

PAPER 2
ESSAY
PART A
[30 Marks]

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

1. Mr. and Mrs. Adonteng had a beautiful wedding on Saturday afternoon. The refreshment was scheduled for the following day. They assigned people to decorate the place for the refreshment and also set nice buffet tables for the programme.

(a) State three importance of setting a table for the programme [3marks]

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(b) Mention four equipment or materials for setting a table [4marks]

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(c) A part from buffet style service, list any two types of table setting you know [2marks]

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(d) Differentiate between a cover and covers [2marks]

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(e) State four factors to consider when planning meals [4marks]

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2.

(a) Explain mechanism

[2marks]

(b) List three types of mechanisms with one example of artifact that operates under the mechanisms listed

[6marks]

(c) List three steps involved in setting up a micro and small business enterprise

[3marks]

(d) Explain the following terms

[2marks]

(i) Micro-sized business enterprise

(ii) Medium-sized business enterprise

(e) Mention two ways to care for the sewing machine

[2marks]

3. (a) (i) Explain the term modern materials

[2marks]

(ii) Complete the table below

[3marks]

Industry	One product made from Smart and Modern Materials
Electrical / electronic industries	
Building industries	
Textile industries	

(b) Discuss ways of applying finishing to food products

[2marks]

(c) (i) Explain sanitation

[2marks]

(ii) Mention three causes of poor sanitation in the school

[3marks]

(d) (i) Explain stewing as a method of cooking

[1mark]

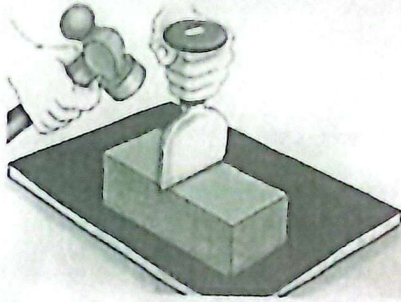
(ii) Mention two techniques/rules of stewing

[2marks]

PART B
[30 marks]

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

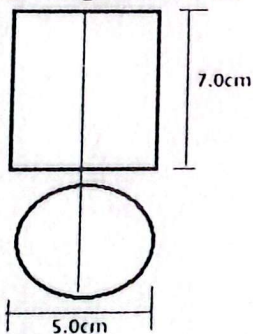
4. Use figure 1 shown below to answer the following questions



- (a) (i) Name two tools seen in the picture above [2marks]
(ii) What activity is done with the tools above? [1mark]
(iii) Mention three ways to care for the tools above [3marks]
- (b) State two reasons each why sand and cement are good for building. [4marks]
- (c) State the uses of the following tools [5marks]
(i) Brick hammer
(ii) Club hammer
(iii) Surveyors tape
(iv) Builders square
(v) Straight edge

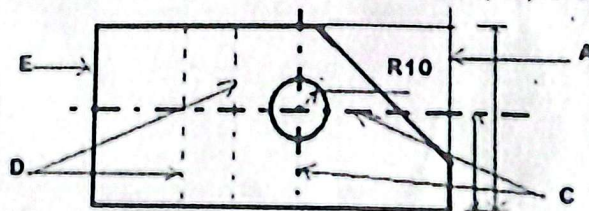
5. (a) (i) Explain surface development [2marks]
(ii) Mention three importance of developing surfaces of objects before manufacturing [3marks]

The figure below shows the front elevation and plan of a cylindrical prism



- (b) Draw to full size the following [10marks]
(i) The given front elevation and plan
(ii) The surface development

6. (a) (i) Explain investigation/research as used in design process [2marks]
(ii) Mention three methods of gathering/obtaining information when conducting research. [3marks]
(iii) Outline three importance of conducting investigation/research when making an artifact [3marks]
- (b) (i) Describe a line [1mark]
(ii) Identify the type of lines lettered A, C, D and E [4marks]



- (c) State one use of the lines lettered D and E [2marks]

