

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATION COUNCIL
DIPLOMA IN SECONDARY EDUCATION EXAMINATION**

752

HOME ECONOMICS

Time: 3 Hour.

ANSWERS

Year: 2018

Instructions

1. This paper has Section A, B and C with a total of Sixteen (16) questions.
2. Answer all questions from Section A and two (2) questions from Section B and C each.
3. Section A carries forty (40) marks and Section B and C carries thirty (30) marks each.
4. Mobile phones are not allowed inside the examination room.
5. Write your Examination Number on every page of your answer booklet.

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SECTION A (40 Marks)

Answer all questions from this section.

1. (a) Give the meaning of educational evaluation. (b) Explain briefly three importance of educational evaluation in Home Economics.

Educational evaluation is the process of systematically collecting, analyzing, and interpreting information to determine the value, effectiveness, or success of an educational program, method, or student's performance. It involves making value judgments about learning outcomes, teaching methods, and educational resources in order to inform decisions and improve future learning experiences.

One importance of educational evaluation in Home Economics is that it helps teachers determine whether the learning objectives of a lesson have been achieved. By assessing students' performance and comparing it with the intended outcomes, a teacher can confirm whether the knowledge and skills delivered were effectively understood by the learners.

Educational evaluation also plays a vital role in identifying strengths and weaknesses within the teaching and learning process. Through evaluations, teachers can recognize which areas students struggle with and which methods prove effective. This information enables adjustments in teaching techniques and strategies to improve the overall quality of education.

Moreover, educational evaluation provides valuable feedback for curriculum developers, policymakers, and education stakeholders. It highlights gaps in educational content and areas requiring revision or enhancement, ensuring that the curriculum remains relevant, practical, and aligned with societal needs, especially in vocational subjects like Home Economics.

2. (a) State two general rules for making darts. (b) Name four positions where darts can be sewn.

When making darts, one general rule is that the dart should taper smoothly from the widest part to the point. This ensures that the garment takes on a natural, flattering shape and prevents puckering or wrinkling at the dart's end, which would otherwise ruin the appearance of the finished product.

Another important rule is that darts must be accurately marked and sewn symmetrically on both sides of a garment. Accurate dart placement is crucial to achieve balanced fitting, especially in fitted garments like blouses and dresses, where uneven darts can distort the overall look and fit of the garment.

Darts can be sewn at the shoulder, where they help adjust excess fabric from the neckline to the bust area, improving the fit around the upper body. This is common in women's dresses and blouses.

They are also commonly placed under the arm, extending toward the bust point. This underarm dart allows for a snug and flattering fit around the chest without distorting the fabric's grainline.

Another position is at the waistline, both at the front and back of a garment. Waist darts help shape the garment to follow the body's natural curves, especially in dresses, blouses, and fitted jackets.

Elbow darts are sewn in sleeves, particularly in fitted jackets or blouses with long sleeves. These darts give ease and flexibility at the elbow joint, improving comfort and movement while maintaining a neat appearance.

3. (a) Name two types of sewing machines. (b) Give the function of each of the following parts of the sewing machine: (i) Stop motion screw, (ii) Tension control, (iii) Presser bar.

One type of sewing machine is the treadle sewing machine. This is a manually operated machine powered by a foot pedal, commonly used before the widespread availability of electric power. It requires continuous foot movement to rotate the balance wheel and operate the needle.

Another type is the electric sewing machine. This machine uses an electric motor to drive the needle and other parts of the machine, making sewing faster and requiring less physical effort. It is the most commonly used type in modern tailoring and garment industries.

The stop motion screw is a part of the sewing machine attached to the balance wheel. Its function is to stop the movement of the needle while allowing the balance wheel to turn freely when winding the bobbin. This enables safe bobbin winding without damaging the needle or the fabric.

The tension control is used to adjust the tightness or looseness of the upper thread. It ensures that the stitches formed are balanced, with neither the upper nor lower thread being too tight or too loose. Proper tension control prevents thread breakage and uneven stitching.

The presser bar is a vertical metal rod that holds the presser foot in position. Its function is to raise and lower the presser foot, which presses the fabric firmly against the feed dog while sewing, ensuring even fabric movement and consistent stitching.

4. (a) Differentiate measurement from test as used in Home Economics. (b) Explain briefly three things that can ensure high validity of a Home Economics test.

Measurement refers to the process of assigning numerical values to a learner's performance or ability using specific tools or instruments. In Home Economics, this could involve determining how well a student can prepare a balanced meal or sew a garment, with results expressed in marks, percentages, or scores.

On the other hand, a test is a specific instrument or tool used to assess a learner's knowledge, skills, or attitudes. In Home Economics, a test may consist of short-answer questions, practical assignments, or projects designed to measure how well students have understood a particular topic.

