

Home Science (Theory)

CISCE

ISC (Arts)

Academic Year: 2023-2024

Date & Time: 1st April 2024, 2:00 pm

Duration: 3h

Marks: 70

1. Candidates are allowed an additional 15 minutes for only reading the paper.
2. They must NOT start writing during this time.
3. Answer all questions in Section A, Section B and Section C.
4. Section A consists of objective/very short answer questions.
5. Section B consists of short answer questions.
6. Section C consists of long answer questions.
7. The intended marks for questions or parts of questions are given in brackets [].

SECTION A - 14 MARKS

Q1.

1.1. The process of immersing food into boiling water for a short period and then plunging it in cold water to remove the outer layer is called _____.

1. Boiling
2. **Blanching**
3. Simmering
4. Grilling

Solution

The process of immersing food into boiling water for a short period and then plunging it in cold water to remove the outer layer is called **Blanching**.

Explanation:

Blanching is a process that involves quickly soaking food in hot water to remove its outer layer.

1.2. Venkatesh soaked rice and dal for six hours to prepare the batter for dosa. He ground them after six hours and kept the batter covered overnight. This is an excellent example of _____ food.

1. germinating
2. supplementing
3. liming
4. fermenting

Solution

Venkatesh soaked rice and dal for six hours to prepare the batter for dosa. He ground them after six hours and kept the batter covered overnight. This is an excellent example of fermenting food.

Explanation:

Soaking the batter overnight causes natural bacteria to break down the starches, creating a light and fluffy dosa.

1.3. Which one of the following methods of payment does not cause a deduction in the bank balance at the time of transaction?

1. Debit Card
2. Credit Card
3. Internet Banking
4. Mobile Banking

Solution

Credit Card

Explanation:

Credit card purchases do not affect the bank balance immediately. Instead, they establish a line of credit, allowing consumers to borrow up to a set level.

1.4. _____ is given to products that are biodegradable and have the capacity to be recycled.

1. Wool Mark

2. Hallmark
3. Handloom Mark
4. Eco Mark

Solution

Eco Mark is given to products that are biodegradable and have the capacity to be recycled.

Explanation:

Eco Mark identifies environmentally friendly, biodegradable, and recyclable products. It promotes sustainable activities and encourages consumers to buy products with little environmental effect.

1.5. The use of alum in water is a common method of ensuring _____ water.

Solution

The use of alum in water is a common method of ensuring **Clear** water.

Explanation:

Alum aids in the coagulation process, binding suspended particles like clay and debris in water. The larger clumps settle, resulting in clearer water near the surface.

1.6. Ravi is a young adolescent whose parents do not allow him to share his views. This makes him aggressive and indisciplined at school.

The style of parenting evident here is _____.

Solution

Ravi is a young adolescent whose parents do not allow him to share his views. This makes him aggressive and indisciplined at school.

The style of parenting evident here is **Authoritarian**.

Explanation:

Authoritarian parenting enforces stringent restrictions and discourages expression and discussion. This can cause frustration, rebellion, aggression, and indiscipline in youngsters, as shown with Ravi.

1.7. Money deposited in _____ account helps to earn interest at a rate higher than in other accounts.

Solution

Money deposited in **Fixed Deposit** account helps to earn interest at a rate higher than in other accounts.

Explanation:

Fixed deposit accounts offer a fixed interest rate and tenure for which the money is locked in. Banks often provide higher interest rates for longer tenures.

1.8. Kasuti is a traditional form of embroidery derived from the geometric designs of the temple structure in the state of _____.

Solution

Kasuti is a traditional form of embroidery derived from the geometric designs of the temple structure in the state of **Karnataka**.

Explanation:

The term Kasuti comes from the Kannada words "Kai" meaning hand and "Suti" meaning cotton, referring to an activity done by hand using cotton threads. This needlework style features ornate and vivid designs influenced by temple architecture, jewels, and rangoli patterns.

