**FORM 3 MARKING SCHEME**

**SECTION A**

1. Types of play a child can be engaged in.
* Physical play
* Imaginative play
* Creative play
* Manipulative play

(½ mark each, ½ x 1 = 1mark)

1. Difference between nutrient supplementation and nutrient fortification.
* Supplementation is taking refined nutrients in the form of tablets, caplets or capsules or syrup. Supplements are pure form of the nutrient
* Fortification is addition/infusion of nutrients into regular food items that lack the nutrient or those foods whose nutrients have been destroyed through processing

(Correct definition 1 mark for each, 1 x 2 = 2marks)

1. Causes of poor sanitation in a poor rural area.
* Lack of drainage systems
* Lack of toilets leading to open defecation
* Poor planning in building
* Ignorance on dangers of poor sanitation

(1 mark each, 1 x 2 = 2marks)

1. Reasons why roughage is important in the diet.
* Keep one feeling full for longer
* Prevention of constipation
* Control of diseases such as cardiovascular disease and diabetes

(1 mark each, 1 x 2 = 2marks)

1. Reasons for tacking when sewing.
* Guides one on where to make permanent stitches
* Holds fabrics together so that they do not shift during stitching
* Helps secure zippers and motifs on garments for permanent stitches
* When making a garment it helps one to try on the tacked garment and fit so as to make adjustments before permanent stitches are made

(1 mark each, 1 x 2 = 2marks)

1. Definition of a soak pit in relation to drainage.
* This is a hole dug into the ground that is not cemented. The pit is filled with stones and covered with soil. Water from roofs and open drains may be directed to such a hole, the water slowly soaks into the ground.
* It may also be the un-cemented half of a septic tank, when sewage from the drain pipes flows into the cemented tank, water slowly floats on the sludge and flows out into the un-cemented soak pit and drains into the ground.

(Correct definition, of either = 2marks)

1. Reasons why some people are vegetarian.
* Medical reasons such as allergies and meat intolerance
* Religious reasons
* Ethical reasons
* Environmental reasons- to reduce effects of global warming
* Reduce risk of cardiovascular diseases
* For longevity, vegetarian diets are thought to slow aging process
* Economic reasons- plant foods are cheaper than animal foods

(1 mark each, 1 x 2 = 2marks)

1. Categories of permanent stitches.
* Joining stitches
* Neatening stitches
* Decorative stitches

(½ mark each, ½ x 2 = 1mark)

1. Difference between print and calico patch.
* Print patch is worked by hand on the right side of garment using oversewing or hemming stitches
* Calico patch is worked by machine on the wrong side of the article/garment and is more commonly worked on plain items

(Correct identification of each, 1 mark each 1 x 2 = 2marks)

1. Reasons other than pregnancy that would lead missing of menstrual periods.
* Serious illness such as cancer
* Stress which interferes with normal body cycle
* Starvation leads to low production of reproductive hormones
* Pre-menopausal changes during which some of the cycles are skipped before periods stop completely
* Extreme physical exercise that strains the body and interferes with hormone production

(1 mark each, 1 x 3 = 3marks)

1. Differences between osteomalacia and rickets.
* Osteomalacia occurs in adults while rickets occurs in children
* In osteomalacia the bones are brittle and break easily while in rickets the bones are soft and deform easily
* Osteomalacia is mainly due to withdrawal of calcium from the bones while rickets is due to lack of intake of foods important in proper bone formation

(Correctly differentiated 1 mark each, 1 x 2 = 2marks)

1. Uses of salt in laundry work.
* Fixing dyes in loose coloured garments
* Loosening mucus in handkerchiefs
* Removing protein stains such as blood and milk
* Removing stains on irons

(1 mark each, 1 x 3 = 3marks)

1. Symptoms of food poisoning.
* Bloating and flatulence
* Severe abdominal pains/stomach ache
* Diarrhoea
* Vomiting
* Fever

(½ mark each, ½ x 4 = 2marks)

1. Indicators of health in a 3 month old baby.
* The baby breastfeeds well
* The baby gains adequate weight and height
* Sleeps for at least 16 to 18 hours
* The baby is interested in his/her surroundings
* Needs at least 6 to 8 diaper changes in a day
* The baby passes stool regularly
* Baby is quiet and attentive without crying
* The baby makes eye contact and smiles/ is not dull and listless
* Baby can hold their head up