To ensure high validity of a Home Economics test, the test items must directly reflect the objectives of the topic taught. Every question should be based on the content covered in class, ensuring that the test measures what it is intended to measure.

Another important factor is ensuring that the test items cover an adequate and representative sample of the subject content. This means including questions from various subtopics to give a fair and balanced assessment of the learner's overall understanding.

The language used in the test must be clear, simple, and free of ambiguity. Test questions should be structured in a way that the meaning is obvious and easy for students to comprehend, preventing confusion and ensuring the test assesses knowledge, not language ability.

5. (a) Give the meaning of a breast milk substitute. (b) Outline three important things to observe when feeding babies the infant formula.

A breast milk substitute is any food specially manufactured to replace human breast milk, intended for feeding infants when breastfeeding is not possible, insufficient, or contraindicated. Common examples include infant formula, which is designed to provide similar nutrients as breast milk.

When feeding babies infant formula, it is essential to ensure that all feeding bottles, teats, and utensils are thoroughly washed and sterilized before each use. This prevents the risk of infections caused by bacteria that can multiply in leftover milk residues.

It is equally important to follow the manufacturer's instructions on how to prepare the formula. Accurate measurements of formula powder and water should be used to ensure the baby receives the correct concentration of nutrients necessary for healthy growth.

The formula should always be tested for temperature before feeding. It must be lukewarm — neither too hot nor too cold to avoid scalding the baby's mouth or causing discomfort, ensuring a safe and pleasant feeding experience.

6. Outline four importance of using teaching and learning materials in teaching Home Economics subject.

Teaching and learning materials help to simplify complex concepts, making them easier for students to understand. For example, a model of a balanced diet can visually demonstrate the composition of a healthy meal, which might be difficult to grasp through verbal explanation alone.

These materials also help to capture and maintain students' attention throughout the lesson. Visual aids, real objects, and practical demonstrations naturally attract interest, reducing boredom and increasing active participation in class.

They enhance the retention of knowledge. Learners tend to remember more of what they see, touch, and do compared to what they hear alone. Using tangible objects and visual aids improves memory by engaging multiple senses.

Teaching materials support practical skill development, which is especially important in a subject like Home Economics that involves hands-on activities such as cooking, sewing, and childcare. They allow students to practice and apply what they have learned in real or simulated situations.

7. (a) Define the term “family.” (b) Write down three things to observe in order to enhance family relationship.

A family is a basic social unit consisting of individuals related by blood, marriage, or adoption, who live together or maintain close social and emotional bonds while supporting each other materially, emotionally, and socially.

To enhance family relationships, it is important to promote open, honest, and regular communication among members. Effective communication reduces misunderstandings, fosters trust, and ensures that each person's feelings and opinions are valued.

Mutual respect and understanding should be observed in all interactions within the family. This involves appreciating each member's strengths, accepting their weaknesses, and avoiding harmful behaviors like insults, physical abuse, or unfair criticism.

Spending quality time together strengthens family bonds. Shared activities such as cooking, playing games, or attending events help to build fond memories, improve cooperation, and create a sense of unity and belonging.

8. Outline four functions of vitamin C.

Vitamin C boosts the immune system by supporting the production and function of white blood cells, which help the body fight infections and diseases.

It plays a crucial role in the formation of collagen, a structural protein that helps maintain healthy skin, blood vessels, bones, and connective tissues.

Vitamin C enhances the absorption of iron from plant-based foods in the digestive tract, reducing the risk of iron-deficiency anemia, especially in vulnerable groups like children and pregnant women.

It acts as an antioxidant, protecting body cells from damage caused by free radicals. This helps slow down aging, reduces the risk of chronic diseases, and promotes general health and wellbeing.

9. Explain three points to consider when planning meals for the invalid.

When planning meals for an invalid, it is important to ensure that the food is easy to digest. Soft, light, and easily digestible foods such as soups, porridge, and boiled vegetables prevent discomfort and promote quicker recovery.

The meals should be attractive and appetizing to tempt the patient's often poor appetite. Serving food that is colorful, well-presented, and varied in texture and flavor can encourage the invalid to eat, supporting proper nutrition.

The meals should be balanced, providing all essential nutrients including proteins for tissue repair, carbohydrates for energy, and vitamins and minerals for overall health. Special attention should be given to the invalid's medical condition and dietary restrictions.

10. (a) Give the meaning of the concept of undernutrition. (b) Describe two causes of rickets.

Undernutrition is a condition that occurs when a person's intake of energy and essential nutrients is insufficient to meet their body's needs for maintaining good health, growth, and development. It often results in weight loss, stunted growth in children, and increased susceptibility to diseases.

