

2013 Basic Design And Technology (Home Economics) – Paper One

1. Which of the stitches can be used to hold down a hem decoratively?

- A. Basting
- B. Hemming
- C. Herringbone
- D. Overcasting

2. The advantage of buying food in bulk is that it

- A. becomes abundant
- B. becomes cheaper
- C. is easier to choose
- D. is easier to store

3. A balanced meal must contain

- A. food from each food group
- B. little fat and oil only
- C. protective foods only
- D. protein foods only

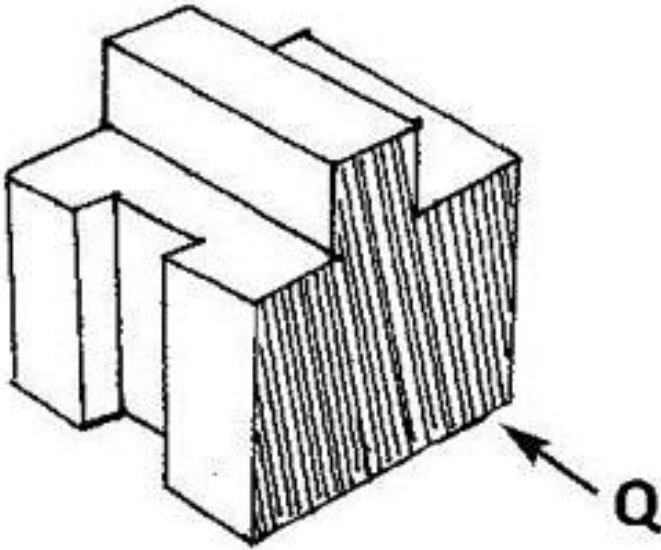
4. Drawing and painting are grouped under

- A. landscape
- B. still life
- C. three-dimensional work
- D. two-dimensional work

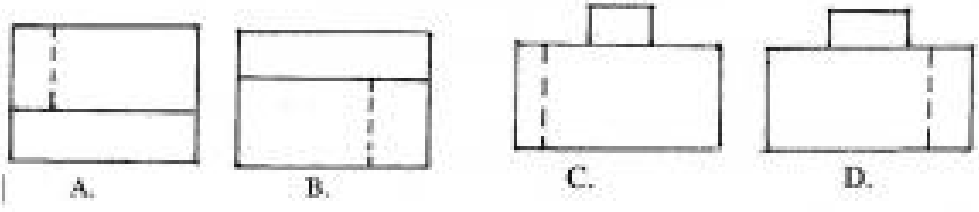
5. Identify the drawing tool from the following items

- A. Crayon
- B. Paper
- C. Palette
- D. Ruler

The figure below is a wooden block. Use it to answer Questions 6 and 7.



6. Which of the following represents the front view in the direction of arrow Q?



7. The plan is represented by



13. Select a neutral colour from the options below

- A. blue
- B. orange
- C. red
- D. white

14. The first step in designing is

- A. choosing the right materials
- B. colouring the sketches
- C. identifying the problem
- D. making sketch models

15. A dressmaker may also be skillful in

- I. embroidery making
- II. furnishing homes beautifully
- III. making beautiful paintings
- IV. selecting materials for upholstery

- A. I, II and III only
- B. I, II and IV only
- C. I, III and IV
- D. II, III and IV only

16. The basic items in a dressmaker's shop include

- A. embroidery machine and tracing wheel
- B. long mirror and buttonhole maker
- C. neatening machine and long meter rule
- D. sewing machine and measuring tape

17. The presser foot on the sewing machine

- A. controls the thread from the bobbin
- B. holds fabric in position
- C. makes stitches straight
- D. pushes fabric when stitching

18. A plain fabric is a better choice for a school uniform because it

- A. can be obtained in different colours
- B. can suit a variety of skin colour
- C. hardly fades
- D. is cheap