(1 mark each, 1 x 3 = 3marks)

1. Qualities of a well-made seam.
* It is even throughout its length
* It is correct size for the seam
* Firmly stitched
* Matching where two seams meet
* Correctly neatened for non-self-neatening seams
* Correctly stitched on the stitching line

(1 mark each, 1 x 3 = 3marks)

1. Disadvantages of advertising to a consumer.
* The consumer has to bear the cost of advertising because advertising increases the final cost of the product
* Advertisements may mislead a consumer to buy a more advertised product that is inferior in quality
* Sometimes adverts appeal to emotions influencing consumer psychology
* Some advertisements give distorted information about products that may mislead consumers
* Large number of similar goods that are equally advertised may make it difficult for consumers to make a choice
* Some advertisements go against morals in society

(1 mark each, 1 x 2 = 2marks)

1. Disadvantages of deep frying as a method of cooking.
* It is an expensive method of cooking
* It requires constant attention
* If not well drained food can be difficult to digest
* Constant consumption of deep fried food can lead to obesity
* If not carefully used, it can lead to serious risks of fire and burning

 (½ mark each, ½ x 2 = 1mark)

1. Reasons why cotton fabric is suitable for making bedsheets.
* Cotton is absorbent therefore can absorb sweat
* It is a strong fibre that withstand frequent washing that bedsheets need
* Cotton takes dyes easily so bedsheet can be made in many interesting colours and designs
* Cotton is cool next to the skin and keeps one cool on hot nights/hot areas
* Cotton can withstand high temperatures so can be easily disinfected by boiling

(1 mark each, 1 x 2 = 2marks)

1. Functions of ascorbic acid in the body.
* Aids in the absorption of iron in the body
* Maintains a healthy skin
* Helps in normal growth in children
* Helps the body to resist infections/improves the body’s immune system
* Helps in the formation of connective tissue thus aiding in healing of wounds

(½ mark each, ½ x 2 = 1mark)

1. Advantages of home delivery.
* It is cheaper than hospital delivery since there are no hospital bills to be paid
* The mother delivers in a familiar environment leading to less stress
* The mother is still in command of her home
* There is no risk of the baby getting exchanged or stolen
* If well-handled there are less risks of infections since the items used are not shared

(1 mark each, 1 x 2 = 2marks)

**SECTION B**

1. Procedure of laundering fast coloured pyjamas with milk stain.
* Collect all equipment and materials needed (½)
* Soak the stained area(½) in cold(½) salty(½) water for 10 minutes
* Clean the area to remove the stain(½), rinse off(½) to remove salt
* Soak the pyjamas in cold(½) water for about 20 minutes to loosen dirt
* Remove from soaking water and wash in warm(½) soapy(½) water using friction(½) method
* Rinse in clean(½) warm(½) water severally
* Give a final(½) cold(½) rinse containing vinegar(½) to brighten colour and fabric conditioner(½) to soften the pyjamas
* Dry out in the shade(½) on the line secured with pegs(½)
* Clear up the working area(½)
* While still damp, iron(½) with a moderately hot(½) iron on the wrong side(½)
* Air(½) to remove all dampness and freshen
* Fold/hang(½) and store(½)
* Clear up(½)

(½ mark for each correct step, ½ x 20 steps = 10marks)

1. Cleaning a bathtub.
* Collect equipment and materials needed
* Remove mats from the floor and clear the bathtub of any materials like pieces of soap(½)
* Sprinkle a scouring powder(½) sparingly(½) all round and inside the bathtub
* Use a scouring pad/ a sisal pad(½) to clean the tub(½)
* Rinse thoroughly(½) with warm(½) water to remove all the scouring powder
* Give a final rinse using clean(½) water containing a disinfectant(½)
* Dry with a clean(½) dry cloth(½) to avoid tear marks
* Wipe the tap(½)
* Replace soap(½)
* Clean the floor and replace mats(½)

(½ mark for each correct step, ½ x 12 steps = 6marks)

1. Procedure of cleaning a bottle used to store milk.
* Empty the bottle(½)
* Rinse with cold(½) water and dismantle(½) the bottle
* Clean using a bottle brush(½) in hot(½) water containing a detergent(½)
* Clean the teat and the lid(½)
* Rinse thoroughly(½) in clean hot(½) water
* Boil(½) for 10 minutes
* Leave covered in the boiled water(½)
* (½ mark for each correct step, ½ x 8 steps = 4marks)

