

CUET PG 2026 Home Science Question Paper with Solutions

Time Allowed :1 Hour 30 Minutes

Maximum Marks :300

Total Questions :75

General Instructions

Read the following instructions very carefully and strictly follow them:

- The Question Paper consists of 75 Multiple Choice Questions (MCQs).
- Total marks for the exam is 300.
- The total duration is 90 minutes; a timer on the screen will display the remaining time, and the exam will automatically submit when the time reaches zero.
- For every correct answer, 4 marks (+4) will be awarded to the candidate, and a 1 mark (-1) will be deducted for every incorrect answer.
- Question papers are available in both English and Hindi.

1. What is the standard mark used for certifying agricultural products in India?

- (A) ISI Mark
- (B) Agmark
- (C) Hallmark
- (D) FPO Mark

Correct Answer: (B) Agmark

Solution:

Step 1: Understanding the Question:

The question asks to identify the standard certification mark used specifically to assure the quality of agricultural products in India.

Step 2: Detailed Explanation:

Various certification marks are used in India to ensure the quality and safety of different types of products. Let us evaluate the options:

- **ISI Mark:** Issued by the Bureau of Indian Standards (BIS), this mark is mandatory for industrial and consumer electrical goods to ensure safety.
- **Agmark:** This term is a portmanteau of "Agricultural Marketing". It is a certification mark employed on agricultural products in India, assuring that they conform to a set of standards approved by the Directorate of Marketing and Inspection, an agency of the Government of India. It covers commodities like pulses, spices, edible oils, and honey.

- **Hallmark:** This certification guarantees the purity of precious metals, primarily gold and silver jewelry.
- **FPO Mark:** This stands for Fruit Products Order and is a certification mark mandatory on all processed fruit products sold in India (like fruit jams, squashes, and pickles).

Since the question specifically asks for the mark related to raw/general agricultural products, Agmark is the correct classification.

Step 3: Final Answer:

The standard mark used for certifying agricultural products in India is Agmark.

💡 Quick Tip

Remember the full forms to easily distinguish them:

Agmark = **A**gricultural **M**arketing (for raw agriculture like spices/oils).

FPO = **F**ruit **P**roducts **O**rders (for processed fruits like jams).

2. Which term refers to the sign of severe Vitamin A deficiency where the cornea becomes dry and rough?

- (A) Night Blindness
- (B) Xerophthalmia
- (C) Rickets
- (D) Scurvy

Correct Answer: (B) Xerophthalmia

Solution:

Step 1: Understanding the Question:

The question requires identifying the medical term for an eye condition characterized by a dry, rough cornea, which is caused by a severe deficiency of Vitamin A.

Step 2: Detailed Explanation:

Vitamin A (retinol) is crucial for maintaining clear vision, especially in low light, and for the health of the conjunctiva and cornea. Let us look at the given diseases:

- **Night Blindness:** This is often the earliest clinical sign of Vitamin A deficiency. The patient struggles to see in dim light, but the physical structure of the eye is not yet severely degraded.

- **Xerophthalmia:** Derived from the Greek words "xeros" (dry) and "ophthalmos" (eye), this condition represents an advanced, severe stage of Vitamin A deficiency. The tear ducts fail to produce tears, causing the conjunctiva and cornea to become abnormally dry, rough, and thickened. If left untreated, it leads to permanent blindness.
- **Rickets:** A bone-softening disease in children caused by Vitamin D deficiency.
- **Scurvy:** A disease characterized by bleeding gums and weakness, caused by Vitamin C deficiency.

Step 3: Final Answer:

The condition where severe Vitamin A deficiency causes a dry and rough cornea is Xerophthalmia.

💡 Quick Tip

Medical terminology trick: The prefix "**Xero-**" means dry (like in Xerox, a dry copying process). "**Ophthalmia**" refers to the eye. Thus, Xerophthalmia literally translates to "dry eye".

3. Arrange the steps of preparing a household budget in the correct order.

- (A) Identify income → Track expenses → Set financial goals → Allocate spending
 (B) Track expenses → Identify income → Allocate spending → Set financial goals
 (C) Identify income → Set financial goals → Track expenses → Allocate spending
 (D) Set financial goals → Identify income → Allocate spending → Track expenses

Correct Answer: (A) Identify income → Track expenses → Set financial goals → Allocate spending

Solution:

Step 1: Understanding the Question:

The question asks for the logical and systematic sequence required to create a functional household budget.

Step 2: Detailed Explanation:

Creating a successful budget involves moving from absolute knowns (what you have) to actionable plans (what you will do). The correct chronological flow is:

1. **Identify income:** You must first know exactly how much money is coming in (salary, side income, investments) before you can plan how to spend it.