CAREER TECHNOLOGY OBJECTIVE TEST

1. When tools and equipment are kept from the floor of the workshop it helps to.....
A. promote growth and development
B. prevent accident
C. save time and energy
D. stay healthy
2. The main challenge entrepreneurs encounter in setting up an enterprise is
A. difficulty in getting qualified workers
B. difficulty in getting land
C. difficulty in raising start-up capital
D. difficulty in persuading customers
3. Which of the following entrepreneurs uses bricks/blocks to make artefacts?
A. Mason
B. Carpenter
C. Fashion designer
D. Fitter
4. It is important to consider the nutritional needs of every member of the family because.....
A. every member needs nutrient
B. every member deserves nutrient
C. nutrient helps every member to grow
D. every member has different nutritional need
5. The unit should not be harmful to the user, this is referred to as
A. construction
B. aesthetic
C. situation
D. specification
6. How many possible idea(s) is/are selected?
A. One
B. Two
C. Three
D. Four
7. Which of the following shows how each component/part of the unit is assembled?
A. Exploded view
B. Working drawing
C. Detailed drawing
D. Cutting list
8. Which of the following statements describes a line?
A. A long drawing made with a pencil
B. A curved path made by drawing
C. A straight or curved path made by a moving point of a tool
D. A straight path made by learners
9. Long chain thick at ends is used for.....
A. dimension
B. showing hidden details
C. hatching
D. cutting section
10. drawing is a way of drawing three dimensional objects where one side of the object is projected at an angle of 45° to the horizontal line.
A. Isometric
B. Perspective
C. Oblique
D. Planometric
11. What type of force is imposed on a structure when people move from one end of the structure to another?
A. Dynamic force
B. Moving force
C. Compression force
D. Static force
12. Which of the following is not a type of structural failure?
A. Bending
B. Cracking
C. Split
D. Widening
13. The appropriate liquid for diluting emulsion paint is
A. water
B. thinner
C. lacquer
D. turpentine
14. Which of following finishes is transparent?
A. Oil paint
B. Wall paper
C. Vanish
D. 3 D floor paper
15. The choice of finish depends on.....
A. cost of the material
B. type of material
C. aesthetic of the material
D. none of the above
16. Which of the following is not a kitchen essential?
A. Dummy
B. Fridge
C. Slicer
D. Bottle opener
17. Mallet is a joining and assembling tool used in
A. block work
B. sewing
C. wood work
D. food laboratory
18. Measures that are followed to ensure safety of food from production to consumption is referred to as.....
A. consumption safety
B. food hygiene
C. kitchen safety
D. food safety
19. It is necessary to bath at least twice a day because.....
A. it makes the body nice
B. it is the best
C. it makes you sleep comfortably
D. it frees the body from disease causing germs
20. Why is it important to wear hand gloves when taking hot saucepan from fire?
A. To make the hand free to move
B. To prevent the saucepan from falling
C. To prevent hand burn
D. To hold the saucepan well
21. Body odour is referred to as
A. unpleasant smell of a person's body
B. a person's body smell
C. pleasant smell of a person's body
D. unpleasant appearance of a person

22. Which of these can prevent a person administering first aid from contaminating a wound?
 A. Bandage C. Disposable gloves
 B. Safety pins D. Nose mask
23. All the following are effects of desertification except
 A. flooding C. shortage of water
 B. climate change D. bush burning
24. What is the best way to manage plastic waste?
 A. It should be buried in the ground
 B. It should be burnt
 C. It should be dumped at a landfill site
 D. It should be recycled
25. Boxes are made of cardboard because
 A. cardboard is light in weight
 B. cardboard can easily be folded
 C. cardboard is durable
 D. cardboard can easily be stretched
26. Which of the following is a physical property of resistant materials?
 A. Density C. Strength
 B. Hardness D. Malleability
27. Which of the building materials below can withstand all weather conditions?
 A. Clay C. Stone
 B. Cement D. Laterite
28. Materials that sense and change their physical properties in response to environmental conditions such as light and temperature are referred to as
 A. modern materials
 B. composite materials
 C. smart materials
 D. resistant materials
29. It is important to eat fruits and vegetables because.....
 A. they provide the body with heat and energy
 B. they protect the body against diseases
 C. they prevent weight loss
 D. they regulate the body temperature
30. It is important to slightly bend the elbow when measuring sleeve length to.....
 A. allow for extra ease
 B. lengthen the sleeve
 C. shorten the sleeve
 D. make it easier to sew
31. What is the appropriate way of releasing tape from its case when measuring wood?
 A. Pull the tape with your hand
 B. Press the release button and the tape will come out automatically
 C. Press the release button and take the measurement
 D. Press the release button, hook the workpiece and pull the tape
32. What is the best way to wash greasy aluminium kitchen essentials?
 A. Wash with cold water and vim
 B. Wash with steel wool and soap
 C. Steep in hot soapy water and wash with scouring pad
 D. Clean with rag
33. Which of the following finishing methods require bias?
 A. Hemming C. Pinking
 B. Binding D. Fringing
34. A force that pulls structural members apart in opposite direction is referred to as
 A. shear force
 B. tension force
 C. compression force
 D. torsion force
35. A 3D object with similar top and bottom is referred to as
 A. prism C. polygon
 B. quadrilateral D. pyramid
36. Which of the following seams is inconspicuous?
 A. French seam
 B. Machine fell seam
 C. Run and fell seam
 D. Flat fell seam
37. Creating your own business starts with
 A. generating a business idea
 B. registering your business
 C. making a structure to accommodate the business
 D. saving some amount of money
38. When an individual establishes a business enterprise and manages it according to his/her style, he/she is said to be
 A. working for self
 B. working for other
 C. working for government
 D. none of the above
39. is a type of menu that offers the same dishes throughout the year.
 A. A La carte
 B. Table D'hote
 C. School menu
 D. Static menu
40. Which of the following statements about third angle projection is true?
 A. The plan and front view are aligned horizontally
 B. The end view and front view are aligned vertically
 C. The front view is above the plan
 D. The plan is above the front view

