KOTHARI INTERNATIONAL SCHOOL, NOIDA
FINAL EXAMINATION - 1, SESSION: 2025-26
GRADE: 9 SUBJECT: Home science (064)
SET A
(ANSWER KEY)

Q1.	According to "Hurlock' –Development stages of the child is Infancy period is from (a)**2 weeks to 2 years** (b)Birth till 2 weeks (c)2 to 6 years (d)10 to 18 years	**(1)**
Q2.	Which of these is not the content of the first aid box ? (a) Hand Sanitizer (b) **Vitamin Pills** (c) Band aids (d) Pairs of Scissors	**(1)**
Q3.	Rickets is caused because of the deficiency of (a) Vitamin A (b) Vitamin B (c) Vitamin C (d) **Vitamin D**	**(1)**
Q4.	Which one of the following is an example of a renewable resource? (a) Coal (b) **Solar energy** (c) Natural gas (d) Petroleum	**(1)**
Q5.	Children have strong emotional bonds with their grandparents in _____ families. (a) Nuclear (b) **Joint** (c) Patriarchal (d) Blended	**(1)**
Q6.	Which type of fibre is made from natural raw materials using chemicals to regenerate them? (a) **Regenerated fibres** (b) Synthetic fibres (c) Mineral fibres (d) Animal fibres	**(1)**
Q7.	**What should you do if you encounter an animal bite?** (a) Ignore it and wait for it to heal (b) **Clean the wound with soap and water, apply antiseptic, and seek medical attention** (c) Try to remove the venom if the animal is poisonous (d) Apply ice directly to the bite	**(1)**

Q8.	_____ are the indicators of development. (a) Growth (b) **Milestones** (c) Principles (d) Patterns	**(1)**
Q9.	During a fire emergency, what should be done first? (a) Hide under a bed (b) Use water on electrical fires (c) **Raise the alarm and call emergency services** (d) Open all windows	**(1)**
Q10.	Which of the following fibres is obtained from plants? (a) Wool (b) Silk (c) **Cotton** (d) Nylon	**(1)**

Q11.	Which of the following is a synthetic fibre? (a) cotton (b) jute (c) **polyster** (d) silk	**(1)**
Q12.	Given below are two statements labelled as Assertion (A) and Reason(R). **Select the most appropriate answer from the options given below:** a. Both A and R are true and R is the correct explanation of A. b. Both A and R are true but R is not the correct explanation of A. c. A is true but R is false. d. Both A and R arte false **Assertion:** A balanced diet helps in proper growth and development of the body. **Reason:** A balanced diet consists only of carbohydrates, fats. (C)	**(1)**
Q13.	**Assertion**: Resource planning is essential for the sustainable development of a country. **Reason**: Resource planning helps in the proper use and conservation of resources for future generations. (A)	**(1)**
Q14.	**Assertion**: Electrical appliances should not be handled with wet hands. **Reason** : Water prevents the flow of electric current & reduces the risk of electric shock. (C)	**(1)**
Q15.	**CASE STUDY BASED QUESTION** **Read the passage carefully and answer Questions 15 to 18.** Sita is a 40-year-old woman who has been feeling weak, tired, and experiences frequent headaches. She often skips meals and eats mostly packaged snacks and sugary drinks. Fresh fruits, vegetables, and dairy are rarely included in her diet. She works long hours at a desk and spends very little time exercising. Her recent check-up showed that she has	**(1)**