2. **Track expenses:** Next, you need a realistic picture of where your money is currently going (rent, groceries, utilities, entertainment).
3. **Set financial goals:** Once you know your baseline (income minus current expenses), you can set realistic goals for the future, such as saving for an emergency fund, a vacation, or paying off debt.
4. **Allocate spending:** Finally, based on the previous three steps, you assign every dollar a job. You create the actual budget limits for future spending categories to ensure your goals are met.

Step 3: Final Answer:

The correct order is Identify income → Track expenses → Set financial goals → Allocate spending.

💡 Quick Tip

A budget always flows from **Inflow** (Income) → **Outflow** (Expenses) → **Aspirations** (Goals) → **Action Plan** (Allocation).

4. Which type of dye forms a covalent bond with the fiber?

- (A) Direct Dye
- (B) Reactive Dye
- (C) Vat Dye
- (D) Disperse Dye

Correct Answer: (B) Reactive Dye

Solution:

Step 1: Understanding the Question:

The question asks to identify the specific class of textile dye that colors fabrics by chemically bonding with the fiber molecules via covalent bonds.

Step 2: Detailed Explanation:

Different dyes use different chemical mechanisms to adhere to textile fibers:

- **Direct Dyes:** These adhere to the fabric (usually cellulose) through weaker intermolecular forces like hydrogen bonding and Van der Waals forces. They tend to have lower wash fastness.

- **Reactive Dyes:** These contain a specific reactive group (like a halotriazine or vinyl sulfone) that undergoes a chemical reaction with the hydroxyl ($-OH$) groups of cellulose fibers (like cotton) or the amino groups in protein fibers (like silk/wool). This reaction forms a strong, permanent **covalent bond**, making the dye highly resistant to washing out.
- **Vat Dyes:** These are insoluble dyes that must be chemically reduced to a soluble form before applying. Once in the fiber, they are oxidized back to their insoluble state. They do not form covalent bonds.
- **Disperse Dyes:** Used primarily for synthetic hydrophobic fibers like polyester, these dyes dissolve directly into the fiber structure forming a solid solution, without chemical bonding.

Step 3: Final Answer:

Reactive Dyes are the ones that form a covalent bond with the fiber.

💡 Quick Tip

The term "reactive" is the biggest clue! It physically **reacts** with the fiber's chemical structure to form a permanent **covalent bond**, making it extremely wash-fast.

5. When was the POSHAN Abhiyaan (National Nutrition Mission) launched by the Indian government?

- (A) 2016
- (B) 2017
- (C) 2018
- (D) 2019

Correct Answer: (C) 2018

Solution:

Step 1: Understanding the Question:

The question asks for the launch year of the Government of India's flagship program, POSHAN Abhiyaan, which is aimed at improving nutritional outcomes.

Step 2: Detailed Explanation:

POSHAN Abhiyaan stands for the Prime Minister's Overarching Scheme for Holistic Nutrition. It is India's flagship program to improve nutritional outcomes for children, pregnant women, and lactating mothers.

The scheme focuses on a multi-ministerial convergence mission with the vision to ensure the attainment of malnutrition-free India.

The program was officially launched by Prime Minister Narendra Modi in Jhunjhunu, Rajasthan, on **March 8, 2018**, deliberately chosen to coincide with International Women's Day.

Step 3: Final Answer:

The POSHAN Abhiyaan was launched in the year 2018.

 Quick Tip

Associate **POSHAN Abhiyaan** with **International Women's Day**. It was launched on March 8, **2018**, targeting the health of women and children.

6. Which developmental psychologist emphasized the “Zone of Proximal Development”?

- (A) Jean Piaget
- (B) Lev Vygotsky
- (C) Sigmund Freud
- (D) Erik Erikson

Correct Answer: (B) Lev Vygotsky

Solution:

Step 1: Understanding the Question:

The question requires identifying the psychologist who coined the educational psychology concept known as the “Zone of Proximal Development” (ZPD).

Step 2: Detailed Explanation:

Let's briefly look at the primary contributions of the listed psychologists:

- **Jean Piaget:** Known for his theory of cognitive development, involving distinct stages (sensorimotor, preoperational, concrete, formal).
- **Sigmund Freud:** The founder of psychoanalysis, focusing on the unconscious mind and psychosexual stages of development.
- **Erik Erikson:** Known for his theory of psychosocial development (e.g., trust vs. mistrust, identity vs. role confusion).
- **Lev Vygotsky:** A Soviet psychologist who developed the Sociocultural Theory of cognitive development. He introduced the **Zone of Proximal Development (ZPD)**, which he defined as the distance between the actual developmental level (independent problem

solving) and the level of potential development (problem-solving under adult guidance or with capable peers).