**SECTION C**

1.
2. Considerations to bear in mind when buying play items for children.
* The age of the child. Ensures that the items bought are appropriate for the child’s age and stage in growth. For example a ball is inappropriate for a child who cannot walk
* Safety in use. Ensure that the play items are well joined and have no sharp edges that could injure the child during play. Those that are electrically charged should have no naked wires
* Durability. The play items should be strong enough to withstand any tension they may be subjected to during play without tearing or breaking
* Ease of care. Consider the materials used and the ease of cleaning the material to keep the play items clean and safe for use

(1 mark for statement, 1 mark for explanation, 2 x 3 = 6marks)

1. Causes of malnutrition in the arid areas of Kenya.
* Poverty. Most families in arid areas live in poverty and cannot afford food leading to malnutrition
* Dry conditions/drought in the area make the area unable to support crops or livestock and thus little or no food
* Insecurity. In many cases such areas have incidences of insecurity due to water and pasture shortage. People are thus unable to go out freely to look for food
* Ignorance. Due to low levels of education in most families there is ignorance on the need for good nutrition and some families may trade milk for much less nutritious foods
* Diseases. Poor hygiene, pests and pests lead to diseases in children making the situation on nutrition difficult
* Worm infestation. Due to poor living conditions and poor hygiene many adults and children suffer from worm infestation that deprives them of nutrients

(1 mark each for well explained point, 1 x 5 = 5marks)

1. Merits of breastfeeding.
* Provides optimum nutrition for the baby. Breastmilk is perfectly balanced for the needs of the baby in the first six months of life thus avoiding over or under nourishment
* The milk is always at the same and right temperature for the baby. The milk thus requires no warming
* Facilitates bonding of the mother and the baby because there is physical contact during feeding
* It is clean and free from contamination as there is little preparation and rarely are any equipment or utensils used
* It is available on demand and does not run out of stock therefore the baby is not kept waiting
* Breastfeeding helps the mother’s uterus to get back to shape
* Breastfeeding reduces chances of post-partum bleeding due to high levels of oxytocin production
* Regular breastfeeding delays onset of menstruation thus assists in family planning and spacing of children

(1 mark each for well explained point, 1 x 5 = 5marks)

1. Factors that influence the cleaning frequency of a kitchen.
* The materials used in making surfaces in the kitchen
* The fuel used in cooking
* How busy the kitchen is. A kitchen that is used very regularly needs more cleaning
* The size of the kitchen, a small kitchen is likely to be congested and need more cleaning
* Availability of cleaning agents and equipment. For example where there are water challenges the kitchen may not be cleaned as regularly as it should
* Availability of homemaker. If the homemaker is at home or has help, the kitchen will be cleaned more regularly than a home where the homemaker is busy and has no help

(1 mark each, 1 x 4 = 4marks)

1.
2. Advantages of taking adequate water in the body.
* It dissolves nutrients and food materials making it possible to transport food nutrients in the body
* Control of body temperature through the process of sweating. This helps cool the body
* It is a component of digestive juices helping soften and liquefy food
* Water is a component of fluids in the joints thus helps keep joints lubricated
* Helps in elimination of waste products through sweat and urine
* Prevents dehydration which can lead to headaches and mental confusion
* It helps prevent constipation
* Keeps the skin hydrated and helps keep the skin elastic
* It helps flush out the system thus reducing build-up of bacteria and viruses thus fighting off illness

(1 mark each, 1 x 5 = 5marks)

1. Hygiene rules that should be observed by cooks in a school.
* They should keep their nails short. This avoids infections caused dirt carried in long dirty nails
* Cover the hair when cooking to ensure hair does not fall into the food and contaminate it
* They should not smoke in the kitchen or the food service area to avoid passing micro-organisms when handling cigarettes
* Wear protective clothing to guard against regularly worn clothes contaminating food
* Observe high standards of cleanliness by bathing and wearing clean clothes and maintaining cleanliness in the kitchen. This helps avoid food poisoning
* Clean hands thoroughly and often and avoid handling cooked food with bare hands. This reduces contamination of food with pathogens carried on our hands
* Avoid handling the phone while cooking or serving. Phones are a major mode of carrying bacteria and viruses that could lead to food poisoning
* Cover all cuts or wound/ do not handle food with open wounds as wounds hold disease causing micro-organisms that can be passed on to other people through food

