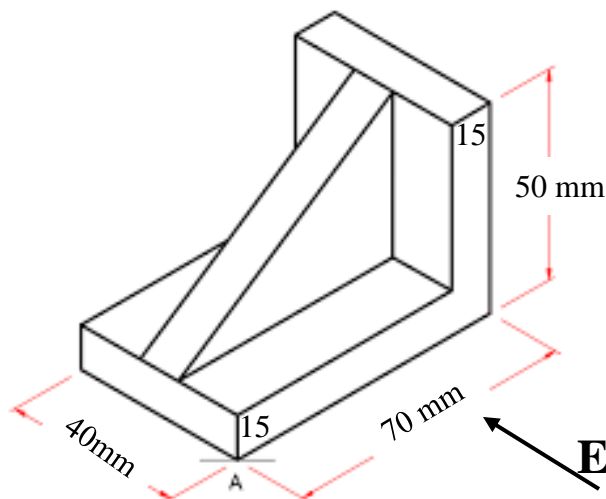
(c) Complete the table by grouping the following under **block work**, **metal work** and **wood work**.

Mortar, Ball pein hammer, Floats, White glue, Soldering bit, Spirit level, , G-Clamp, Spanner,

| Block Work | Metal Work | Wood Work |
|-------------------|-------------------|------------------|
| | | |
| | | |
| | | |
| | | |

4 marks

6. The figure below is a wooden joint to be designed and produced by Fiifi.



(a) Draw to full size the front elevation of the wooden block shown above in the direction of the arrow **E**.

3 marks

- (b) (i) Mention **four** Personal Protective Equipment used in the workshop.

.....

.....

.....

.....

2 marks

- (ii) State **one** reason for wearing the Personal Protective Equipment.

.....

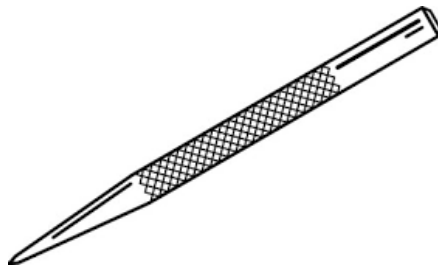
2 marks

- (c) (i) State the kind of force responsible for the following actions in the table below.

| Action of the force | Type of force |
|--|---------------|
| <u>Stretching</u> an object to pull apart | |
| <u>Twisting</u> force | |
| <u>Squeezing</u> or buckling a structural member | |
| <u>Slicing</u> through a structural member | |

4 marks

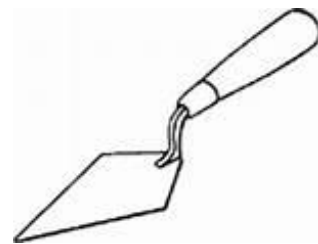
- (ii) Identify the following tools used in the workshops.



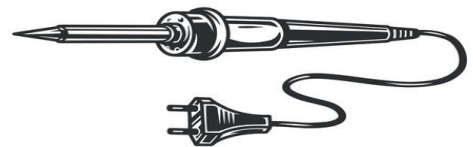
.....



.....



.....



.....

4 marks

END OF ESSAY PAPER

Each question is followed by four options lettered A to D. find the **correct** option for **each** question and shade in **pencil** on your answer sheet the space which bears the same letter as the option you have chosen. Give only **one** answer to **each** question.

Now answer the following questions.

1. A collection of moving parts working together in an artefact to perform a specific task is referred to as
A) Simple structure
B) Pulley system
C) mechanism
D) gear system
2. What is the main purpose of automation in the workplace?
A) To increase manual labour
B) To reduce efficiency
C) To increase productivity and accuracy
D) To eliminate all human workers
3. An orthographic view of a kitchen stool is to be drawn such that the plan will be seen above the front elevation. Which of the following projections would you use to achieve the task?
A) First Angle Orthographic Projection
B) Isometric Projection
C) Oblique Projection
D) Third Angle Orthographic Projection
4. What is the purpose of using multiple pulleys in a compound pulley system?
A) To increase the distance of movement
B) To reduce the effort required
C) To decrease the mechanical advantage
D) To decrease the speed of movement
5. Two friends, Aseda and Fiifii, want to start a small-scale sachet water producing business. Which of the following sources of capital is most appropriate for them?
A) Bank loans
B) Loans from potential customers
C) Personal savings
D) Savings and loans company
6. A metal worker intends to create a circular pattern on a metal sheet. The most appropriate tool for marking out circular shape is
A) a pair of compasses.
B) a pair of dividers.
C) marking gauge.
D) inside caliper.
7. A student is to produce an artefact using materials with consistent and predictable properties. Which type of material would be the best choice?
A) Cardboard
B) Plastic
C) Mild steel
D) Smart
8. In a gears train system, the output gear is known as the:
A) Control gear
B) Driver gear
C) Driven gear
D) Torque gear
9. A Career Technology student needs to construct a chair for use. It is important to take accurate measurement of the various parts before cutting to sizes in order to
A) avoid wastage of material.
B) improve beauty of the chair.
C) make it strong.
D) obtain a unique design.
10. A welder is preparing to weld two pieces of metal together. The most appropriate equipment to protect the eye is
A) contact lens.
B) face mask.
C) goggles.
D) spectacles.