1.9. Rita is seventeen years old and lives in a hostel. Her hair and nails are brittle, and she does not socialise much. She has a constant fear of gaining weight and hence maintains a low body weight.

Name the eating disorder Rita is suffering from.

Solution

Anorexia nervosa

Explanation:

Rita has anorexia nervosa, characterised by a fear of gaining weight, resulting in extreme dietary restrictions and low body weight.

1.10. Samuel is unwell and advised by the doctor to have soups, skimmed milk and boiled pulses. He has been asked to avoid green leafy vegetables, oily and high fibre foods. What is Samuel suffering from?

Solution

Gastritis

Explanation:

Samuel's diet includes easily digestible meals such as soups, skimmed milk, and boiling lentils, while avoiding green leafy vegetables. Consuming veggies, oily, and high-fiber foods could indicate a digestive issue such as gastritis or gastroenteritis.

1.11. Name the toxic colour used during the preparation of iced candies and sweet meats.

Solution

Malachite Green

Explanation:

Toxic colours provide significant health risks, making their use in food strictly regulated and forbidden.

1.12. Choose the correct pair from the following options:

1. Braising - Kebabs
2. Roasting - Tomato Sauce
3. Boiling - Pakodas
4. Stewing - Pulses

Solution

Braising - Kebabs

Explanation:

Braising is a slow cooking technique that involves searing meat first and then boiling it in a covered pot with liquid. Kebabs, or skewered meat, are commonly cooked this way.

1.13. Choose the correct pair from the following options:

1. Dyed textile - Phulkari
2. Woven textile - Jamdani
3. Painted textile - Ikat

4. Embroidered textile - Baluchari

Solution

Woven textile - Jamdani

Explanation:

Jamdani is a woven cloth with elaborate designs created using the supplemental weft technique.

1.14. Mention any one example of food fads.

Solution

Detox diet

Explanation:

Detox diets often involve eating plenty of fruits, vegetables, and juices while avoiding certain food groups and processed foods.

SECTION B - 28 MARKS

Q2.

2.1. Rajat cooked tandoori chicken and paneer tikka for his friends whom he had invited for dinner. Name the cooking method Rajat used to prepare these dishes. State any one advantage of this method of cooking.

Solution

Rajat prepared tandoori chicken and paneer tikka by grilling them. Grilling removes extra fat from food, leading to healthier foods with lower fat content than frying.

2.2. How do personal preferences and dislikes affect selection of food while planning meals for the family?

Solution

Personal preferences and dislikes play a significant role in meal planning for families in the following ways:

- a. Family members may have different preferences for tastes, textures, and food varieties.

- b. Family members may have varying dietary choices based on cultural background or personal taste.
- c. Personal preferences may include food restrictions or allergies among family members.

Q3.

3.1. List any two changes rice undergoes during cooking.

Solution

The two changes that rice undergoes during cooking are:

- a. Rice's starch molecules become gelatinized due to heat and moisture during cooking. Gelatinization is the process of starch granules absorbing water, swelling, and eventually bursting to release amylose and amylopectin molecules.
- b. Rice absorbs water when cooking, resulting in swollen and squishy grains. The absorption process is essential for producing the correct texture in cooked rice.

3.2. State any two ways of minimising nutrient loss while cooking.

Solution

The two methods of minimizing nutrient loss while cooking are:

- a. To keep nutrients in food, use less water and cook for shorter periods of time. Steaming or stir-frying are suitable methods for doing this.
- b. Cooking veggies until soft, rather than overcooking, helps retain vitamins and minerals.

Q4.

4.1. Explain kneading as a preliminary treatment given to certain food items before cooking.

Solution

Kneading involves pushing, folding, and stretching dough to produce gluten and achieve a consistent texture. It is significant because it:

- a. Creates gluten for structure and flexibility.

- b. Improves texture by integrating air and evenly distributing components.
- c. Allows dough to rise correctly by trapping gases.
- d. Ensures the flour is properly hydrated.

