

# CBSE Class 12 Horticulture Paper 2023 Solved

## SECTION A

### (Objective Type Questions)

**1. Answer any 4 questions out of the given 6 questions on employability skills. 4x1=4**

**(i) Expand ICT.**

**Ans:** Information and Communication Technology.

**(ii) Define Stress.**

**Ans:** Stress is a state of feeling upset, annoyed and hopeless.

**(iii) Write one characteristic of Borderline Personality Disorder.**

**Ans:** People with borderline personality disorder essentially lack a sense of self-worth and thus, experience feelings of emptiness and fears of abandonment.

**(iv) The National Institute of Entrepreneurship and Small Business Development comes under which Ministry of the Central Government?**

**Ans:** The Ministry of Human Resource Development (MHRD).

**(v) By default, how many text boxes appear in the first slide in LibreOffice Impress Software?**

**Ans:** Two textboxes.

**(vi) What is a Startup?**

**Ans:** A startup is a company that is in the first stage of its operations.

**2. Answer any 5 out of the given 7 questions. 5x1=5**

**(i) Identify the incorrect statement about Hi-Tech Floriculture.**

(a) It is an ultra-modern technology.

**(b) It is technology highly dependent on environment.**

(c) It is capital intensive technology.

(d) It gives higher productivity with better quality produce.

**(ii) \_\_\_\_\_ refers to a specific area in the garden where only roses are planted.**

(a) Topiary

(b) Arch

(c) Pergola

**(d) Rosary**

**(iii) Air layering is not used to propagate:**

**(a) Dieffenbachia**

(b) Dracaena

(c) Rubber plant

(d) Ficus

**(iv) Plants which are not suitable for paved garden:**

(a) Lantana sellowiana

(b) Euphorbia splendens

**(c) Bougainvillea**

(d) Dianthus deltoides

**(v) Which flower is insensitive to ethylene?**

(a) Carnation

- (b) Rose
- (c) Sunflower**
- (d) Gerbera

**(vi) Lipstick, Dark Tempo, Cobra, Empire, Design are important cultivars of**

- (a) Rose
- (b) Carnation**
- (c) Chrysanthemum
- (d) Marigold

**(vii) Ikebana is basically a \_\_\_\_\_ floral art form.**

- (a) Chinese
- (b) Portuguese
- (c) Japanese**
- (d) Philippines

**3. Answer any 6 out of the given 7 questions.  
6x1=6**

**(i) Calcutta Selection 1 is:**

**(a) the best variety of rose for making gulab jal**

- (b) a variety of grass used for lawn making
- (c) a variety of tulip
- (d) a suitable plant for topiary

**(ii) Among the following, which is the topmost cut flower sold globally (value-wise)?**

- (a) Tulip
- (b) Gerbera
- (c) Rose**
- (d) Lilium

**(iii) Which of the following plants is used in hedge with the objective of protection?**

- (a) Hamelia patens
- (b) Murraya exotica
- (c) Opuntia**
- (d) Poinsettia

**(iv) Leaf scorch, Bud blast, Puffy foliage are disorders of:**

- (a) Rose
- (b) Gerbera**
- (c) Tulip
- (d) Lily

**(v) \_\_\_\_\_ is the treatment given immediately to harvested flowers with the objective of removing field heat.**

- (a) Pre-cooling**
- (b) Freezing
- (c) Pulsing
- (d) Holding

**(vi) First CAD software for creation of both 2-D and 3-D design is:**

- (a) AutoCAD
- (b) ArchiCAD**
- (c) LinuxCAD
- (d) WindowsCAD

**(vii) The art of arrangement of flowers, fruits, and vegetables is called:**

- (a) Moribana
- (b) Morimono**
- (c) Zeneibana
- (d) Jiyubana

**4. Answer any 5 out of the given 6 questions.  
5x1=5**

**(i) Which of the following is called French Marigold?**

- (a) *Tagetes erecta*
- (b) *Tagetes patula***
- (c) *Tagetes minuta*
- (d) *Tagetes tenuifolia*

(ii) The following is not used as humectant in preserving plants:

- (a) Glycerol
- (b) Phospholipids**
- (c) Polyethylene glycol
- (d) Comfort

(iii) Which of the following is not a physiological disorder of rose?

- (a) Bull head
- (b) Whiptail**
- (c) Bent neck
- (d) Blind shoot

(iv) *Cynodon dactylon* is commonly known as \_\_\_\_\_.

- (a) Korean grass
- (b) Bermuda grass**
- (c) Manila grass
- (d) Elephant grass

(v) Plant which can be grown successfully as a pot plant under pergola is:

- (a) *Bryophyllum*
- (b) *Cineraria*
- (c) *Rhoeo***
- (d) *Crassula*

(vi) In general, most of the indoor plants grow best at day temperature ranging from \_\_\_\_\_.

