

040/2&1 BECE
June 2025
CAREER
TECHNOLOGY 2&1
Essay and Objective
2 hours 10 minutes

2&1

Name.....

Index Number.....

THE WEST AFRICAN EXAMINATIONS COUNCIL
GHANA

Basic Education Certificate Examination

June 2025

CAREER TECHNOLOGY 2&1

2 hours 10 minutes

ESSAY AND OBJECTIVE

[100 MARKS]

Write your name and index number in ink in the spaces provided above and complete the title block on 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 Part B 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 20 minutes:

Part B will last 40 minutes after which the drawing sheet(s) will be collected;

Part A will last 40 minutes after which candidates will be asked to move on to Paper 1.

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.

(b) State **one** function **each** of the following ingredients to be used for the preparation of the rock burns:

- (i) eggs;
- (ii) flour;
- (iii) sugar.

[6 marks]

2. (a) Describe **one** of the techniques used to shape biscuit during its preparation.

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

[2 marks]

(b) Mrs. Boadu prepared soup with fish powder for her toddler.
State **one** specific function of the **major** nutrient in the soup.

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

[2 marks]

(c) In the sewing workshop, equipment and tools must be well arranged to prevent the occurrence of accidents. Describe any **one** of the accidents **likely** to occur in the workshop.

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

[3 marks]

Turn over

(d) Kojo's teacher took the class out to plant trees. State **two** guidelines the class will follow during the tree planting exercise.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4 marks]

(e) Mrs Owusu owns a small scale business. State **two** processes she would follow to manage the business successfully.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4 marks]

3 (a) Fifi's mother sent him to buy sewing materials. Outline **two** factors Fifi should consider when choosing the sewing materials.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4 marks]

(b) Ekuu made a petticoat and finished the hem using lace trimming. She is excited seeing the finished article. State **two** benefits of her choice of finishing.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4 marks]

(c) Azumah wants to buy fresh meat to prepare groundnut soup for his grandmother. State **two** factors he should consider when selecting the meat for the soup.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4 marks]

(d) The cotton fabric is the **best** choice for use as dish cloth and tea towels in the kitchen. Explain **one** reason why the cotton fabric is the **best** choice for kitchen cloths.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

[3 marks]

Turn over

PART B

[30 marks]

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

4. A student loved the idea of savings but always found it difficult to keep money without spending it. He was advised to get a money box as shown in Figure 1.

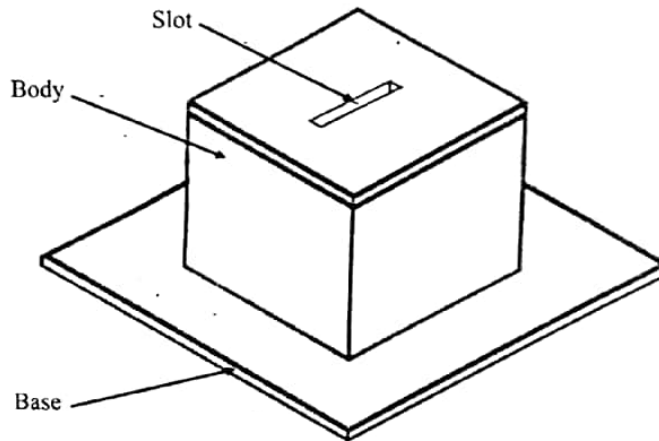


Figure 1

- (a) (i) List **two** different types of timber **suitable** for producing the money box.
 (ii) Name **two** suitable joints to be used for assembling the body to the base.
 (iii) List **two** different tools for cutting the slot. [6 marks]
- (b) Re-arrange the following procedures for making the money box in a sequential order:
 I. Mark out and cut the top hole;
 II. Assemble the workpieces by gluing;
 III. Finish off the artefact with glasspaper and apply lacquer;
 IV. Measure and mark out the workpieces;
 V. Cut the workpieces into sizes;
 VI. Prepare the joints. [6 marks]
- (c) (i) State **one** type of adhesive to be used to assemble the unit. [6 marks]
 (ii) List **two** types of fasteners that can be used to strengthen the joint. [3 marks]

5. (a) State **one** reason for carrying out **each** of the following workshop operations:
- taking accurate measurements and marking-out workpieces;
 - glasspapering a wooden artefact before applying a finish;
 - fixing a hacksaw blade with the teeth pointing away from the handle.
- [6 marks]
- (b) (i) Make a pictorial sketch of a *warrington hammer* and label any **two** parts on the tool sketched.
- (ii) State **one** use of the warrington hammer.
- [9 marks]
6. (a) Figure 2 shows the front view of an L-shaped wooden block. Draw the figure in single-point perspective below the eye level.