4.2. Mention any two advantages of Induction Cooking.

Solution

Two advantages of induction cooking are:

- a. Induction cooking heats the cookware directly, resulting in faster heating times and less energy use.
- b. Induction cooktops are cold to the touch, minimising the danger of burns.

Q5.

5.1. Briefly discuss any two features of Current account in a bank.

Solution

Two features of current account in a bank are:

- a. Current accounts have large deposit and withdrawal limits, making them excellent for frequent commercial transactions.
- b. Current accounts often do not generate interest due to their high liquidity and ease of use.

5.2. Mr. Rana has to transfer money, but he is unable to go to the bank due to his ill health. He decides to transfer the amount through NEFT.

List any two necessary information Mr. Rana should possess to make this transaction.

Solution

Two necessary pieces of information Mr. Rana should possess to make a NEFT transaction are:

- a. Beneficiary Details Include the recipient's name, bank account number, and IFSC code (Indian Financial System Code) for their bank branch.
- b. To initiate the NEFT transfer, Mr. Rana would need to enter his online banking login details.

Q6.

6.1. State any four salient features of the Integrated Child Development Services (ICDS) programme.

Solution

Salient features of Integrated Child Development Services (ICDS) programme are:

- a. ICDS provides holistic development for children under six through Anganwadi centres, including nutrition, health check-ups, and early education.
- b. The programme prioritises vulnerable groups, promotes community participation, and combines services from health, nutrition, and education to provide comprehensive care and improve maternal and child well-being.
- c. Ensure efficient policy coordination and implementation across departments to enhance child development.
- d. Improve the mother's ability to meet her child's nutritional and health needs through good nutrition and education.

OR

6.2. State any four objectives of Swachh Bharat Abhiyan.

Solution

The four objectives of the Swachh Bharat Abhiyan are:

- a. Eradicate open defecation: Aiming to improve sanitation and public health.
- b. Promote hygiene and sanitation practices: Promoting cleanliness and responsible garbage disposal.
- c. Create a clean and sustainable environment: Our goal is to enhance waste management and the environment holistically.
- d. Improve living standards: Cleanliness and appropriate sanitation improve health and quality of life, particularly in rural areas.

Q7.

7.1. Patola textiles are very expensive and were once worn only by those belonging to royal families. With reference to this statement, discuss the origin of these textiles and the motifs used on them.

Solution

Patola textiles come from Gujarat, India and are made by the Salvi community in Patan. They use a double ikat technique, dyeing both the warp and weft threads before weaving. Traditional motifs include geometric patterns, flora, fauna, and religious symbols that represent cultural and spiritual beliefs. Patola textiles were traditionally worn by kings and elites, representing luxury and dignity. Patola saris are no longer only worn by royalty, despite their high cost due to the intricate weaving process.

7.2. Madhubani paintings are marked by bright colours and human forms. In this context, briefly explain the technique adopted for this type of painting.

Solution

Madhubani paintings, originating from the Mithila region of Bihar, India, are renowned for their vibrant colors and distinctive human forms.

- a. Madhubani painting uses a method known as "Kachni" or "Bharni," which involves creating elaborate motifs using fingers, twigs, brushes, and even matchsticks.
- b. Madhubani paintings are known for their vibrant colours, created by artists using natural pigments from plants, flowers, and minerals.
- c. Madhubani paintings feature stylized and mathematically abstract depictions of human figures, highlighting cultural and mythological themes.

Q8.

8.1. State any four responsibilities of a Consumer.

Solution

In addition to their rights, consumers have essential duties. Consumers have four responsibilities:

- a. Research items, comprehend features, warranties, and any disadvantages.
- b. They prevent impulse purchases by comparing possibilities and making informed judgements based on needs and budget.
- c. If a consumer encounters a broken product or deceptive marketing, they can submit a complaint with the seller or applicable authorities.