	low iron levels and her body mass index (BMI) is below the normal range. The doctor advised her to improve her diet and include more nutrient-rich foods. Which type of malnutrition is Sita most likely suffering from? (a) Over-nutrition (b) **Under-nutrition** (c) Obesity (d) Balanced nutrition	
Q16.	Which nutrient deficiency is indicated in Sita's condition? (a) **Iron deficiency** (b) Vitamin C deficiency (c) Iodine deficiency (d) Calcium deficiency\	**(1)**
Q17.	Which dietary changes would help Sita improve her condition? (a) Eating more packaged snacks and sugary drinks (b) **Including leafy vegetables, fruits, pulses, and dairy in her diet** (c) Skipping breakfast to reduce weight (d) Drinking more soft drinks instead of water	**(1)**
Q18.	What lifestyle change is most important for Sita to improve her health? (a) **Increasing physical activity and following a balanced diet** (b) Sitting for long hours to save energy (c) Avoiding all dairy and fruits (d) Eating only one meal a day	**(1)**
Q19.	Mention any two factors affecting growth and development. **Heredity– genes inherited from parents influence height, body structure, and abilities.** **Nutrition– a balanced diet is essential for proper physical and mental development.**	**(2)**
Q20.	Mention any two functions of proteins in human body. **Growth and repair of tissue – proteins help in building and repairing muscles, skin, and organs.** **Formation of enzymes and hormones– proteins are needed to make enzymes and some hormones that regulate body functions.**	**(2)**
Q21.	Resources are interrelate. Explain this statement by giving two examples. **Resources are interrelated because the use of one resource depends on the availability of another**. Examples: 1. **Land and Water** – Agriculture needs fertile land as well as water for irrigation. 2. **Coal and Electricity** – Coal is used to produce electricity in thermal power plants. **OR** List two types of resources. Draw a flowchart to give classification of resources. **Natural resources** **Human-made resources**	**(2)**
Q22.	What are blended fibres? Give few examples. **Blended fibres are fibres made by mixing two or more different types of fibres to combine the qualities of each fibre in a single fabric.** **Examples: Polycotton (polyester + cotton)** **Terrycot (terylene + cotton)** **Woollen blends (wool + acrylic)**	**(2)**

Q23. Differentiate between Biodegradable and Non-biodegradable **(2)**

Biodegradable	Non-biodegradable
1)These materials can break down naturally by the action of microorganisms (like bacteria and fungi). Examples include food waste, paper, and vegetable peels	These materials do not break down naturally and can stay in the environment for a long time. Examples include plastic, glass, and metals
2)They are safer for the environment because they decompose into natural substances like water, carbon dioxide, and organic matter, causing less pollution.	They can cause long-term pollution since they don't decompose easily, leading to waste buildup in landfills or oceans
3) They decompose relatively quickly, often within weeks or months.	These can take hundreds or even thousands of years to break down.
4) examples: Food scraps, leaves, cotton, wool.	examples: Plastic bags, aluminum cans, and glass bottles.

Q24. Explain the main features of joint family. **(3)**

Large family system where grandparents, parents, uncles, aunts, and cousins live together.
Common kitchen and property shared by all family members.
Strong emotional bonding and cooperation among family members.
Elders take major decisions and guide the younger members**.**
Sharing of responsibilities, such as earning, childcare, and household work.

Q25. Write the features of first aid treatment for any 2 of the following: **(3)**

a) Electric Shock

Switch off the main electric supply immediately or separate the person from the source using a dry wooden stick or rubber object.
Do not touch the victim with bare hands until the power is disconnected.
Check breathing and pulse; give CPR if trained.
Keep the person warm and at rest and seek medical help immediately.

(b) First Aid for Dog Bite

Wash the wound thoroughly with soap and running water for at least 10–15 minutes.

Apply antiseptic to prevent infection.

Do not cover the wound tightly or apply home remedies.

Seek medical attention immediately for anti-rabies injection and tetanus shot.

c) Poisoning

Do not induce vomiting unless advised by a doctor.
Try to identify the poison and keep its container for the doctor.
Keep the person calm and conscious; do not give food or drink unless instructed.
Take the person to a hospital immediately or call emergency services.

OR

Discuss three safety rules to be followed in kitchen.
Handle sharp object carefully
Prevent burns and fires
Maintain cleanliness and hygiene

Q26. Discuss the importance of Home Science education. **(3)**

Helps in proper nutrition and healthy food habits for the family.
Teaches child development and family relationships, promoting emotional well-being.
Provides knowledge of health, hygiene, and first aid for emergencies.
Develops life skills like cooking, budgeting, time management, and home management.
Creates awareness about resource management and sustainable living.