19. Cotton fabric are sulfurized to make them

- A. moth-resistant
- B. shrink resistant
- C. smooth
- D. strong

20. A suitable neatening for the side seam of a school short is

- A. edge stitching
- B. loop stitching
- C. overcasting
- D. pinking

21. A skirt hangs well on a figure if it is cut along the

- A. bias
- B. cross
- C. warp
- D. weft

22. Renovating involves

- A. fixing new fasteners
- B. inserting sleeves
- C. making new articles out of an old garment
- D. making patchwork out of old clothes

23. What must be done first before cleaning an electric cooker?

- A. close the oven
- B. pour water over it
- C. switch off the source of power
- D. wipe burners with wet rag

24. A well ventilated kitchen prevents

- A. accidents
- B. fatigue
- C. hardwork
- D. nausea

25. Which of the following pairs of food is for body building?

- A. cassava and beans
- B. cocoyam and plantain
- C. pawpaw and cabbage
- D. groundnut and cowpea

26. The most common nutrient in the diet of most Ghanaians is

- A. carbohydrate
- B. fat
- C. protein
- D. vitamin

27. Which of the following flour is good for springroll?

- A. cassava flour
- B. corn flour
- C. rice flour
- D. wheat flour

28. A syrup is made from

- A. sugar and fruit juice
- B. sugar and milk
- C. sugar and water
- D. sugar, milk and water

29. The basic ingredients for pancake are:

- A. flour, baking powder and milk
- B. flour, butter and baking powder
- C. flour, eggs and liquid
- D. flour, fat, milk and sugar.

30. The commonest method of preserving fish is by

- A. adding vinegar
- B. drying
- C. smoking
- D. adding salt

Paper One – Answer

1. C. Herringbone
2. B. becomes cheaper
3. A. food from each food group
4. D. two-dimensional work
5. A. Crayon
6. C.
8. C. takes decisions alone
9. C. situation
10. C. Temporary joints
11. B. 45°
12. C. positive to negative

13. D. white
14. C. identifying the problem
15. B. I, II and IV only
16. D. sewing machine and measuring tape
17. B. holds fabric in position
18. C. hardly fades
19. B. shrink resistant
20. C. overcasting
21. A. bias
22. C. making new articles out of an old garment
23. C. switch off the source of power
24. B. fatigue
25. D. groundnut and cowpea
26. A. carbohydrate
27. D. wheat flour
28. C. sugar and water
29. C. flour, eggs and liquid
30. C. smoking

2013 Basic Design And Technology (Home Economics) – Paper Two

1. (a) State two functions of protein in the body
- (b) List two ways by which patching can be done
- (c) (i) Explain a design brief
(ii) List three methods of carrying out design investigations.
(iii) State two factors to consider when selecting the best solution from the generated possible solutions in designing.
- (d) (i) What is the colour spectrum?
(ii) List the three primary colours
(iii) Explain secondary colours

SECTION B

2. (a) State the main nutrients in the following food items:
- (b) State seven points to be considered when planning a menu
- (c) Give three simple firefighting equipment found in a modern kitchen
- (d) List six fixed equipment found in a modern kitchen.
- (e) State seven ways to avoid burns and scalds in the kitchen
3. (a) List a suitable fabric for making each of the following articles
wedding dress, a boy's pair of shorts, scarf, handkerchief, tea towel
- (b) Fill in the blank spaces with the appropriate words provided below:
making, faults, tears, article, repairing, old, process.

Renovating is the of and mending such as breaks or in clothes and household articles. Remodelling is the process of making a new article out of an one.