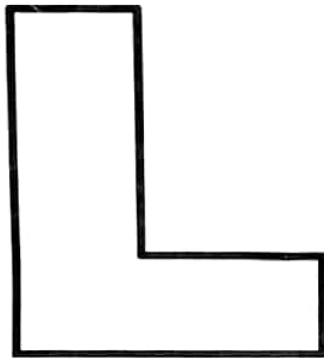


Figure 2

- [6 marks]
- (b) A graduate aspires to be a successful business manager in the near future. List **four** management processes the graduate should be familiar with in order to become a good manager in future.
- [4 marks]
- (c) (i) State **two** primary purposes of frame structures.
- (ii) List **three** examples of frame structures.

[5 marks]

END OF ESSAY TEST

Turn over

Answer **all** the questions.

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 answer space which bears the same letter as the option you have chosen. Give only **one** answer to **each** question. An example is given below.

Tools are oiled after use to

- A. ensure they remain accurate.
- B. prevent them from rusting.
- C. preserve the cutting edges.
- D. maintain their attractiveness.

The correct answer is **prevent them from rusting** which is lettered **B** and therefore answer space **B** would be shaded.

A B C D

Think carefully before you shade the answer spaces; erase completely **any** answer you wish to change.

Do all rough work in this question paper.

Now answer the following questions.

1. A **major** factor to consider when selecting a sewing machine for a cousin who is an apprentice dressmaker is
 - A. facilities available.
 - B. the skills of the user.
 - C. maintenance facilities available.
 - D. type of sewing work to be done.
2. After the family's meal, Ama washed up and dried the crockery with a kitchen cloth. The **suitable** cloth for drying crockery is
 - A. tea towel.
 - B. dish cloth.
 - C. muslin cloth.
 - D. cotton napkin.
3. The doctor diagnosed Kofi of iron deficiency after examining the laboratory results. Deficiency symptoms of iron include
 - A. improper functioning of nerves.
 - B. inability of blood to clot.
 - C. fatigue and loss of appetite.
 - D. loss of weight and muscle cramps.
4. The **main** reason why it is advisable to do proper clearing and washing up of utensils in the food laboratory after the days work is to
 - A. keep the family healthy.
 - B. increase the lifespan of equipment.
 - C. rid the food laboratory of pest.
 - D. prevent accidents in the food laboratory.
5. A **major** cause of cholera in **most** of the communities is due to
 - A. indiscriminate disposal of household refuse.
 - B. improper disposal of pollutants.
 - C. drinking water contaminated with pollutants.
 - D. indiscriminate open defecation.
6. Food nutrients needed for healthy body development but required in very minute quantity is
 - A. vitamins.
 - B. protein.
 - C. mineral elements.
 - D. fats and oils.

7. Amanda wants to make an opening on a garment she is sewing in her shop. After considering all types of openings, she decided to use the continuous wrap opening. Which of the following garments will be **most** suitable for the opening she has chosen?
- Children's clothes
 - Blouses for women
 - A pair of trousers
 - Children pair of slacks
8. To ensure that her children are safe from illnesses, a mother should encourage them to
- maintain good personal hygiene practices.
 - avoid eating outside the home.
 - maintain good food hygiene practices.
 - avoid eating with friends.
9. When sewing a shirt for Sam, in order to obtain his shoulder length, measure
- from base of neck to top of arm.
 - across the shoulder between sleeve seams.
 - across back and divide by two.
 - around the neck and divide by three.
10. The reason why cotton is most attractive fabric **suitable** for all occasions is its ability to
- resist creases and bleaches.
 - absorb different dyes easily.
 - withstand high temperatures.
 - be made into different textures.
11. The **best** tool Kofi can use to unpick unwanted stitches on a pair of shorts he bought from the supermarket is
- safety pin.
 - dressmakers' pin.
 - seam ripper.
 - stiletto.
12. Mary is sewing a petticoat for her sister and **cannot** afford lace trimming. The **most** appropriate decorative stitch she can use for the hem is
- French knots.
 - satin stitches.
 - lazy daisy stitches.
 - chain stitches.
13. The **best** cooking method that can easily be handled by a beginner in food preparation is
- steaming.
 - roasting.
 - boiling.
 - grilling.
14. A dish that can be served **both** as a snack and dessert is
- jam rolls.
 - pancake.
 - ice cream.
 - chocolate.
15. A form of business organization in which the business is owned and controlled by those who use its services is termed
- sole proprietorship.
 - cooperative.
 - limited liability.
 - partnership.
16. Which of the following conditions is favourable for the growth of micro-organisms in food?
- Food, moisture and warmth
 - Moisture, temperature and warmth
 - Warmth and air
 - Food and temperature
17. Uncooked ingredients needed to prepare variety of dishes are generally termed
- perishable foods.
 - convenient foods.
 - non-perishable foods.
 - food commodities.