Q27. What is the relation between food and health? Explain with the help of a flow diagram. **(3)**

Food and health are closely related because the type and quality of food we eat directly affect our physical, mental, and emotional well-being. A balanced diet provides nutrients needed for growth, energy, immunity, and disease prevention. Poor food habits can lead to weakness, deficiency diseases, and poor health.

Flow Diagram showing relation between Food and Health:

Food Intake
↓
Nutrients (Carbohydrates, Proteins, Fats, Vitamins, Minerals)
↓
Proper Growth and Energy
↓
Strong Immunity
↓
Good Health

Q28. List and explain four principles of development. **(4)**

1. **Development is continuous**: Development starts from conception and continues throughout life.
2. **Development follows a definite pattern**: Development occurs in an orderly sequence, such as sitting before standing and standing before walking.
3. **Development proceeds from head to toe (Cephalocaudal)**:Control develops first in the head, then trunk, and finally the legs.
4**. Development proceeds from centre to periphery (Proximodistal):**Control of the body develops from the central parts to the outer parts like hands and fingers.

OR

List four differences between growth and development.

Growth	**Development**
Refers to increase in height, weight, and size	Refers to overall physical,mental,emotional,and social changes
Quantitative in nature	Qualitative in nature
Can be measured	Cannot be easily measured
Stops after a certain age	Continues throughout life

Q29. Compare the advantages of living in a joint and nuclear family? **(4)**

Joint Family	Nuclear Family
Members share responsibilities and household work	Parents manage the family independently
Strong emotional support from grandparents and relatives	More privacy and independence
Children receive care, guidance, and moral values from elders	Parents can give more individual attention to children
Economic burden is shared among earning members	Better financial planning for a smaller
Help is available during illness or emergencies	Faster decision-making

Q30.	Explain the concept of the 4 R's in waste management with examples. The 4 R's of Waste Management are practices that help reduce waste, conserve natural resources, and protect the environment. They are followed in a specific order to minimize waste generation. 1. Refuse : Say no to things that are not necessary. Example: Refusing plastic bags and carrying a cloth or jute bag. Saying no to single-use plastic straws or cups. 2. Reduce: Use fewer resources and avoid waste. Example: Buying products with less packaging. Using water and electricity carefully. 3. Reuse: Use items again instead of throwing them away. Example: Reusing glass bottles, jars, and containers. Using old clothes as cleaning cloths. 4. Recycle: Convert waste materials into new useful products. Example: Recycling paper to make new paper products. Recycling plastic, metal, and glass through proper recycling systems. OR List and explain the methods to segregate household waste effectively. Methods to Segregate Household Waste Effectively 1. **Segregation at Source** Household waste should be separated **at the point where it is generated**. Use separate bins for different types of waste. Prevents mixing of wet and dry waste. 2. **Wet (Biodegradable) Waste** Includes kitchen and garden waste. Examples: vegetable peels, leftover food, fruit waste, tea leaves. Can be used for composting or making manure. 3. **Dry (Non-biodegradable) Waste**:Includes recyclable materials. Examples: paper, plastic, metal, glass. Should be clean and dry before disposal or recycling. 4. **Hazardous Waste**Waste that is harmful to health and environment. Examples: batteries, bulbs, medicines, paint containers, chemicals. Should be stored **separately** and disposed of safely. 5. **E-waste Segregation**Electronic waste should not be mixed with regular garbage. Examples: old mobile phones, chargers, wires. Should be given to authorized e-waste collection centres. 6. **Color-Coded Bins**Using color-coded bins makes segregation easier. Green bin– wet/biodegradable waste Blue bin– dry/recyclable waste Red/Black bin – hazardous waste	**(4)**
Q31.	Define nutrition. Name and explain different types of nutrition. Nutrition is the process by which living organisms obtain food and utilize it for **energy, growth, repair, and maintenance of the body. **Types of Nutrition** Nutrition is mainly of two types: 1. **Autotrophic Nutrition** In this type of nutrition, organisms prepare their own food using simple substances. Explanation: Green plants make their own food by the process of photosynthesis using sunlight, carbon dioxide, and water. Chlorophyll is required for this process. Examples: Green plants, algae 2. **Heterotrophic Nutrition**In this type of nutrition, organisms depend on other organisms for food. Explanation:They cannot make their own food and obtain it from plants or animals.	**(4)**