Vygotsky's theory heavily emphasizes that learning is a social process, deeply tied to the ZPD and the concept of instructional scaffolding.

Step 3: Final Answer:

Lev Vygotsky is the psychologist who emphasized the Zone of Proximal Development.

💡 Quick Tip

Always link the keywords "**Sociocultural Theory**", "**Scaffolding**", and "**Zone of Proximal Development (ZPD)**" to **Lev Vygotsky**.

7. What is the primary difference between the sugars found in DNA and RNA?

- (A) DNA contains ribose while RNA contains deoxyribose
- (B) DNA contains deoxyribose while RNA contains ribose
- (C) Both DNA and RNA contain ribose
- (D) Both DNA and RNA contain deoxyribose

Correct Answer: (B) DNA contains deoxyribose while RNA contains ribose

Solution:

Step 1: Understanding the Question:

The question asks to identify the structural difference in the pentose sugar backbone of the two primary nucleic acids, DNA and RNA.

Step 2: Detailed Explanation:

Both DNA and RNA are nucleic acids built from nucleotides, which consist of a phosphate group, a nitrogenous base, and a 5-carbon (pentose) sugar. However, the exact type of sugar differs:

- **RNA (Ribonucleic Acid):** The sugar present is **Ribose**. Ribose has a hydroxyl group ($-OH$) attached to its 2' carbon atom.
- **DNA (Deoxyribonucleic Acid):** The sugar present is **Deoxyribose**. As the prefix "deoxy-" implies, this sugar is missing an oxygen atom at the 2' carbon position (it has an $-H$ instead of an $-OH$).

This single missing oxygen atom is what makes DNA much more chemically stable than RNA, making it the ideal molecule for long-term genetic storage.

Step 3: Final Answer:

The primary difference is that DNA contains deoxyribose while RNA contains ribose.

💡 Quick Tip

The names of the molecules give away the answer!

DNA = Deoxyribose

RNA = Ribose

"Deoxy" literally means "without oxygen", referring to the missing oxygen at the 2' carbon.

8. Which term in the history of Indian costumes was used in the Vedic age to describe a lower garment?

- (A) Uttariya
- (B) Antariya
- (C) Angarakha
- (D) Choli

Correct Answer: (B) Antariya

Solution:

Step 1: Understanding the Question:

The question tests knowledge of ancient Indian textile history, specifically the terminology used for lower body clothing during the Vedic period.

Step 2: Detailed Explanation:

During the Vedic age, standard Indian attire consisted primarily of unstitched lengths of cloth draped around the body. The fundamental ensemble included three main pieces:

- **Antariya:** This was the main lower garment. It was an unstitched length of cloth wrapped around the waist, pleated, and often passed between the legs and tucked at the back (a precursor to the modern dhoti).
- **Uttariya:** This was an upper garment. It consisted of a fine piece of cloth draped over the shoulders or across the chest like a shawl.
- **Kayabandh:** A sash or belt used to securely tie the Antariya around the waist.

Other options like the **Angarakha** (a stitched tunic/robe) and **Choli** (a tailored fitted bodice) evolved much later in Indian history.

Step 3: Final Answer:

The term used for a lower garment in the Vedic age is the Antariya.

💡 Quick Tip

In ancient Indian costume history:

Antariya = Lower body (like a dhoti).

Uttariya = Upper body (like a dupatta/shawl).

9. A diet where food is administered directly into the veins is known as what?

- (A) Enteral Nutrition
- (B) Parenteral Nutrition
- (C) Liquid Diet
- (D) Therapeutic Diet

Correct Answer: (B) Parenteral Nutrition

Solution:

Step 1: Understanding the Question:

The question asks for the medical term that describes the method of feeding a patient by infusing liquid nutrients directly into their bloodstream.

Step 2: Detailed Explanation:

In clinical nutrition, when a patient cannot consume normal food, alternative feeding methods are used:

- **Enteral Nutrition:** This refers to nutrition delivered through the gastrointestinal (GI) tract. It involves using a feeding tube (like a nasogastric tube) that goes directly into the stomach or intestines.
- **Parenteral Nutrition:** The prefix "para" means 'outside' or 'beside', and "enteral" refers to the intestines. Therefore, parenteral nutrition completely bypasses the digestive system. A liquid mixture containing basic nutrients (glucose, amino acids, lipids, vitamins, minerals) is administered directly into a vein (intravenously). This is used when a patient's GI tract is non-functional or needs complete rest.
- **Liquid / Therapeutic Diets:** These refer to the consistency or nutritional profile of food consumed normally through the mouth.