18. An important safety rule to observe in the food laboratory is to
- avoid carrying tiny objects and tools in the pocket.
 - ensure efficient lighting and ventilation.
 - avoid long sleeve dresses when cooking.
 - cut away from the body when using cutting tools.
19. Whilst cereals, fats and oils provide energy to the body, fruits and vegetables provide
- growth.
 - satiety.
 - repair.
 - protection.
20. Select from the options below, a mechanical kitchen appliance used to make a pawpaw puree.
- Juicer
 - Blender
 - Mixer
 - Toaster
21. Students have been tasked to prepare metal workpieces for the production of artefacts. To obtain safe edges after cutting and filing, it is **appropriate** to
- brush off metal chips from workpieces.
 - knurl the sides of workpieces.
 - oil all sides of workpieces.
 - remove burrs from workpieces.
22. The specification for the construction of nursery school furniture demands that the furniture should be finished with oil paint. Which solvent is **most** appropriate for mixing oil paint for application?
- Kerosene
 - Thinner
 - Turpentine
 - Water
23. Career Technology students have been tasked to measure by volume materials for mixing concrete. The **most** appropriate measuring tool to use is
- gauge box.
 - mould box.
 - shovel.
 - wheel barrow.
24. Craftsmen working with plumbing fittings have been advised to use materials made of non-ferrous alloys because such materials have been developed to
- break under instant force.
 - bend well with little pressure.
 - have good resistance to corrosion.
 - melt at very low heat.
25. The **main** reason why children's furniture often become weak is due to
- broken tongue.
 - chairs not painted.
 - chairs not polished.
 - shrinkage of timber used.
26. The use of active flux such as zinc chloride in soldering metals is very necessary. However, it needs to be washed off immediately after joining the metals because it is
- difficult to clean.
 - highly indelible.
 - mild on metals.
 - very corrosive.
27. In a construction workshop, preventing accidents is a top priority to ensure a
- complex artefact.
 - portable artefact.
 - reliable evaluation.
 - safe environment.

28. One property of cardboard that makes it **suitable** for making greeting cards is its
- elasticity.
 - flexibility.
 - softness.
 - stiffness.

29. Smart materials respond to changes in temperature by altering their properties. Thermochromic materials change colour when exposed to
- dust.
 - heat.
 - light.
 - moisture.

Figure 1 shows an illustration of a structure. Use it to answer questions 30 and 31.

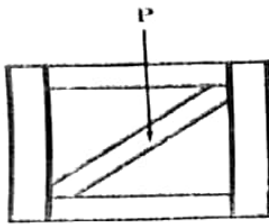


Figure 1

30. The structure helps to
- reduce weight.
 - increase stability.
 - make unit attractive.
 - make handling easier.
31. The member labelled **P** helps to create
- linkage.
 - strut.
 - tie.
 - triangulation.

32. Career Technology students working on their project work informed their class teacher that they were preparing the sequence of operation. The exact stage of the design process the students have reached is
- construction.
 - evaluation.
 - investigation.
 - specification.
33. A furniture designer is cutting along the grain of a mahogany board to make a door. The method of sawing used is
- cross-cutting.
 - felling.
 - ripping.
 - straight-cutting.
34. A technician working on a water-tight container needs to join two pieces of sheet metal. The **best** technique to use is
- bolting.
 - riveting.
 - screwing.
 - soldering.
35. A Career Technology teacher uses real life examples to explain three-dimensional figures. The **most** suitable object to use is
- football.
 - map.
 - paper.
 - poster.
36. In a career day programme organized to highlight the attributes of an entrepreneur, students learnt that entrepreneurs are
- introverts.
 - outgoing.
 - outspoken.
 - risk takers.

37. During an interview, one of the panelists asked Fuseina, whether as a woman, she can handle the physical demands of the job. This type of bias is referred to as
- A. cultural bias.
 - B. gender bias in recruitment.
 - C. stereotyping in recruitment.
 - D. unequal opportunities.
38. A group of students designed a water-filtering device for rural communities to purify water from nearby rivers. Before distributing the device, they need to test and evaluate its
- A. aesthetics.
 - B. cost.
 - C. functionality.
 - D. size.
39. A student followed a detailed operational sequence to make a functional wooden try-square. Which operation was performed **first**?
- A. Cutting and folding the workpiece
 - B. Marking and dimensioning the workpiece
 - C. Sanding and finishing the workpiece
 - D. Shaping the right-angle of the tool
40. Descriptive notes on possible solutions are **important** because they give
- A. clarity and explanations.
 - B. functionality and testing.
 - C. quick feedback.
 - D. visual representation.

END OF PAPER