(1 mark each, 1 x 5 = 5marks)

1. Points to consider when packing meals for a school going child.
* The food should be balanced. School going children are still growing and need all the nutrients in their proper proportions for healthy growth
* Food should be easy to handle. Since the food is eaten at school the food should be easy to eat without need of too much cutlery
* The food should not have too much liquid. Food with too much liquid could be messy since it may easily pour leading to stains and accidents
* The food made should be possible to eat and enjoyable at room temperature or when cold. This is because the children may not have a way of warming the food at school
* The food should be packed in easy to use non-breakable dishes so that there is no risk of breaking the dish
* The meal should be easy to make or heat so that the child does not get late waiting for food to get ready

(½ mark for statement, 1 mark for explanation, 1 ½ x 4 = 6marks)

1. Disadvantages of using silk to make swimming costumes.
* It is not chlorine resistant thus will be weakened by chlorine present in swimming pools
* It is also destroyed by salty water so one cannot swim in the ocean
* It is weakened by sweat and swimming costumes are worn next to the body and take in sweat when swimming
* Silk creases easily unless treated making the swimming costume difficult to manage
* Spots of water on silk form stains so the swimming costume may keep getting distemper stains from splashes of water
* Silk is weak when wet and thus the swimming costume may tear easily or not last long

(1 mark each, 1 x 4 = 4marks)

1.
2. Explain **four** essential nutrients in the diet of an expectant mother.
* Proteins. These are needed in building cells for the foetus
* Iron. It is essential for blood formation for both the mother and the developing foetus. Protects against anaemia in pregnancy
* Calcium. Essential for proper formation of the foetus skeleton. It also ensures healthy bones for the mother by avoiding withdrawal of calcium from her bones for the foetus
* Folic acid. Essential for proper formation of the nervous system and protects the developing foetus from spina bifida (deformity of the spine)
* Iodine. Essential for a healthy thyroid gland and ensure proper brain development. This helps to avoid cretinism in the new born
* Vitamin C. promotes healthy gums and boosts immunity. It also helps the body to absorb iron
* Fibre (complex carbohydrates). Essential in movement of material in the intestines thus avoiding constipation

(½ mark for identifying the nutrient, 1 mark for the explanation. 1 ½ x 4 = 6marks)

1. Reasons why child immunisation is important.
* Protects against deadly diseases. Some childhood diseases such as measles are very dangerous and can easily lead to death if a child is not immunized
* Helps keep others safe. Most diseases that children are immunized against are highly contagious. By immunizing children it helps reduce spread of these diseases
* Reduces chances of serious deformities. Diseases such as polio can lead to serious body deformities of limbs and the spine. By immunizing children it ensures that chances of such deformities are reduced or eliminated
* Saves time and money. When children are immunized they are less likely to get very ill from childhood diseases, this saves the family money that would have been spent on hospitalisation and also time taken off to take the child to hospital
* Saves future generations. Vaccines have reduced and in some cases eliminated diseases such as small pox that killed or severely disabled people
* Reduces child mortality. Children who are immunized are more likely to live to five years unlike unvaccinated children who are more likely to die before their 5th birthday

(1 mark each for statement, 1 mark each for explanation, 2 x 3 = 6marks)

1. Mention **five** qualities of fabrics used to make babies clothes.
* They should be soft to avoid hurting babies’ delicate skin
* They should be fast coloured as the clothes need frequent washing
* Easy to launder due to constant need to wash the clothes
* Absorbent so that they can take in sweat
* Non irritating to the skin to avoid rashes
* Strong to withstand frequent washing
* Should not be damaged by water as they are constantly wetted
* (1 mark each, 1 x 5 = 5marks)
1. Qualities of a good pit latrine.
* It should be deep enough so that it can be used for a reasonable time
* It should have a lid for the opening to avoid flies
* It should have a vent pipe to take away odours from the latrine
* It should have a closable door for privacy
* The floor should be firm and stable to avoid collapsing
* The hole should be big enough for ease in use but not too big to avoid people falling in
* It should face away from the wind direction to avoid odours being blown by wind into the house
* It should be well roofed to avoid leakage during rainy seasons
* It should be dug away from any water sources to avoid contamination of water

(1 mark each, 1 x 3 = 3marks)