# BASIC DESIGN AND TECHNOLOGY (BDT) HOME ECONOMICS PAPER 2

#### 1. **GENERAL COMMENTS**

The standard of the paper compared favourably with that of last year. The paper was within the candidates' scope and the questions were based on topics in the syllabus.

Candidates' performance this year showed an improvement over that of last year.

#### 2. A SUMMARY OF CANDIDATES' STRENGTHS

- Questions were well answered by most candidates instead of one word answers given in the previous years, candidates wrote simple sentences.
- Candidates' handwriting have improved.
- Rubrics were well adhered to.
- Cancellation of work was neatly done by the few candidates who had to cancel unwanted work.
- The Clothing and Textiles aspect of the work was well handled by majority of candidates.

#### 3(a) A SUMMARY OF CANDIDATES' WEAKNESSES

- Candidastes' ability to spell simple words was very poor e.g. 'bule' for blue, 'contton', 'coting' for cotton. 'Vitamie' for vitamins, 'Nalong' for nylon 'won/werm,worm' for worn.
- Candidates' knowledge of basic nutrition is very poor.
- From answers of most candidates, they did not know the difference between fixed equipment and moveable equipment.

#### (b) SUGGESTED REMEDY FOR THE WEAKNESSES

- To improve spellings, students should be encouraged to do more reading by both teachers and parents.
- Teachers must take few minutes of contact time to do spelling drills.
- Teachers must use the chalkboard effectively when teaching by writing new words as well as difficult to spell words on it.
- Basic nutrition should be thoroughly taught by teachers.
- Topics on equipment and textiles should also be properly handled by teachers.

#### 4. **DETAILED COMMENTS**

#### Question 1(a) State two functions of proteins in the body.

- Very few candidates had the question wrong by writing 'Building up worn out tissues; for function of body processes.
- Majority of candidates who had the correct answer knew only about the following:
  - For body building/growth.
  - To repair worn-out tissues.
  - To provide heat and energy.
- Very few candidates knew about the use of protein for production of enzymes and antibodies.
- For maintenance.

#### Some other correct answers are

- for fluid balance;
- for production of hormones.

#### (b) List two ways by which patching can be done.

Most candidates were confused about methods of making a patch and types of patches.

#### Wrong answers given by majority of candidates were

- print patch.
- calico patch.

#### Correct answer expected is

- Patching alone by hand using thread and needle.
- Patching done by using the sewing machine.

#### (c)(i) Explain a design brief.

Most candidates could not answer this question.

#### Some wrong answers

- A design brief is a short statement given to a design brief.
- Is the process of a situation being asked and designed and solved.
- It is a design using primary colours/fabric.
- It is using a patch to design.

#### Correct answer expected is

- A design brief is a short statement on what the designer intends to design and make/realise/manufacture/produce/ construct.

#### (c)(ii) List three methods of carrying out a design investigations.

- Majority of candidates had this question wrong.
- The few who had it right gave varied answers.

#### Some wrong answers by candidates

- Conclusion
- Evaluation
- Economics
- Invetigation
- Situation brief
- Fabric

#### Correct answers by candidates

- Observation - Interviewing/Interview

Experiments/Tests
 Brainstorming
 Taking pictures
 Questionnaire/Asking questions
 Visiting places/resource centres
 Reading books/Literature review

#### Other correct answers

- Participation
- Reading magazines
- Opinion polls
- Use of internet

## (iii) State <u>two</u> factors to consider when selecting the best solutions from the generated possible solution in designing.

Another poorly answered question by most candidates.
 The few who were able to answer this question gave varied answers.

#### Some wrong answers given by candidates

Investigation
 Solutions
 Patch
 Research
 Analysis
 Fabric

- Colours - Type of design.

#### Candidates' correct answers

- Economics/cost - Research - Material - Analysis - Type of material - Fabric

Cost of material
 Type of design.

#### Other correct answers

SpecificationErgonomicsWeakness

- Aesthetics (beauty)

#### (d)(i) What is the colour spectrum?

- Majority of candidates were able to get this question correct.

#### Correct answers

- Colours that reflect light when a beam of light is passed through a triangular glass prism.
- The rainbow colours.
- Band/compound/row of colour seen when light is passed through a prism.
- Candidates could have also listed the rainbow colours.

#### (ii) List the three primary colours of light.

- Most candidates included 'yellow' in the answers giving the impression that they read the question up to mean 'primary colours'.
- Very few had all the three correct answers.

#### Correct answers

- Red
- Blue
- Green

#### (iii) Explain secondary colours.

- Majority of candidates were able to answer the question correctly.
   The few who had this question wrong wrote "When two or more primary colours are mixed together or are combined, secondary colours are obtained.
- They are colours used at the secondary level.
- They are natural colours.