11. Which of the following is an example of workplace automation?
 A) Typewriters
 B) Alarm systems
 C) Handwritten letters
 D) Manual cash registers
12. Which of these is NOT an advantage of automation?
 A) Increased efficiency
 B) Higher accuracy
 C) Reduced productivity
 D) Lower labour costs
13. Which of the listed mechanism consists of tooth wheel?
 I. Screw
 II. Gears
 III. Crank
 IV. Sprocket
 A) I, II and III
 B) II and III only
 C) III and IV only
 D) I and IV only
14. Which of the following projections shows views in two-dimensions?
 A) Isometric
 B) Oblique
 C) Orthographic
 D) Perspective
15. To manage business effectively, owners must follow orderly certain processes which includes . . .
 A) Organising, planning, communication, controlling
 B) Planning, organizing, communication, controlling
 C) Planning, organizing, controlling communication
 D) Controlling, Planning, communication, organizing,
16. The following are examples of mechanism **except**:
 A) Gear system
 B) Cams and follower
 C) Chain System
 D) Pulley system
17. A common application of a **screw jack** is to:
 A) Lift heavy loads with minimal input force
 B) Increase rotational speed in mechanical systems
 C) Change the direction of motion in a mechanism
 D) Increase linear speed
18. Which of the following is a common application of a crank mechanism?
 A) Wind turbines
 B) Internal combustion engines
 C) Hydraulic presses
 D) Elevators
19. The choice of mechanism for a particular job depends on the factors below **except**
 A) The tools to fix the mechanism
 B) How to use the mechanism
 C) Cost of the mechanism
 D) Availability of the mechanism
20. Use **figure 1** to answer question 20.

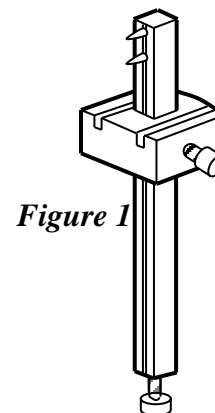


Figure 1

- The figure shows a
 A) Marking gauge
 B) Mortise gauge
 C) Sliding bevel
 D) Mallet

21. The thimble is used to protect which finger during hand stitching?
 - A) Thumb
 - B) Index finger
 - C) Middle finger
 - D) Ring finger
22. The needle used for lacing cords and casings in skirts is known as a
 - A) Bodkin
 - B) Crewel
 - C) Sharp
 - D) Stiletto
23. The tool used to measure fabric and make large measurements on paper is the
 - A) French curve
 - B) Ruler
 - C) Tape measure
 - D) Yard rule
24. To protect the tailors chalk from breaking or chipping,
 - A) Shade or draw using only horizontal strokes
 - B) Tie in a transparent rubber
 - C) Wet with water before use
 - D) Wrap several times in paper after use
25. To prevent pins from rusting,
 - A) Keep in talcum powder
 - B) Prevent from contact with water
 - C) Place back in its original box
 - D) Use a scourer to shine them regularly
26. Which of the following is not true about maintaining the sewing machine?
 - A) Oil only metallic moveable parts regularly
 - B) Cover with its case when not in use
 - C) Do not store in a damp area
 - D) Servicing is needed once every two years
27. A menu at restaurant is also known as,
 - A) Bill of fare
 - B) Food plan
 - C) Restaurant board
 - D) Food list
28. All the following can be done to prevent desertification in Ivory Coast **except**,
 - A) Afforestation
 - B) Legal mining practices
 - C) Ruralisation
 - D) Use of renewable energy
29. Which of the following is the main cause of urbanisation in Ghana?
 - A) Search for family and friends
 - B) Search for food
 - C) Search for fertile land
 - D) Search for social amenities
30. Deforestation leads to climate change. This means that deforestation,
 - A) Contributes to global warming as less CO² is absorbed by fewer trees
 - B) Deprives humans of food, medicine and shelter
 - C) Destroys plant and animal habitats leading to their extinction
 - D) Leads to reduced soil fertility, thus increased food insecurity
31. The process by which people move from rural areas to established cities is referred to as,
 - A) Modernisation
 - B) Migration
 - C) Ruralisation
 - D) Urbanisation
32. The planting of trees to create new forests is known as
 - A) Afforestation
 - B) Replanting
 - C) Reforestation
 - D) Tree planting exercise

33. All the following are major nutrient requirements of a pregnant woman **except**,
 A) Carbohydrates
 B) Folic acid
 C) Iron
 D) Vitamin k
34. A snack eaten around 11am while waiting for lunch is known as,
 A) Brunch
 B) Elevenses
 C) High tea
 D) Snack
35. All the following are true when preparing meals for an invalid **except**,
 A) Boiling and steaming are best cooking methods
 B) Follow doctor's instructions carefully
 C) Food must be one that digests slowly
 D) Ensure cleanliness of cooking utensils
36. It is important for toddlers to eat calcium rich foods because,
 A) It ensures strong teeth and bones
 B) It fights against diseases
 C) It enhances brain development
 D) It builds body tissue
37. The most appropriate lunch meal for a vegan in the following is,
 A) Sea food sauce with waakye and spaghetti
 B) Mackerel and agushie nkontonmire stew with yam ampesi
 C) Beans jollof rice with an egg and vegetable salad
 D) Spicy soya bean khebab with yam chips and green pepper sauce.
38. An invalid suffering from goitre needs food rich in,
 A) Carbohydrates
 B) Iron
 C) Iodine
 D) Protein
39. Avocado slices, fried yam chips, an ice cream sandwich and a bowl of groundnut soup are all classified as
 A) Appetizers
 B) Desserts
 C) Dishes
 D) Meals
40. As an appetizer, fruit juice is suitably served for;
 A) Breakfast
 B) Lunch
 C) Supper
 D) Dinner

END OF PAPER