**MARKING SCHEME: CAREER TECHNOLOGY
OBJECTIVE TEST**

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

**PAPER 2 : ESSAY
PART A: [30marks]**

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

1. (a) **Three importance of setting a table for the programme**
 - Table setting makes eating more enjoyable and pleasant
 - A well laid table stimulates appetite
 - It makes the eating place attractive / creates a welcoming environment
 - It brings out the skill of the caterer

Any three for [3marks]
 - (b) **Four equipment or materials for setting a table**
 - Cutlery set
 - Crockery set
 - Flower for decoration
 - Table cloth
 - Napkins
 - Glass ware
 - Tumblers or drinking vessel

Any four for [4marks]
 - (c) **Two types of table setting**
 - Cafeteria service
 - Pre-plate style service

One mark each [2marks]
 - (d) A cover is the table space in front of a person's seat while covers are the number of customers being catered for/ served **[2 marks]**
 - (e) **Four factors to consider when planning meals**
 - Money available/family budget
 - Cooking facilities available
 - Nutritional needs of individuals
 - Conservative methods of cooking
 - Food in season
 - Capability/skills of the kitchen staff
 - Time of the day
 - Variety in meals

Any four [4marks]
2. (a) Mechanism is a collection of moving parts/system of parts working together in a machine/an artifact to perform a specific task. **[2 marks]**
 - (b) **Three types of mechanisms and one example**
 - **Pulley system** – crane, towing car, garage doors, flagpoles etc.
 - **Chain and sprocket** – bicycle, vehicles, motorcycle, elevators, escalators etc.

- Gear system – Guitar, Clock, Cassette player, Drills for boreholes
- Cams and follower mechanism – Sewing machine, Vehicles
- Screw mechanism – Car jerk, Milling machine, Bench vice
- Lever and linkages – Excavator, Hand riveter, Scissors lift,
- Crank mechanism – Vehicle, Locomotive train, Pumps, and Compressors.

One mark each [6marks]

(c) **Three steps involved in setting up a micro and small business enterprise**

- Develop a business plan
- Get tax identification number (TIN)
- Register business at Registrar General's Department
- Open a business bank account
- Apply for business operation permit from the metropolitan / municipal / district assembly
- Register for social security

Any three for [3marks]

- (d) (i) **Micro-sized business enterprise** – It is a business with a capital of up to 10,000 with a work force of one to five and uses simple technology
- (ii) **Medium-sized business enterprise** – It is a business with a capital of more than 100,000 with a work force of 30 plus and uses intermediate technology **[2 marks]**

(e) **Two ways to care for the sewing machine**

- Regular oiling
- Cleaning regularly
- Covering when not in use
- Repairing faulty parts immediately
- Keeping it at a safe place and away from water

Any two for [2marks]

3. (a) (i) Modern materials are materials that have developed through the invention of new or improved processes. **[2 marks]**

(ii) **One mark each [3marks]**

Industry	One product made from smart and modern materials
• Electrical / electronic industries	Organic light emitting diode, micro LEDs, motion control gels etc.
• Building industries	Light transmitting concrete, lens in glass of window etc.
• Textile industries	Sportswear and socks, bulletproof vest