Types of Heterotrophic Nutrition:

Holozoic nutrition:Food is taken inside the body and digested (e.g., humans, animals).

Saprophytic nutrition:Organisms feed on dead and decaying matter (e.g., fungi, mushrooms).

Parasitic nutrition: Organisms obtain food from a living host and harm it (e.g., tapeworm, lice).

Q32. What points will you keep in mind while disposing of plastics? **(4)**

While disposing of plastics, the following important points should be kept in mind to protect the environment and reduce pollution:

1. **Segregate plastic waste** from wet and biodegradable waste at home.

2. **Avoid burning plastics**, as it releases harmful and poisonous gases.

3. **Reuse plastic items** like containers and bottles whenever possible.

4. **Reduce the use of single-use plastics** such as plastic bags, cups, and straws.

5. **Clean plastic waste** before disposal to make recycling easier.

6. **Send plastics for recycling** by giving them to authorized recyclers or collection centres.

7. **Do not throw plastics in drains, water bodies, or open areas**, as they block drainage and harm animals.

Q33. Why is silk called 'queen'of all fibres? **(5)**

Silk is called the "Queen of all Fibres" because of its unique qualities and luxurious properties that make it highly valued:

1. **Softness and Smoothness**: Silk has a very soft and smooth texture, which feels comfortable and gentle on the skin.

2. **Natural Shine and Lustre**: It has a natural glossy appearance that makes it look rich and elegant.

3. **Strength and Durability**:Silk is a strong natural fibre, yet lightweight and flexible.

4. **Good Absorbency**: Silk can absorb moisture, making it comfortable to wear in different climates.

5. **Elegant Draping**: Fabrics made from silk drape beautifully, enhancing the appearance of clothing.

Q34. Explain the differences between natural and synthetic fibres. Give two examples of each. Also, mention one advantage of synthetic fibres over natural fibres. **(5)**

Feature	Natural Fibres	Synthetic Fibres
Cost	Usually more expensive	Generally cheaper to produce in bulk
Source	Obtained from plants or animals	Made from chemicals in laboratories
Texture	Soft and comfortable	Can be rough or smooth depending on manufacturing
Moisture Absorption	Good absorbency	Poor absorbency, may cause sweating
Durability	Less durable, can shrink or tear easily	Very strong and long-lasting

	Examples : Natural Fibres: Cotton, Wool Synthetic Fibres: Polyester, Nylon Advantage of Synthetic Fibres over Natural Fibres Durability:Synthetic fibres are stronger, last longer, and do not shrink or get easily damaged by insects. OR Write five properties of any one of the following: Cotton or Wool. Five Properties of Cotton 1. **Soft and Comfortable**: Feels gentle on the skin and is ideal for clothing. 2. **Good Absorbency**: Absorbs sweat and moisture, keeping the body cool. 3. **Durable:** Strong fibre that can withstand repeated washing. 4. **Breathable:** Allows air to pass through, making it suitable for warm climates. 5. **Easy to Dye**: Can easily take up colors and maintain them after washing. **Properties of Wool** 1. **Soft and Warm**: Keeps the body warm in cold weather. 2. **Elastic**: Can stretch without breaking, making it durable and comfortable. 3. **Absorbent**: Absorbs moisture but still feels warm and does not feel wet easily. 4. **Fire**-Resistant: Does not catch fire easily, making it safer. 5. **Does Not Wrinkle Easily**: Maintains shape and appearance well.	