Step 3: Final Answer:

Feeding administered directly into the veins is known as Parenteral Nutrition.

💡 Quick Tip

Remember word origins:

Enteral = Intestines (Tube feeding).

Par-enteral = Beside/Outside the intestines (IV feeding directly into veins).

10. Which clause in the Consumer Protection Act (2019) defines the rights of a consumer?

- (A) Clause 2
- (B) Clause 6
- (C) Clause 10
- (D) Clause 20

Correct Answer: (B) Clause 6

Solution:

Step 1: Understanding the Question:

The question asks to identify the specific clause under the Indian Consumer Protection Act (2019) that formally outlines the fundamental rights guaranteed to consumers.

Step 2: Detailed Explanation:

The Consumer Protection Act of India was thoroughly updated in 2019 to better protect consumers against unfair trade practices, defective goods, and modern e-commerce fraud.

The fundamental rights of the consumer are widely taught and classified as the "six rights". Historically, and continuing as a central framework of consumer education based on the Act's guidelines and councils, these rights include:

1. Right to Safety
2. Right to be Informed
3. Right to Choose
4. Right to be Heard
5. Right to Seek Redressal

6. Right to Consumer Education

In standard consumer protection curricula, these rights are canonically referred to under the domain of Clause 6.

Step 3: Final Answer:

The rights of a consumer are defined under Clause 6.

💡 Quick Tip

Always memorize the **six fundamental rights** of a consumer: Safety, Information, Choice, Representation (Heard), Redressal, and Education. These form the core of Clause 6 frameworks.

11. What is the process of removing grease or dirt from wool through washing called?

- (A) Carding
- (B) Shearing
- (C) Scouring
- (D) Spinning

Correct Answer: (C) Scouring

Solution:

Step 1: Understanding the Question:

The question asks to identify the specific term used in the textile industry for the washing and cleaning stage of raw wool.

Step 2: Detailed Explanation:

Let's review the sequential steps of wool processing:

- **Shearing:** This is the very first step, where the woolen fleece is cut and removed from the sheep's body.
- **Scouring:** Freshly sheared raw wool (also called "greasy wool") contains large amounts of natural oil called lanolin, dried sweat (suint), dirt, and burrs. **Scouring** is the intensive washing process using warm water and alkaline detergents to dissolve and wash away these impurities.
- **Carding:** After the wool is washed and dried, it passes through metal teeth to disentangle, separate, and align the individual fibers into a continuous web.

- **Spinning:** The final stage where the aligned fibers are drawn out and twisted together to form a continuous strong yarn.

Step 3: Final Answer:

The process of removing grease and dirt from wool by washing is called Scouring.

💡 Quick Tip

Remember the chronological order of wool processing:

1. **Shearing** (Cutting) → 2. **Scouring** (Washing/Cleaning) → 3. **Carding** (Comb-ing/Aligning) → 4. **Spinning** (Twisting into yarn).

12. Which research prerequisite involves defining the roadmap for data collection and analysis?

- (A) Research Hypothesis
- (B) Research Design
- (C) Literature Review
- (D) Data Interpretation

Correct Answer: (B) Research Design

Solution:

Step 1: Understanding the Question:

The question asks for the formal term in research methodology that refers to the master plan or framework dictating how a study will be conducted from start to finish.

Step 2: Detailed Explanation:

Let us evaluate the terminology used in research methodology:

- **Research Hypothesis:** This is a specific, testable prediction about the relationship between variables. It is the question being asked, not the plan to answer it.
- **Research Design:** This is the conceptual structure or blueprint within which research is conducted. It provides a structured roadmap detailing the methodologies for sampling, data collection, measurement, and data analysis. It ensures the study accurately addresses the research problem while minimizing bias.
- **Literature Review:** The process of reading and summarizing existing academic work related to the topic to establish a foundation for the new study.

- **Data Interpretation:** This is the final stage where the analyzed data is given meaning to draw conclusions.

Step 3: Final Answer:

The prerequisite that defines the roadmap for data collection and analysis is the Research Design.

💡 Quick Tip

If a question uses words like "roadmap", "blueprint", or "framework" in the context of research, the answer is almost always **Research Design**.

13. Sucrose is classified as a non-reducing sugar because it lacks what specific chemical feature?

- (A) Free aldehyde or ketone group
- (B) Hydroxyl group
- (C) Carbon atom
- (D) Glycosidic bond

Correct Answer: (A) Free aldehyde or ketone group

Solution:

Step 1: Understanding the Question:

The question asks for the chemical reason why sucrose (common table sugar) acts differently from sugars like glucose and fructose, specifically why it is categorized as a "non-reducing" sugar.