- d. Responsible consumers can support firms that match with their beliefs, in addition to making individual purchases.

OR

8.2. Discuss any four problems faced by consumers while buying products from the market.

Solution

Shopping can be a minefield for customers. Consumers encounter problems when purchasing things from the market.

- a. **Misleading Advertisements:** Misleading marketing and imprecise labels can be problematic. Making informed decisions might be challenging due to hidden fees, overstated promises, and unclear expiry dates.
- b. **Poor Quality:** Sometimes we receive less than we pay for. Consumers may feel disappointed and deceived if they receive subpar materials, shoddy craftsmanship, or fakes.
- c. **Unfair Pricing:** Unfair pricing practices might deplete our finances. Obtaining a decent deal might be challenging due to artificial price increases, false discounts, and pressure tactics.
- d. **Limited Options:** Despite the apparent abundance of options, they can be limited. Monopolies and a lack of knowledge about alternatives can hinder our capacity to find the ideal product.

SECTION C - 28 MARKS

Q9.

9.1. (a) What is meant by career?

Solution

A career is the pursuit of a lifelong ambition or the general course of progression towards lifelong goals, often involving a series of jobs or professional experiences in a particular field.

9.1. (b) Briefly discuss the role of the school in the career choice made by a young adult.

Solution

The school strongly influences young adults' employment choices through several factors, including:

- a. **Educational and Skill Development:** Schools provide basic information and abilities for numerous occupations through academic and extracurricular activities, helping students identify their interests and strengths.
- b. **Career Guidance and Counselling:** This provides tailored advice and information to assist students in exploring career possibilities, understanding their aptitudes, and setting achievable goals. Learn about educational pathways and occupational training.
- c. **Exposure to Professions:** Schools host career fairs, guest speaker events, and internships to introduce students to various professions and provide insights into job requirements, workplace cultures, and potential career routes.
- d. **Personal and Professional Development:** Schools develop critical thinking, communication, and teamwork skills, preparing students for success in their chosen fields and encouraging personal and professional growth.

9.2. State any three facilities that can be provided to ensure the safety of elderly at home.

Solution

There are numerous facilities available to guarantee the safety of elderly adults at home, including:

- a. **Fall Prevention Measures:** Installing handrails, grab bars, and non-slip matting in high-risk locations can help prevent falls.
- b. **Medical Alert Systems:** Medical alert systems provide older folks with peace of mind and quick aid during emergencies.
- c. **Home Monitoring Devices:** Using home monitoring technologies like motion sensors, video cameras, and smart home technology enables carers to remotely watch elderly persons and respond swiftly.

Q10.

10.1. What is meant by adulthood?

Solution

Adulthood is the stage of life characterised by independence, responsibility, and maturity.

10.2. Give any three differences between Middle Adulthood and Late Adulthood.

Solution

Parameters	Middle age	Late Adulthood
(a) Age Range	Middle adulthood normally ranges from 40 to 65 years. During this period, individuals consolidate their careers, family duties, and personal achievements.	Late adulthood, often known as old age, typically begins at age 65 and lasts until death. This stage involves physical and cognitive changes, retirement, and reflection on one's life.
(b) Physical Health	Middle-aged individuals often have optimal physical health. While they may still have minor health issues, they are less prone to develop major age-related health complications.	Late adulthood frequently leads to diminishing physical health. Older persons may face many age-related diseases, including arthritis, cardiovascular disease, and cognitive impairment.
(c) Life Transitions	Middle adulthood brings substantial life adjustments, such as professional progression, empty nesting, and caring for ageing parents. Midlife crisis might lead to rethinking one's goals and priorities.	Late adulthood include retiring, adjusting to changes in family dynamics, and facing end-of-life difficulties. Older persons may experience obstacles such as loss of independence, decreasing health, and the death of loved ones.

10.3. 'Early adulthood is popularly referred to as a settling-down age and also as a problem age.' Comment.