#### Correct answers

- Secondary colours are obtained by mixing any two primary colours.
- Red + Blue = Violet; Blue + Yellow = Green; Red + Yellow = Orange.

**Question 2:** A very popular question which was just satisfactorily answered by most Candidates.

#### (a) State the main nutrients in the following food items:

- (i) Orange
- (ii) Liver
- (iii) Soft bones
- (iv) Kontomire
- Some candidates either were confused or did not know the difference between the functional groups of food items and nutrients, therefore gave both as answers
  - e.g. cassava carbohydrate or energy giving food.
- Majority of candidates gave protein as the main nutrient of kontomire.

#### Some wrong answers given by candidates include

Orange - Vitamins; Vitamin A, E, Vitamin C.

Cassava - Protective food, carbohydrate, energy giving food.

Liver - Protein, Iron, Vitamin A, Calcium.

Soft bones - Protein, Calcium, energy giving foods.

Kontomire - Protein, carbohydrate, Protective food, body building

Vitamin A, Vitamin C.

Correct answers

Orange - Vitamin C
Cassava - Carbohydrate
Liver - Protein, Iron
Soft bones - Calcium

Kontomire - Vitamin C, Vitamin A.

#### Question 2(b) State seven points to be considered when planning a menu.

- This question was very well answered by majority of candidates. The answers were varied and include the following:.

- Consider the occasion for the meal.
- Time available.
- Time available for shopping/marketing and cooking.
- Type of customers/people.
- Time of day.
- Nutritional balance of diet.
- There should be no repetition of either flavour/colour/texture or ingredients
- Nutritional needs of the people being catered for/health status/age/sex/occupation of individuals.
- Religious beliefs/rules/taboos.
- Availability of cooking facilities.
- Skills of the cook/worker.
- Food in season.
- Type of establishment (school, worker's canteen etc.)
- Number of courses.
- Labour.

#### Question 2(c). Give three simple fire fighting equipment found in a modern kitchen.

- A very poorly answered question.

Majority of candidates gave answers on equipment while others listed carbon dioxide, water, fire tenders and fire alarm.

#### Some correct answers from candidates were

- Fire extinguisher.
- Bucket of sand/sand.
- Heavy blanket/blanket.

#### Ouestion 2(d). List six fixed equipment found in a modern kitchen.

- This question was not well answered. The impression given by candidates was that they did not know the difference between fixed equipment and moveable equipment as well as tools.

#### Some answers by candidates

- Drain - Spoons/forks/knife
- Tap/pipe - Microwave oven
- Saucepan - Deep fryer
- Blender - Boiler
- Sink - Heater
- Mortar and pestle - Plates

- Cup/glasses - Chopping board

TableCooker/coalpotLadlesCarboard

#### The correct answers include

- Cupboard
- Foodsafe
- Cooker/stove/kitchen range/oven
- Cabinet
- Table
- Deep freezer
- Sink
- Dish washer
- Refrigerator
- Water heater
- Washing machine
- Microwave oven.

#### Question 3(e) State seven ways to avoid burning and scalding in the kitchen.

A very poorly answered question by majority of candidates.

Most of the answers were on general precautions that must be taken in the kitchen.

#### Wrong answers given by candidates

- Wipe/mop floor when liquid/water pours on it.
- Wear gloves when working.
- Avoid putting ingredients or items on higher shelves.
- One should be careful.
- Obey safety instruction.
- Avoid sending petrol into the kitchen.
- Wear oven gloves when putting food in oven.
- Do not come into contact with steam.
- Do not touch hot pot with hands.
- Do not test hot food with hands.
- Wear protective clothing/apron when cooking.

#### Correct answers

- Do not use wet cloth to handle hot pot.
- Fill pan or pot half way when deep frying.
- Handles of hot pans should be turned away from traffic.

- Use oven gloves and pot holders in handling hot pans.
- Hot liquids should never be left on the floor.
- Avoid handling live or lighted charcoal with bare hands.
- Lift the lid of a hot pot towards you.
- Strike match before turning gas knob on.
- Hot items from the oven should be sprinkled with flour.
- Allow pressure cooker to cool before opening.
- Turn off gas cylinder after cooking.
- Wear protective clothing.
- Make sure all knobs off before lighting a match
- Turn off all knobs of plates of electric cooker.

Question 3.A very popular question which was well answered by most candidates.

### Question 3(a) List a suitable fabric for making <u>each</u> of the following articles:

wedding dress

a boy's pair of shorts

a scarf

a handkerchief

tea towel

A well answered question with few variations and few wrong answers.