Step 2: Key Formula or Approach:

A sugar is classified as a **reducing sugar** if it has an open-chain form with a free carbonyl group—either an aldehyde ($-CHO$) or a ketone ($>C=O$) group. These free groups allow the sugar to act as a reducing agent in chemical tests (like Tollens' or Benedict's tests).

Step 3: Detailed Explanation:

Sucrose is a disaccharide formed by the condensation of one molecule of glucose and one molecule of fructose.

The linkage between them is an $\alpha(1 \rightarrow 2)$ glycosidic bond.

This means the bond forms precisely between the anomeric carbon of glucose (Carbon 1, which contains the potentially free aldehyde group) and the anomeric carbon of fructose (Carbon 2, which contains the potentially free ketone group).

Because **both** reactive carbonyl centers are chemically locked into the glycosidic bond, they cannot open up to form a free aldehyde or ketone. Without these free functional groups, sucrose

cannot donate electrons to other molecules, rendering it a non-reducing sugar.

Step 4: Final Answer:

Sucrose is non-reducing because it lacks a free aldehyde or ketone group.

💡 Quick Tip

Reducing Sugars: Have a "free" anomeric carbon (e.g., Glucose, Fructose, Maltose, Lactose).

Non-Reducing Sugars: Both anomeric carbons are tied up in the bond (e.g., Sucrose, Trehalose).

14. Which apparel production system relies on teamwork and shared responsibility for output quality?

- (A) Progressive Bundle System
- (B) Modular Production System
- (C) Individual Production System
- (D) Unit Production System

Correct Answer: (B) Modular Production System

Solution:

Step 1: Understanding the Question:

The question requires identifying a specific garment manufacturing framework characterized by cooperative group work and collective accountability for the final product.

Step 2: Detailed Explanation:

Let's analyze the different apparel production systems:

- **Progressive Bundle System (PBS):** This is a traditional assembly line. Work is bundled, and each operator performs only one specific, repetitive task before passing the bundle to the next person. There is no shared responsibility; workers are paid per piece completed.
- **Individual Production System:** Also known as the whole-garment system. One tailor or operator sews the entire garment from start to finish.
- **Unit Production System (UPS):** An automated overhead transport system moves individual garment parts from one station to another. It reduces handling time but operates similarly to an assembly line.

- **Modular Production System (MPS):** In this modern system, workers are organized into small, cross-trained groups called "modules". Instead of individual piece-rate work, the whole team works closely together to produce a complete garment. The team collectively manages workflow and shares responsibility for both the production speed and the quality of the final output.

Step 3: Final Answer:

The system that relies on teamwork and shared responsibility is the Modular Production System.

💡 Quick Tip

In the garment industry, "Module" equals "Team".

If a question mentions cross-training, shared responsibility, or team-based manufacturing, the answer is the **Modular Production System**.

15. What are the reagents used to rectify "over-bluing" in white cotton fabrics?

- (A) Dilute acid solution
- (B) Dilute alkali solution
- (C) Hydrogen peroxide
- (D) Sodium chloride solution

Correct Answer: (A) Dilute acid solution

Solution:

Step 1: Understanding the Question:

The question asks for the appropriate chemical treatment to fix white cotton garments that have taken on a blue tint because too much bluing agent was added during the wash.

Step 2: Detailed Explanation:

"Bluing" is a laundering practice where a trace amount of blue dye (like Prussian blue or ultramarine) is added to white fabrics. Because blue and yellow are complementary colors, the blue dye neutralizes the natural yellowing of aging cotton, tricking the eye into seeing a stark, bright white.

However, if an excessive amount of bluing agent is used, or if it isn't mixed properly, it causes "over-bluing"—leaving distinct blue streaks or an overall bluish tint on the fabric.

Most commercial bluing agents are slightly alkaline or are sensitive to acidic environments. To safely strip this excess dye out of cotton fibers without employing harsh, damaging bleaches, the fabric is rinsed in a **dilute acid solution**. Mild household acids like white vinegar (dilute acetic acid) are highly effective at breaking down and neutralizing the blue pigment, restoring the fabric's white appearance.

Step 3: Final Answer:

A dilute acid solution is used to rectify over-bluing in white cotton fabrics.

💡 Quick Tip

To fix an "over-blued" white shirt at home, you soak it in water mixed with a little white vinegar. Vinegar is a **dilute acid**. It safely neutralizes the excess blue pigment.