Solution

Early adulthood is known as the "settling-down age" as it involves establishing careers, forming long-term relationships, and starting families. The "problem age" refers to the obstacles and uncertainties that individuals endure during this time, such as professional struggles, financial instability, interpersonal issues, and self-discovery. Making important decisions and transitioning from reliance to independence can cause stress and worry. Early adulthood is a complicated era that includes both potential for stability and problems.

Q11.

11.1. Enumerate any four features of Cognitive Development during adolescence.

Solution

The four features of Cognitive Development during adolescence are:

- a. **Abstract Thinking:** Teens can manage complicated thoughts and hypothetical circumstances, extending beyond their real experiences.
- b. **Metacognition:** Adolescence involves "thinking about thinking." Teens become aware of their unique learning patterns and problem-solving strategies.
- c. **Moral Reasoning:** Following regulations leads to building personal morals. They question societal conventions and face ethical issues.
- d. **Identity Formation:** Cognitive development promotes self-discovery. Teens develop their sense of self by exploring concepts and asking "Who am I?".

11.2. Ritesh is a seventeen-year-old boy who is suffering from depression and needs help.

Suggest any three ways by which Ritesh can be helped to overcome depression.

Solution

Three ways Ritesh can be helped to overcome depression are:

- a. **Seek Professional Help:** Ritesh should get help from a therapist or counsellor who specialises in depression treatment.
- b. **Build Support System:** Ritesh should seek support from friends, family, or classmates who can provide empathy and encouragement.
- c. **Practice Self-Care:** Ritesh should focus activities such as exercise, relaxation, and hobbies to improve mental health and reduce symptoms of depression.

Q12.

12.1. Shweta is a dietician whose father suffers from hypertension.

- i. State any two symptoms of the ailment Shweta's father is suffering from.
- ii. Name the two types of food that he should avoid eating.
- iii. As a dietician, how can Shweta plan a nutritious meal for her father?

Solution

- i. Two symptoms of hypertension are:
 - a. Headaches
 - b. Dizziness
- ii. To treat hypertension, Shweta's father should avoid salty and sugary foods and drinks.
- iii. Shweta, a dietitian, can prepare a nutritious meal for her father by:
 - a. Promoting a diet rich in fruits, vegetables, whole grains, and lean proteins.
 - b. Reduce sodium intake by using herbs and spices for flavour instead of salt and selecting low-sodium products.
 - c. Regular eating of potassium-rich foods including bananas, oranges, spinach, and sweet potatoes helps reduce blood pressure.
 - d. Monitor portion sizes to control calorie consumption and maintain a healthy weight, crucial for managing hypertension.
 - e. Drinking enough water, limiting sugary drinks, and avoiding excessive caffeine.

OR

12.2. Tara went to a farm on the outskirts of the city. She purchased honey and ghee from the farm. On reaching home, she found that the seal of the honey bottle was broken.

- i. What are standardised marks? Which standardised mark should Tara look for on the above mentioned products?

- ii. 'On reaching home, she found that the seal of the honey bottle was broken. Which right of Tara was violated as a consumer?
- iii. Mention any four details that a consumer should check on the label of a product, before purchase, to ensure its quality.

Solution

- i. Standardised marks are symbols or logos used to signify product quality, safety, or authenticity. Tara should check for the FSSAI mark for honey and Agmark certification for ghee to ensure quality standards set by the Government of India.
- ii. The damaged seal on Tara's honey bottle breaches her right to product safety. Consumers deserve safe and well-packaged products.
- iii. The four key details a consumer like Tara should check on a product label to ensure quality are:
 - a. Expiry Date: This is the date beyond which the product's quality or safety may deteriorate.
 - b. Manufacturer's Information: Look for the manufacturer's name and address for traceability in case of concerns.
 - c. Ingredients List: This identifies probable allergies or undesired components.
 - d. Standardized Mark: Check for applicable marks, such as AGMARK, to guarantee quality compliance.