- (a) 0-10 C
- (b) 35-40 C
- (c) 18-24 C**
- (d) Above 40 C

5. Answer any 5 out of the given 6 questions.  
5x1=5

(i) Which place in India leads in having the highest number of ornamental plant nurseries?

- (a) Delhi
- (b) Surat
- (c) Kolkata**
- (d) Tuticorin

(ii) *Coleus*, *Iresine* plants are suitable for:

- (a) Lawn
- (b) Carpet bedding**
- (c) Arches
- (d) Climber for gate

(iii) Among the following, which plant is commonly not used during foliage decoration?

- (a) *Thuja*
- (b) Fern
- (c) Cycads
- (d) *Prosopis juliflora***

(iv) In *Chrysanthemum*, flowering occurs when critical day length is less than \_\_\_\_\_.

- (a) 11.5 hours
- (b) 13 hours**
- (c) 10.5 hours
- (d) 9.5 hours

(v) Which of the following is not a CAD programming software used in landscaping?

- (a) Advance Design
- (b) Advance Steel
- (c) Advance Garden**
- (d) Advance Concrete

(vi) American Beauty, Friendship, Oscar, Rose Supreme are important cultivars of:

- (a) Rose

- (b) Marigold
- (c) Gladiolus**
- (d) Jasmine

**6. Answer any 5 out of the given 6 questions.**

**5x1=5**

**(i) The term Topiary is derived from**

\_\_\_\_\_.

- (a) Greek
- (b) Latin**
- (c) Roman
- (d) Sanskrit

**(ii) The largest flower market in the world is situated at \_\_\_\_\_.**

- (a) Aalsmeer (The Netherlands)**
- (b) Azadpur Mandi (Delhi, India)
- (c) Florida (USA)
- (d) London (UK)

**(iii) Which of the following is the intangible enrichment item in the garden?**

- (a) Stone
- (b) Water
- (c) Fragrance**
- (d) Birds

**(iv) Which of the following plants can be grown in light shade (10% light)?**

- (a) Coleus
- (b) Bryophyllum
- (c) Thunbergia
- (d) Hydrangea**

**(v) Which of the following occupations is not a directly associated component of commercial floriculture?**

- (a) Manufacturing pots
- (b) Packaging material
- (c) Greenhouse material

**(d) Flori-clinics**

**(vi) Table decoration with flowers is an example of which type of flower arrangement?**

- (a) Vertical arrangement
- (b) Triangular arrangement
- (c) Horizontal arrangement**
- (d) Hogarth curve arrangement

## SECTION B

**(Subjective Type Questions)**

*Answer any 3 questions out of the given 5 questions on employability skills. Answer each question in 20-30 words. 3 2=6*

**7. Enlist four characteristics of entrepreneurship.**

Ans: The characteristics of entrepreneurship.

- It is an economic activity done to create, develop, and maintain a profit-oriented organisation.
- Identify an opportunity as a potential to sell and make a profit in the market.
- Deals with optimisation in the utilisation of resources.
- An enterprise and an entrepreneur can take risks.

**8. List two benefits of having a positive attitude in life.**

Ans: A positive attitude makes a person happier and helps build and maintain relationships. It even increases one's chances of success. In addition, it can help the person make better decisions.

**9. Explain service entrepreneur.**

Ans: Service entrepreneurs either create a new market for their services or provide a service in

an existing market. They spot an idea and convert it into a service, which is unprecedented or not available in the market. It is irrespective of the nature and size of operations, but is essentially a service.

**10. Differentiate between worksheet and workbook.**

Ans:

- A worksheet is a collection of cells in the form of a grid (a network of lines that intersect each other, making rectangles).
- A workbook is a spreadsheet that has one or more worksheets.

**11. What will happen when the following buttons are pressed together on a keyboard?**

(a) Ctrl + P

(b) Ctrl + U

Ans:

(a) Ctrl + P: Help print the spreadsheet or the document.

(b) Ctrl + U: It underlines the selected text.

*Answer any 3 out of the given 5 questions in 20-30 words each. 3x2=6*

**12. Define the following:**

(a) Floriculturist

(b) Florist

Ans: (a) Floriculturist – A person who specializes in the cultivation and management of flowering and ornamental plants for commercial or aesthetic purposes.

(b) Florist – A person who sells and arranges cut flowers, bouquets, and floral decorations.

**13. Explain the importance of pinching and pruning of indoor plants.**

Ans: Pinching and pruning help maintain the shape, size, and health of indoor plants. They encourage bushier growth, remove dead or diseased parts, improve air circulation, and enhance flowering and aesthetic appeal.