- (c) State five reasons for remodeling articles
- (d) Define darning
- (e) List two types of fibres

4. (a) Explain scurvy
- (b) State four signs and symptoms of scurvy
- (c) List six food sources of vitamin C
- (d) Describe in four sentences how to clean a plain wooden chopping board
- (e) State four ways of caring for articles made from natural fibres

Paper Two – Answers

1. (a) It promotes growth and development.
It repairs worn out tissues in the body.
It provides energy in the absence of carbohydrates
It supports production of hormones and enzymes

(b) 1. By hand
2. By machine

(c) (i) A short statement that expresses the solution to a problem
Or
A statement of what the designer intends to design and make

(ii) By observing carefully
By visiting
By experimenting
By reading relevant literature
By interviewing
By surfing the internet

(iii) Its function / effectiveness
Its physical appearance (Aesthetics)
Its cost of designing and making
Its safety and suitability
Its durability

(d) (i) The distribution of colours produced when white light is dispersed by a prism

(ii) The primary colours for
(α) pigment: red, yellow and blue
(β) light (additive): red, green and blue
(γ) light (subtractive): magenta, cyan and yellow

(iii) A colour resulting from the mixing of two primary colours in equal proportions

For pigment, the secondary colours are
Violet = (red + blue),
green = (yellow + blue) and
orange = (red + yellow)

For light (additive), the secondary colours are
Yellow = (green + red)
Cyan = (green + blue)
Magenta = (red + blue)

For light (subtractive), the secondary colours are:
Red = (yellow + magenta)
Green = (yellow + cyan)
Blue = (magenta + cyan)

2. (a)

(b) The nutritional needs of the consumers
The time available for food preparation
The time of the day (for consumption of meal)
The food items available
The money available for food preparation
The cooking equipment available
The number of consumers
The number of courses
The occasion
The type of customers (their preferences)

(c) A bucket full of sand
A fire extinguisher
A fire blanket
Fire extinguishing ball

(d) List six fixed equipment found in a modern kitchen
Cabinet
Sink
Freezer
Cooker
Fryers
Working tables
Shelves

(e) Lift lid of saucepan towards you
Handles of saucepans should be turned away from traffic.
Use dry cloth to handle or hold hot pots or pans.
For deep frying, saucepan should not be more than half full of oil.
Hot liquids should not be lifted around.
Cover kettle before pouring liquid through the spout.
When frying, place food gently into hot oil.
Gas cylinders must be turned off immediately after use.
Use oven gloves and pot holders to hold hot trays and pans
Wear protective clothing which fits well to avoid catching fire.

3. (a) List a suitable fabric for making each of the following articles
wedding dress, a boy's pair of shorts, scarf, handkerchief, tea towel

(b) Fill in the blank spaces with the appropriate words provided below:
making, faults, tears, article, repairing, old, process.

Renovating is the process of repairing and mending faults such as breaks or tears in clothes and household articles.

Remodelling is the process of making a new article out of an old one.

(c) To save money.

To avoid wastage.

To make good use of leisure time.

To prolong the lifespan of the article.

To show creativity.

To earn more money

To make the article become more useful (to use the article for other purposes)

(d) It is the act of repairing torn garment or article by weaving thread into the torn portion of the garment or article.

(e) Natural fibre.

Artificial / Synthetic (Man-made) fibre

4. (a) Explain scurvy

It is a disease caused by lack of vitamin C

(b) Swollen and/or Bleeding gums

Pains in the joints.

Wounds heal slowly or not at all

Loss of appetite

Fatigue (feeling tired and weak)

Skin disorders

(c) Baobab fruit

Orange

Tangerine

Lemon

Lime

Tomato

Grapefruit

Strawberry

Pineapple

Green leafy vegetables (eg, Kontomire)

(d) Apply warm water and detergent on the surface (Salt and lime/lemon can also be used)

Scrub the surface along the grain direction using a bench scraper / palate knife / brush

Rinse the surface with clean water.

Dry in a well-ventilated place

(e) Wash white articles separately from coloured ones.

Wash with warm water.

Wash with mild detergent or soap to prevent fading

Rinse thoroughly with clean water

Read and follow instructions on label

Dry and store in a cool dry place

Remove stains using a colour-safe stain remover.