One cause of rickets is a deficiency of vitamin D in the diet. Vitamin D is essential for the absorption of calcium and phosphorus, which are critical for strong bone formation. Without adequate vitamin D, bones become soft and weak, leading to deformities.

Another cause is a lack of calcium in the diet. Calcium is the primary mineral needed for strong bones and teeth. A deficiency can impair bone development in children, leading to symptoms such as bowed legs, delayed growth, and dental problems.

SECTION B (30 Marks)

Answer two questions from this section.

Good — let's continue cleanly with **questions 11 to 16** from your previous Home Economics PDF, following your exact instructions: numbering the questions **11 to 16**, copying each question exactly as it appears, and writing each point in its own clear, separate, well-explained paragraph without numbering inside the answers.

11. Describe six methods of arranging fullness commonly used on garments.

Gathering is a method of arranging fullness by drawing together a length of fabric with stitches so that it fits into a smaller space. This creates a series of small, soft folds used in areas like sleeve heads, waistlines, or yokes, adding decoration and shape.

Darts are triangular folds of fabric stitched to a point and pressed to one side. They are used to shape a garment, especially around curves like the bust, waist, or hips, without adding bulk, giving a smooth and fitted appearance.

Pleats involve folding fabric back upon itself and securing it in place. The folds can be knife pleats, box pleats, or inverted pleats, used for decorative and functional purposes to allow movement while maintaining a neat, structured look.

Tucks are narrow, stitched folds of fabric made on the surface of a garment. They can be either decorative or functional, used to control fullness while adding style, especially on bodices, skirts, and children's dresses.

Shirring is a technique where two or more parallel rows of gathering stitches are made on a fabric. The threads are then drawn up to produce controlled gathers, often used in bodices or cuffs to add elasticity and decorative detail.

Elastic casing involves inserting a strip of elastic into a fabric casing. This method gathers the fabric when the elastic contracts, providing adjustable fullness and comfort in areas like waistbands, sleeve ends, and necklines.

12. Explain in detail six causes of food spoilage.

Microorganisms such as bacteria, molds, and yeasts are primary causes of food spoilage. These organisms break down food components, producing unpleasant odors, flavors, and textures, which make food unsafe and unappetizing to eat.

Enzyme activity within food itself can cause spoilage. Enzymes are natural proteins in food that continue to function after harvesting or slaughtering, leading to changes in color, flavor, and texture, such as fruit over-ripening and meat becoming slimy.

Air exposure contributes to spoilage through a process known as oxidation. Oxygen reacts with fats, leading to rancidity, and with fruits and vegetables, causing discoloration and nutrient loss, reducing the overall quality and shelf life of food.

Insects and pests like flies, weevils, and rodents contaminate food by consuming it or leaving behind droppings, eggs, and disease-causing microbes. This not only damages the food physically but also makes it unhygienic and dangerous for consumption.

Moisture promotes the growth of spoilage-causing microorganisms and encourages mold and bacterial development. Foods stored in damp conditions are especially prone to this type of spoilage, leading to foul odors, sliminess, and visible fungal growth.

Chemical reactions, especially in processed and preserved foods, can result in spoilage. These reactions may involve interactions between food components and packaging materials or environmental factors like light, leading to off-flavors, discoloration, and loss of quality.

13. Explain four factors that contributed to teenage pregnancies and give four problems which an adolescent boy faces.

Poverty is a major factor contributing to teenage pregnancies. In poor households, girls may be forced into early sexual relationships in exchange for financial support, leading to unintended pregnancies at a young age.

Lack of proper sexual and reproductive health education exposes adolescents to risky behaviors. Without accurate knowledge about contraception and consequences of early sexual activity, young girls are vulnerable to unintended pregnancies.

Peer pressure encourages teenagers to engage in early sexual activity to gain acceptance or approval within their social circles. This behavior often occurs without proper protection, increasing the risk of pregnancy.

Cultural practices and traditional beliefs in some communities promote early marriages and childbearing, leading to teenage pregnancies, as girls are married off before reaching physical and emotional maturity.

Adolescent boys often face pressure to prove their masculinity through risky behavior such as early sexual activity, alcohol consumption, or violence, which can negatively impact their health and future.

Peer influence pushes boys into activities like smoking, drug use, or crime in an attempt to fit in or assert dominance, risking their well-being and leading to possible legal consequences.

Educational challenges like poor academic performance or dropping out of school due to financial constraints or indiscipline result in limited career opportunities, exposing boys to a cycle of poverty and risky lifestyles.

Emotional and psychological issues such as identity crises, stress, and anxiety about the future are common among adolescent boys. These problems affect their mental health, leading to poor decision-making and behavioral issues.

SECTION C (30 Marks)

Answer two questions from this section.

