CUET PG 2026 Horticulture 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. Which fruit is known as the "King of Fruits" in India?

(A) Apple
(B) Banana
(C) Mango
(D) Orange

Correct Answer: (C) Mango

Solution:

Step 1: Understanding the Question:
The question asks to identify the fruit that holds the cultural title "King of Fruits" specifically within the Indian context.

Step 2: Key Formula or Approach:
This is a general knowledge question based on cultural significance rather than scientific classification. The approach is to identify the fruit most celebrated for its taste, variety, and cultural importance in India.

Step 3: Detailed Explanation:
The Mango (Mangifera indica) is revered in India and affectionately called the "King of Fruits". This is due to its exceptional sweetness, rich aroma, wide range of varieties (like Alphonso, Dasheri), and deep-rooted presence in Indian culture, religion, and history.
Let's evaluate the other options:
(A) **Apple**: A popular and healthy fruit, but not given this title in India.
(B) **Banana**: A widely available and staple fruit, but lacks the celebratory status of the mango.

(D) **Orange**: A common citrus fruit, but not considered the "king".

Step 4: Final Answer:
Due to its unparalleled popularity and cultural status in India, the Mango is known as the "King of Fruits". Therefore, option (C) is the correct answer.

> Quick Tip
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> For cultural GK questions, think about which item has the most significance in festivals, literature, and common parlance. In India, the arrival of the mango season is a widely celebrated event, confirming its "royal" status.

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2. What is the botanical name of the Guava plant?

(A) Mangifera indica
(B) Psidium guajava
(C) Musa paradisiaca
(D) Citrus sinensis

Correct Answer: (B) Psidium guajava

Solution:

Step 1: Understanding the Question:
The question requires the scientific or botanical name for the common fruit, Guava, based on the binomial nomenclature system.

Step 2: Key Formula or Approach:
The approach involves matching the common plant name (Guava) with its correct scientific name from the given options. This tests knowledge of botanical classifications.

Step 3: Detailed Explanation:
The botanical name for the common guava is *Psidium guajava*. The first part, *Psidium*, is the genus, and the second part, *guajava*, is the species.
Let's identify the other botanical names in the options:
(A) **Mangifera indica**: This is the botanical name for the Mango.
(C) **Musa paradisiaca**: This is a botanical name for the Banana.
(D) **Citrus sinensis**: This is the botanical name for the Sweet Orange.

Step 4: Final Answer:
The correct botanical name for the Guava plant is *Psidium guajava*. Therefore, option (B) is the correct answer.

Quick Tip

Often, the species name in a botanical name gives a clue. Here, 'guajava' sounds very similar to 'guava', making it easier to remember. Associate genus names with common fruits: *Mangifera* (Mango), *Psidium* (Guava), *Musa* (Banana).

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3. Which plant growth regulator is commonly used for rooting in cuttings?

(A) Gibberellin
(B) Cytokinin
(C) Auxin
(D) Ethylene

Correct Answer: (C) Auxin

Solution:

Step 1: Understanding the Question:
The question asks to identify the specific plant hormone (plant growth regulator) that is responsible for and used to stimulate the formation of roots on plant cuttings.

Step 2: Key Formula or Approach:
This question requires understanding the primary functions of the main classes of plant hormones. The approach is to match the function (root initiation) with the correct hormone.

Step 3: Detailed Explanation:
Plant hormones have distinct roles in plant development.
(C) **Auxin**: The primary role of auxins (like Indole-3-acetic acid or IAA) is to promote cell elongation and, crucially, to initiate the formation of adventitious roots. This makes it the key ingredient in rooting powders used for vegetative propagation.
The other hormones have different main functions:
(A) **Gibberellin**: Primarily promotes stem elongation, germination, and flowering.
(B) **Cytokinin**: Primarily promotes cell division (cytokinesis) and shoot formation.
(D) **Ethylene**: Primarily functions as a gaseous hormone that promotes fruit ripening and senescence.

Step 4: Final Answer:
Auxins are the plant growth regulators used to induce rooting in cuttings. Therefore, option (C) is the correct answer.

Quick Tip

A simple mnemonic for exams: **A**uxin helps with **A**dventitious roots (at the base of the cutting), while **C**ytokinin promotes **C**ell division and shoot growth (at the top). Think Roots vs. Shoots.

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4. "Amrapali" is a cross between which two Mango varieties?

(A) Dasheri × Langra
(B) Dasheri × Neelum
(C) Alphonso × Kesar
(D) Langra × Neelum

Correct Answer: (B) Dasheri × Neelum

Solution:

Step 1: Understanding the Question:
The question asks for the parent varieties of the hybrid mango 'Amrapali'.