#### Other correct answers include

wedding dress - organdie, lace, brocade, chiffon

a boy's pair of shorts - drill, tussore

a scarf - cotton

a handkerchief - polyester, linen

tea towel - linen

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

Renovation is the ...... and mending ..... articles.

Remodelling is the process of ...... a new ...... out of an ...... one.

Most candidates were able to fill in the blank spaces with the correct words. Very few candidates missed few words.

#### Expected answers

Renovation is the <u>process</u> of <u>repairing</u> and mending faults such as <u>breaks</u> or <u>tears</u> in clothes and household articles.

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

#### (c) State <u>five</u> reasons for remodelling articles.

A well answered question with variety of answers. Only few candidates added 'To make it/the article attractive.

#### Correct answers

- To make the articles useful again.
- To last longer/Prolong the life span of articles.
- To retain some of their original beauty.
- To save money/To cut down on cost.
- Helps one to make good use of leisure/free time.
- Makes one more creative and resourceful/To improve skills.
- To avoid waste.

#### (d) **Define darning.**

Most of the candidates who answered this question had it wrong.

The few who had it right replaced the 'repair-work with either process/act.

#### Candidates' wrong answer

- Darning is a place/hall where people/secondary school students/boys and girls sit to eat.
- Darning is a process/act of weaving threads into weakened/worn out portion/part of garments/articles.

#### Correct Definition

- Darning is a form of repairwork done by weaving threads into the weakened portion of articles.

#### (a) List thetwo types of fibres.

Majority of candidates were able to list the two types of fibres. The few who were not able to list the type wrote: cotton, silk, nylon, plant fibre, animal fibre, rayon.

#### Correct answer

- Natural fibres
- Man made/Artificial fibres

Question 4. This question was poorly answered by the few candidates who chose it.

#### Question 4(a) Explain scurvy.

- Majority of candidates knew that scurvy is a deficiency of a nutrient, but did not know the specific nutrient.

#### Candidates' wrong answers

- Scurvy is a disease caused by lack of vitamins.
- It is caused by lack of protein.
- It is a disease caused by not having vitamin B in the diet for a long time.

#### Correct answer

- Scurvy is a disease caused by lack of vitamin C.

#### (b) State <u>four</u> signs and symptons of scurvy.

- The signs and symptons of scurvy could not be stated by most of the candidates. The few candidates who were able to state the signs and symptoms were limited in their answers.

#### Some wrong answers by candidates

- kwashiorkor
- sores at the sides of the mouth
- not growing

#### Correct answers by candidates

- Tiredness/fatigue
- Bleeding gum
- Anaemia
- Loss of appetite
- Sore mouth/soreness of the mouth

#### Other correct answers

- Slow healing of wounds
- Tiredness due to anaemia
- Soreness of the skin
- Inability to fight diseases

#### (c) List six food sources of Vitamin C.

Very poorly answered question from most candidates.
 Candidates knew only about oranges and tomatoes.
 Very few candidates were able to list the correct food sources of Vitamin

#### Candidates' wrong answers

- Cassava - Yam - Plant<mark>ain - Mango</mark> - B<mark>anana - Pawp</mark>aw - Fish - <mark>Me</mark>at

#### Correct answers

Pineapple
 Tomatoes
 Grape fruit
 Green vegetables
 Lime

Orange
 Strawberry
 Sour sap
 Guava
 Grapes
 Blackcurrant
 Custard apple

#### (d) Describe in <u>four</u> sentences how to clean a plain wooden chopping board.

A very poorly answered question.

It seems candidates do not know what a chopping board is.

#### Some candidates' wrong answers

- It will use water to clean.
- It may use sour/suop/soap to clean.
- It may use net to clean

or

- Remove particles from it.
- Wash with soap/suop/soup.
- Dry/dry in the sun and put in cupboard.

#### Correct answer

- Scrub using hot/warm detergent water.
- Scrub along the grain.
- Rinse with clean water.
- Dry in a cool place.
- Stand on its side to prevent warping.

#### (e) State <u>four</u> ways of caring for articles made from natural fibres.

- Most candidates did not answer this question and the few who attempted it could not state the right answers well.

#### Candidates' wrong answers

- Wash regularly.
- Iron regularly
- Wash when dirty.
- Wash separately.
- Dry.

#### Correct answer

- Mend torn parts when necessary.
- Wash white articles separately.
- Read and obey all instructions on care label.
- Wash dark coloured articles separately.
- Wash in moderately hot water Rinse thoroughly.
- Dry white articles in the sun and coloured in the shade.
- Iron and store appropriately.