(b) **Ways of applying finishing to food products**

Food can be finished using garnishes. Choose garnishes of different colours and flavours that complement the food to be garnished. Use carrot, green pepper and tomatoes to garnish pale foods and it also adds flavour and decorative colour. **[2marks]**

- (c) (i) Sanitation refers to the conditions relating to public health, especially the provision of clean drinking water and adequate sewage disposal **[2 marks]**

(ii) **Three causes of poor sanitation in the school**

- Littering around

- Poor disposal of waste
- Indiscriminate/open defecation
- Lack of facilities
- Unsafe drinking water

Any three for [3marks]

(d) (i) Stewing is a slow and long method of cooking food in a small amount of required liquid in a covered pan. [1 mark]

(ii) Two techniques/rules of stewing

- Use just enough oil to avoid oil stew
- Cut food into tiny pieces to allow it soften quicker
- Use a tight fitting lid saucepan to retain flavour/steam
- Keep fire low when food reaches boiling point

Any two for [2marks]

PART B: [30 marks]

Answer Question 4 [Compulsory] and any other one question

4. (a) (i) Two tools seen in the picture

- Bolster
- Ball pein hammer/club hammer

One mark each [2marks]

(ii) Activity done with the tools above?

Cutting of block / brick into sizes

[1mark]

(iii) Three ways to care for the tools above

- Use for the right job
- Do not use bolster with mushroom heads
- Hammer heads should be well fitted into the handle
- Keep tools at a safe place after work

Any three for [3marks]

(b) Two reasons each why sand and cement are good for building
Sand

- It reduces cracks and shrinkages in mortar
- It increases the volume and strength of mortar
- It prevents mortar from sticking onto the trowel or shovel
- It makes mortar and concrete workable

One mark each [4marks]

Cement

- It has a greater strength
- It can withstand any weather condition when used in mortar and concrete
- It lasts longer when used in mortar and concrete
- Workable
- Durable

(c) Uses of the tools

- (i) Brick hammer – For cutting bricks and blocks
- (ii) Club hammer – Used with the bolster or cold chisels to cut block/bricks and metals
- (iii) Surveyors tape – For measuring distances on the ground
- (iv) Builders square – For checking the corners of a wall
- (v) Straight edge – For checking alignment of walls

[5 marks]

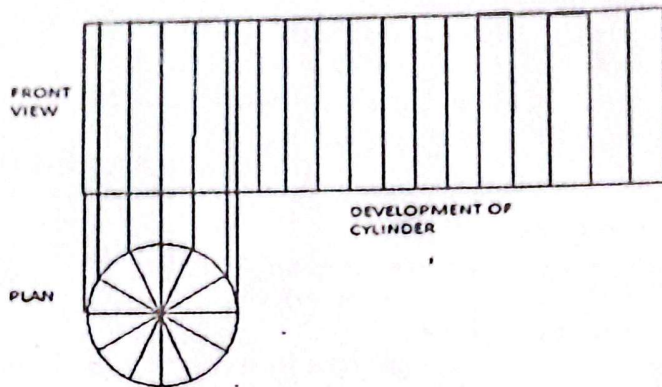
5. (a) (i) Surface development is the spreading out surfaces of a solid to see the true or the actual shape [2 marks]

- (ii) **Three importance of developing a surface**

- For easier duplication
- Minimizes waste of materials
- Saves time spent on production
- For accuracy

Any three for [3marks]

(b)



[10 marks]

6. (a) (i) Investigation means finding out more information about the problem and seeking various ways in which the problem may be solved. [2 marks]

- (ii) **Three methods of gathering/obtaining information**

- Interview
- Visiting
- Questionnaire
- Observation
- Literature review
- Market survey

Any three for [3marks]

- (iii) **Three importance of conducting investigation / research**

- To design an artifact to suit the very purpose
- To save time and energy
- To understand the challenges involved in making the artifact
- To have clearer picture of the artifact
- To be able to know the appropriate materials suitable for a specific artefact

Any three for [3marks]

- (b) (i) • A line is a continuous mark connecting two points
• A line is a path created by a moving point of a tool [1mark]

- (ii) **Type of lines lettered A, C, D and E**

- A – thin continuous line
- C – center line
- D – short dash line
- E – thick continuous line

One mark each [4 marks]

- (c) **One use of the lines lettered D and E**

- D – short dashes are used to show hidden details of object
- E – thick continuous line is used to show visible out lines of objects

One mark each [2 marks]