Step 2: Key Formula or Approach:
This is a factual question from the field of horticulture, specifically fruit breeding. The approach is to recall the specific cross that resulted in the 'Amrapali' variety.

Step 3: Detailed Explanation:
'Amrapali' is a popular mango hybrid developed at the Indian Agricultural Research Institute (IARI), New Delhi, in 1971. It was created to develop a dwarf, regular-bearing, and high-quality variety suitable for high-density planting.
The cross was made using:
Dasheri (as the female parent) × **Neelum** (as the male parent).
This combination resulted in the desired traits, making 'Amrapali' a significant achievement in mango breeding.

Step 4: Final Answer:
The correct parentage for 'Amrapali' mango is Dasheri × Neelum. Therefore, option (B) is the correct answer.

Quick Tip

Remembering hybrid crosses can be tricky. Use a mnemonic like D.N.A. (**D**asheri × **N**eelum = **A**mrapali) to easily recall this famous mango cross during an exam.

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5. The process of removing the terminal bud to promote lateral branching is called _____.

(A) Pruning
(B) Pinching
(C) Grafting
(D) Layering

Correct Answer: (B) Pinching

Solution:

Step 1: Understanding the Question:
The question asks for the specific horticultural term for the removal of the main growing tip (terminal bud) of a plant to encourage the growth of side shoots (lateral branches).

Step 2: Key Formula or Approach:
This requires understanding the concept of "apical dominance" and the different horticultural practices listed. The terminal bud produces auxins that suppress the growth of lateral buds below it. Removing this bud breaks the dominance and allows side branches to grow.

Step 3: Detailed Explanation:
Let's define the terms:
(B) **Pinching** (or tipping): This is the precise term for removing the soft, new growth at the end of a stem. This action breaks apical dominance, leading to a bushier, more compact plant with more branches.
(A) **Pruning**: This is a more general term for cutting away dead, overgrown, or unwanted branches and stems. While it can involve removing terminal buds, 'pinching' is the more specific term for this particular action.
(C) **Grafting**: A propagation technique where parts of two plants are joined to grow as one.
(D) **Layering**: A propagation technique where a stem is encouraged to root while still attached to the parent plant.

Step 4: Final Answer:
The specific process of removing the terminal bud to promote lateral branching is called pinching. Therefore, option (B) is correct.

Quick Tip

Think of the action: you use your thumb and forefinger to 'pinch' off the tiny growing tip. This specific, small-scale removal to make a plant bushier is called pinching. Pruning is like a general haircut, while pinching is like a very specific trim.

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6. Which nutrient deficiency causes "Buttoning" in Cauliflower?

(A) Nitrogen
(B) Phosphorus
(C) Potassium
(D) Boron

Correct Answer: (A) Nitrogen

Solution:

Step 1: Understanding the Question:
The question asks to identify the specific nutrient deficiency that leads to a physiological disorder in cauliflower known as "Buttoning".

Step 2: Key Formula or Approach:
First, define "Buttoning". It is the premature formation of a small, non-marketable head or "curd" while the plant is still small. The approach is to understand the role of each nutrient and how its deficiency would affect plant growth, leading to this disorder.

Step 3: Detailed Explanation:
For a cauliflower to form a large, healthy curd, it must first undergo sufficient vegetative growth (i.e., develop a large frame of leaves).
(A) **Nitrogen (N)**: Nitrogen is the most critical nutrient for vegetative growth (leaf and stem development). A deficiency of nitrogen stunts the plant's growth. A small, starved plant will be triggered to enter its reproductive phase early, resulting in the formation of a tiny, premature "button" curd.
Deficiencies of other nutrients cause different disorders:
(B) **Phosphorus (P)**: Deficiency can cause purplish discoloration and stunted growth, but is not the primary cause of buttoning.
(C) **Potassium (K)**: Deficiency affects water regulation and can cause browning on leaf margins.
(D) **Boron (B)**: Deficiency causes browning of the curd and hollow stems, not buttoning.

Step 4: Final Answer:
The primary cause of poor vegetative growth leading to buttoning in cauliflower is Nitrogen deficiency. Therefore, option (A) is correct.

Quick Tip

Remember the role of N-P-K: **N**itrogen is for leafy **G**rowth. Without enough growth, the cauliflower head can't get big and remains a small "button". Buttoning = Stunted Growth = Nitrogen Deficiency.

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7. "Arka Rakshak" is a high-yielding triple-resistant variety of which vegetable?