14. Support the statement which states that “future’s wheel is a strategy suitable to illustrate the complexity of factors that contribute to a specific situation,” by (i) explaining five procedures of using future’s wheel when conducting a lesson on the cause of malnutrition and (ii) using future’s wheel teaching strategy to illustrate basic, underlying and immediate causes of malnutrition and their effects.

When using the future’s wheel strategy to conduct a lesson on malnutrition, the first procedure is to identify the central issue, which in this case is malnutrition. This is placed at the center of a diagram or chart to serve as the focal point for discussion.

Next, learners brainstorm direct causes of malnutrition and write them in a circular formation around the central issue. These are immediate factors such as poor diet, disease, or food insecurity.

The third step involves identifying secondary factors that lead to the immediate causes. These are underlying causes like poverty, lack of health services, and low education levels, which contribute indirectly to the occurrence of malnutrition.

The fourth procedure is to analyze the effects of malnutrition, placing them around the diagram. Effects might include stunted growth, reduced school performance, or increased disease susceptibility.

Finally, learners suggest possible solutions or interventions to address both direct and indirect causes. These could include improving healthcare access, enhancing nutrition education, or introducing food support programs.

Using the future's wheel, basic causes of malnutrition can be placed at the outer circle of the diagram. These include socio-economic inequalities, cultural practices, and political instability, which affect entire communities or countries.

Underlying causes are placed in the next inner circle and may include factors like poor maternal care, inadequate sanitation, and household poverty, which directly affect access to food and health services.

Immediate causes are placed closest to the center, directly surrounding malnutrition. These include insufficient dietary intake and disease, which immediately result in nutritional deficiencies and health problems.

Effects of malnutrition such as stunting, low productivity, and increased infant mortality rates are connected outward from these causes, showing the chain reaction and interconnectedness of these factors within the future's wheel diagram.

15. (a) Analyse how you would effectively plan and organize a field visit by giving nine points. (b) Explain three advantages and disadvantages of field visit.

Effective planning for a field visit starts with defining the objectives and purpose of the trip. This clarifies the specific outcomes expected and guides the selection of a suitable location relevant to the lesson content.

The next step involves selecting the venue or site for the field visit based on its educational value, accessibility, and safety for students. The site must align with the objectives identified earlier.

It is important to seek permission from school authorities and parents, providing them with details about the visit, including its purpose, date, venue, and expected activities, ensuring transparency and consent.

Budget preparation is necessary to determine costs for transport, meals, entry fees, and other expenses. Proper financial planning ensures that the trip is affordable and well-managed.

Arrangements for transport should be made early to avoid last-minute inconveniences. The selected transport should be safe, reliable, and suitable for the number of participants.

A risk assessment should be conducted to identify potential hazards at the site and on the way. Measures to address risks should be put in place, including first aid preparations and emergency contacts.

Students should be briefed in advance about the objectives, expected behavior, dress code, and items to carry during the trip. This ensures discipline and readiness on the day of the visit.

A program or timetable should be drawn up, outlining the day's activities, times, and responsibilities of both students and teachers. This helps to manage time effectively and ensures all intended learning outcomes are achieved.

After returning, students should be required to write reports or give presentations based on their observations. This reinforces learning and assesses whether the visit met its educational objectives.

Field visits provide opportunities for learners to gain real-life experiences, enhancing their understanding of classroom theories through practical exposure.

They foster teamwork and social interaction as students work and move together in a new environment, building interpersonal skills.

Field visits can also arouse interest and motivation in learners, making lessons more memorable and enjoyable.

However, field visits can be costly, especially when factoring in transportation, meals, and entry fees, which may not be affordable for all students.

They can also pose safety risks if proper planning and precautions are not taken, exposing students to accidents or illnesses.

Another disadvantage is that weather conditions, transport delays, or site closures can disrupt planned activities, wasting resources and time.

16. (a) Explain in detail four steps in planning a Home Economics test. (b) Give two qualities of a good test.

The first step in planning a Home Economics test is determining the purpose of the test. This involves deciding whether the test will assess knowledge acquisition, skill development, attitude change, or application of concepts.

The next step is identifying and defining the intended learning outcomes. These are clear, measurable statements that specify what learners should know or be able to do after instruction.

The third step involves preparing a table of specification. This is a blueprint that aligns test items with the learning objectives and content areas, ensuring balanced coverage and appropriate weight for each topic.

The final step is constructing the test items, ensuring that questions are clear, relevant, and varied in form, such as multiple-choice, short-answer, essay, or practical tasks, depending on the learning objectives.

A good test should have high validity. This means it accurately measures what it is intended to assess, whether it is knowledge, skills, or attitudes, without being influenced by irrelevant factors.

Another important quality is reliability. A reliable test produces consistent results when administered to similar groups under similar conditions, ensuring fairness and accuracy in evaluating student performance.