(A) Brinjal
(B) Tomato
(C) Chilli
(D) Cabbage

Correct Answer: (B) Tomato

Solution:

Step 1: Understanding the Question:
The question asks to identify the vegetable crop to which the variety "Arka Rakshak" belongs. The name provides clues about its origin and characteristics.

Step 2: Key Formula or Approach:
This is a factual question. The prefix "Arka" indicates that the variety was developed by the Indian Institute of Horticultural Research (IIHR) in Bengaluru, which names many of its varieties after the Arkavathi river. "Rakshak" means "protector" in Hindi, suggesting disease resistance.

Step 3: Detailed Explanation:
"Arka Rakshak" is a celebrated high-yielding hybrid variety of **Tomato**. Its key feature is its "triple resistance" to three major diseases that affect tomato crops:
1. Bacterial wilt
2. Tomato leaf curl virus (ToLCV)
3. Early blight
This robust resistance makes it a highly reliable and profitable variety for farmers.

Step 4: Final Answer:
"Arka Rakshak" is a triple-resistant variety of Tomato. Therefore, option (B) is the correct answer.

Quick Tip

Associate the name's meaning with the crop. "Rakshak" (Protector) protects the high-value Tomato crop from three devastating diseases. This mental link can help you remember the answer easily.

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8. In which type of garden style is the "Baradari" a typical feature?

(A) Mughal Garden
(B) Japanese Garden
(C) English Garden
(D) Formal Garden

Correct Answer: (A) Mughal Garden

Solution:

Step 1: Understanding the Question:
The question asks to identify the specific style of garden design where a "Baradari" is a characteristic architectural element.

Step 2: Key Formula or Approach:
First, define a "Baradari". It is a pavilion or building with "twelve doors" ('bara' = twelve, 'dar' = door), designed to allow the free passage of air. The approach is to match this architectural feature with the characteristics of the listed garden styles.

Step 3: Detailed Explanation:
(A) **Mughal Garden**: This style, influenced by Persian gardens, is highly formal and symmetrical. It is characterized by rectilinear layouts, water channels, fountains, and central architectural features for relaxation and viewing the garden. The Baradari is a classic example of such a feature, often placed at the center of a terrace or overlooking a water body.
(B) **Japanese Garden**: This style focuses on naturalism, symbolism, and asymmetry, avoiding formal structures like a Baradari.
(C) **English Garden**: This style imitates an idealized view of nature and is characterized by flowing, informal lines and a lack of rigid geometry.
(D) **Formal Garden**: While Mughal gardens are a type of formal garden, this option is too general. The Baradari is specifically tied to the Mughal style.

Step 4: Final Answer:
The Baradari is a quintessential feature of the Mughal Garden style. Therefore, option (A) is correct.

Quick Tip

Associate key features with garden styles. Mughal = Symmetry, Water Channels, Baradari. Japanese = Rocks, Water, Lanterns, Asymmetry. English = Naturalistic Landscapes, Rolling Lawns. This helps in quick identification.

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9. What is the maturity index for harvesting Banana?

(A) Flowering stage
(B) Fruit color change
(C) Angularity of fingers
(D) Leaf fall

Correct Answer: (C) Angularity of fingers

Solution:

Step 1: Understanding the Question:
The question asks for a key indicator or "maturity index" that growers use to decide the right time to harvest bananas.

Step 2: Key Formula or Approach:
Bananas are harvested when they are mature but still green (climacteric fruit). The maturity index must be a reliable physical sign that indicates the fruit has reached this stage. The approach is to evaluate which option represents this sign.

Step 3: Detailed Explanation:
(C) **Angularity of fingers**: This is the most widely used visual indicator. When bananas (the "fingers") are immature, they have sharp, distinct angles or ridges. As they mature and the pulp fills out, these angles become less prominent, and the fruit appears more rounded and plump. The disappearance of this angularity indicates the banana is ready for harvest.
Let's analyze other options:
(A) **Flowering stage**: This marks the beginning of fruit development, not maturity.
(B) **Fruit color change**: The change from green to yellow happens during ripening, which occurs *after* the banana has been harvested.
(D) **Leaf fall**: This is generally a sign of plant health or age, not fruit maturity.

Step 4: Final Answer:
The change in the angularity of the banana fingers is the primary maturity index for harvesting. Therefore, option (C) is correct.

Quick Tip

For harvesting bananas, remember the rule: "From edgy to round". A mature banana loses its sharp edges and becomes plump. This visual cue is the most practical method for farmers in the field.

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10. Which method of irrigation is most suitable for arid and semi-arid horticultural regions?

(A) Flood irrigation
(B) Sprinkler irrigation
(C) Drip irrigation
(D) Basin irrigation

Correct Answer: (C) Drip irrigation

Solution:

Step 1: Understanding the Question:
The question asks to identify the most water-efficient irrigation method for areas where water

is scarce, such as arid (dry) and semi-arid regions.

Step 2: Key Formula or Approach:
The key principle in arid regions is to maximize Water Use Efficiency (WUE). This means delivering water to the plant's roots with minimum loss from evaporation, runoff, or deep percolation. The approach is to compare the efficiency of the given irrigation methods.

Step 3: Detailed Explanation:
(C) **Drip irrigation**: This method involves a network of pipes that deliver water slowly and directly to the soil at the plant's root zone, drop by drop. It has the highest water application efficiency (over 90%) because it minimizes evaporation and runoff. This makes it the ideal choice for water-scarce regions.
Other methods are less efficient:
(A) **Flood irrigation** and (D) **Basin irrigation**: These are surface irrigation methods that involve flooding the entire field. They lead to significant water loss through evaporation and deep percolation.
(B) **Sprinkler irrigation**: This method sprays water over the plants, resembling rainfall. It is more efficient than flooding but still loses a considerable amount of water to evaporation, especially in windy and hot arid conditions.

Step 4: Final Answer:
Drip irrigation is the most suitable and efficient method for horticultural regions with limited water resources. Therefore, option (C) is correct.

Quick Tip

In questions about arid regions, always look for the option that conserves the most water. Drip irrigation's motto is "more crop per drop," making it the definitive answer for water-scarce environments.

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11. "Pusa Nanha" is a dioecious, dwarf variety of which fruit?

(A) Papaya
(B) Mango
(C) Banana
(D) Guava

Correct Answer: (A) Papaya

Solution:

Step 1: Understanding the Question:
The question asks to identify the fruit crop for which "Pusa Nanha" is a known variety. The description includes key traits: dioecious and dwarf.

Step 2: Key Formula or Approach:
This is a factual question about crop varieties. The name "Pusa Nanha" itself provides clues. "Pusa" indicates it was developed at the IARI in Pusa, New Delhi, and "Nanha" means "small" or "dwarf" in Hindi. The term "dioecious" means that male and female flowers are on separate plants.

Step 3: Detailed Explanation:
(A) **Papaya** (Carica papaya): "Pusa Nanha" is a very famous and revolutionary dwarf variety of papaya. Its short stature allows for high-density planting and makes it suitable for growing in pots and home gardens. Papaya plants are naturally dioecious (though many modern varieties are gynodioecious or hermaphrodite), fitting the description.
The other fruits do not fit the description:
(B) **Mango**: 'Amrapali' is a dwarf mango, but not 'Pusa Nanha'.
(C) **Banana**: Banana varieties are not referred to as dioecious.
(D) **Guava**: Dwarf guava varieties exist, but 'Pusa Nanha' is not one of them.

Step 4: Final Answer:
"Pusa Nanha" is a well-known dwarf, dioecious variety of Papaya. Therefore, option (A) is correct.

Quick Tip

Use the name as a memory aid. "Nanha" is Hindi for "small". When you see "Pusa Nanha", immediately think "small/dwarf Papaya". This is one of the most frequently asked variety-related questions.

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12. The specialized branch of horticulture dealing with the cultivation of flowers is called?

(A) Pomology
(B) Olericulture
(C) Floriculture
(D) Arboriculture

Correct Answer: (C) Floriculture

Solution:

Step 1: Understanding the Question:
The question asks for the specific scientific term for the branch of horticulture that focuses on growing and marketing flowers and ornamental plants.

Step 2: Key Formula or Approach:
This question tests knowledge of the main branches of horticulture. The approach is to define

each term provided in the options and identify the one related to flowers.

Step 3: Detailed Explanation:
Horticulture is a broad field with several specializations:
(C) **Floriculture**: Derived from the Latin words 'flos' (flower) and 'cultura' (cultivation), this branch deals with the cultivation of flowering and ornamental plants for gardens and for commercial purposes like the cut flower industry.
Let's define the other branches:
(A) **Pomology**: The branch dealing with the cultivation of fruit crops (from Latin 'pomum' meaning fruit).
(B) **Olericulture**: The branch dealing with the cultivation of vegetables (from Latin 'oleris' meaning pot-herb).
(D) **Arboriculture**: The cultivation, management, and study of individual trees, shrubs, vines, and other perennial woody plants.

Step 4: Final Answer:
The branch of horticulture dedicated to flower cultivation is Floriculture. Therefore, option (C) is correct.

Quick Tip

Remember the Latin roots to easily distinguish the branches:
Flori = Flower
Pomo = Fruit
Oleri = Vegetable
Arbor = Tree
This makes it simple to answer any question on this topic.

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13. Which acid is used as a chemical preservative in RTS (Ready-to-Serve) beverages?

(A) Citric acid
(B) Benzoic acid
(C) Acetic acid
(D) Lactic acid

Correct Answer: (B) Benzoic acid

Solution:

Step 1: Understanding the Question:
The question asks to identify the acid that acts as a primary chemical preservative in Ready-to-Serve (RTS) fruit beverages to prevent spoilage and extend shelf life.

Step 2: Key Formula or Approach:
This question requires knowledge of food preservation. The approach is to differentiate between acids used for flavoring/acidity control and those used specifically for their antimicrobial preservative properties.

Step 3: Detailed Explanation:
(B) **Benzoic acid** (and its salt, sodium benzoate) is a widely used Class II chemical preservative. It is particularly effective at inhibiting the growth of yeasts and molds in acidic environments (low pH), which is characteristic of fruit juices and RTS beverages.
Let's analyze the other options:
(A) **Citric acid**: Is primarily used as an acidulant to add a tart flavor and to control the pH of the beverage, not as the main preservative.
(C) **Acetic acid**: This is the main component of vinegar and is used to preserve pickles, but not typically in RTS fruit drinks.
(D) **Lactic acid**: Is a product of fermentation and is used in preserving dairy products and some vegetables, but not as an added preservative for RTS beverages.

Step 4: Final Answer:
Benzoic acid is the chemical preservative commonly used in RTS beverages. Therefore, option (B) is correct.

Quick Tip

For exams, remember the two main preservatives for beverages: **Benzoic acid** (or Sodium Benzoate) for colored juices/drinks, and **Potassium Metabisulphite (KMS)** for colorless drinks. Benzoic acid is the correct choice here.

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14. "M-9" is a well-known dwarfing rootstock for which fruit crop?

(A) Mango
(B) Apple
(C) Pear
(D) Peach

Correct Answer: (B) Apple

Solution:

Step 1: Understanding the Question:
The question asks to identify the fruit crop that uses "M-9" as a common rootstock to control its size, specifically to make it a dwarf tree.

Step 2: Key Formula or Approach:
This is a factual question testing knowledge of horticultural propagation techniques, specifically the use of rootstocks. The approach is to recognize the famous "Malling" series of rootstocks

and their association with a particular fruit.

Step 3: Detailed Explanation:
A rootstock is the root system and base of a plant onto which a different plant's top portion (scion) is grafted. Dwarfing rootstocks are crucial for creating smaller, more manageable trees for high-density planting.
(B) **Apple**: The "M" series of rootstocks, also known as the Malling series, were developed at the East Malling Research Station in England specifically for apple trees. **M-9** is one of the most important and widely used dwarfing rootstocks for apple in the world. It induces early fruiting and high yields.
The other crops use different series of rootstocks.

Step 4: Final Answer:
M-9 is a famous dwarfing rootstock used for Apple. Therefore, option (B) is the correct answer.

Quick Tip

Remember this key association for your exam: The "M-series" (Malling series) of rootstocks, especially M-9 and M-27, are almost exclusively linked with **Apple** cultivation for creating dwarf and semi-dwarf trees.

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15. What is the primary pigment responsible for the red color in Tomatoes?

(A) Chlorophyll
(B) Carotene
(C) Lycopene
(D) Xanthophyll

Correct Answer: (C) Lycopene

Solution:

Step 1: Understanding the Question:
The question asks to identify the specific natural pigment that gives ripe tomatoes their characteristic red color.

Step 2: Key Formula or Approach:
This question tests knowledge of plant pigments. The approach is to understand the colors associated with different types of pigments found in fruits and vegetables.

Step 3: Detailed Explanation:
Plant colors are determined by various pigments.
(C) **Lycopene**: This is a bright red carotenoid pigment and phytochemical found in tomatoes and other red fruits and vegetables, such as red carrots, watermelons, and papayas. It is the

principal pigment responsible for the deep red color of ripe tomatoes.
Let's review the other pigments:
(A) **Chlorophyll**: This is the pigment that gives plants their green color and is involved in photosynthesis.
(B) **Carotene** (specifically Beta-carotene): This is an orange-colored pigment found abundantly in carrots.
(D) **Xanthophyll**: This is a pigment that produces a yellow color.

Step 4: Final Answer:
The primary pigment causing the red color in tomatoes is Lycopene. Therefore, option (C) is correct.

Quick Tip

A good way to remember this is to link the pigment **Lycopene** to the botanical name of tomato, *Solanum* ***lyco****persicum*. The shared "lyco" part can serve as a strong mnemonic link between the pigment and the plant.