**14. Write the four functions that are served by the private or family area in home landscaping.**

Ans:

- Provides space for relaxation and privacy
- Serves as an area for family gatherings or recreation
- Used for laundry or utility purposes
- Space for kitchen gardening or growing herbs and vegetables

**15. Explain the role of humidity in the growth of indoor plants.**

Ans: Humidity helps maintain turgidity and prevents wilting of indoor plants. It influences transpiration, nutrient uptake, and overall plant health. Low humidity can cause browning of leaf tips and reduced growth.

**16. What is flower arrangement? How does the colour of the flower play an important role in flower arrangement?**

Ans: Flower arrangement is the artistic placement of flowers and foliage for decorative purposes. Colour plays a vital role by creating visual harmony, contrast, and emotional impact, enhancing the overall beauty and expression of the arrangement.

*Answer any 2 out of the given 3 questions in 30-50 words each. 2x3=6*

**17. What are the general guidelines to be kept in mind while developing an outdoor room?**

**Ans:** General guidelines for developing an outdoor room:

- Design with purpose: Define the function of the space (e.g., relaxation, entertainment, dining).
- Ensure privacy and comfort: Use hedges, screens, or pergolas to create a sense of enclosure and shade.
- Proper selection of furniture and materials: Use weather-resistant furniture and materials suitable for outdoor conditions.
- Include greenery and natural elements: Add potted plants, lawns, or flower beds to enhance beauty and freshness.
- Ensure accessibility and safety: Design pathways and surfaces that are slip-resistant and easy to navigate.

**18. Explain the three basic types of CAD systems.**

**Ans:** Three basic types of CAD systems:

- 2D CAD: Used for creating flat drawings, floor plans, and basic layouts. It includes lines, curves, and shapes (e.g., AutoCAD 2D).
- 3D CAD: Allows creation of realistic 3D models with depth and perspective, useful for landscape and architectural visualization (e.g., SketchUp, ArchiCAD).
- Hybrid CAD: Combines both 2D and 3D capabilities, allowing users to switch between views and representations for a comprehensive design approach (e.g., AutoCAD full version).

**19. List the various parameters on which the grading of flowers is done after their harvest. (Any three)**

**Ans:** Parameters for grading flowers after harvest (any three):

- Stem length and thickness
- Flower size and form
- Color uniformity and freshness
- Absence of diseases, pests, and mechanical damage
- Stage of maturity at the time of harvest

**Answer any 3 out of the given 5 questions in 50-80 words each. 3x4=12**

**20. Describe any four indirectly associated employment generation avenues which get a boost with the development of commercial floriculture.**

**Ans:** Indirectly associated components of commercial floriculture:

Different types of job opportunities in commercial floriculture:

- Manufacturing Pots: Different types of pots, i.e., earthen, plastic, brass, glass, or concrete, are required to grow various types of ornamental plants.
- Greenhouse material: For quality flower production, greenhouses have become an indispensable part of the floriculture industry. As the demand for greenhouse materials increases, some people can earn their livelihood by being involved in the business of greenhouse materials.
- Packaging material: For marketing of various floricultural products, good packaging is essential, as improperly packed material becomes inferior and fetches little or no price. Thus, packaging materials such as cartons of corrugated cardboard, wooden or plastic,

bamboo baskets, etc., are also in demand.

- Transporting floricultural products: For transporting the flower products from their place of production to the actual marketing, some people can earn their livelihood, and to avoid the cruelty of middlemen, the growers should make their own co-operative, and their representatives should be involved in this marketing to ensure higher profit to the growers.

**21. What is dehydration technology of ornamental plant parts? Explain the following dehydration technologies:**

**(a) Natural drying**

**(b) Air drying**

**Ans:** Dehydration technology means to dry something under artificially produced heat through controlled temperature, humidity, and air flow.

- a) In natural drying, ornamental plant parts are allowed to dry naturally on the plant itself.
- b) In air drying, ornamental plant parts are simply kept hanging down under cover on racks or from rafters in the dark, or kept on newspaper/ blotting sheets.

**22. Write short notes on any four of the following:**

**(a) Shrubbery**

**(b) Bird Baths**

**(c) Sundials**

**(d) Floral Clocks**

**(e) Garden Seats**

**(f) Statues**

**(g) Ornamental Tubs / Urns and Vases**

**Ans:**

- (a) Shrubbery is an area planted with shrubs either in groups or as an accent in the form of a specimen plant.
- (b) Bird baths are nothing but large bowl-shaped containers, generally made of concrete, fixed over a pillar or column, which is about one meter tall.
- (c) Sundials: A sundial can be used as a focal point in a garden, can form a centre piece of a formal flower bed, and can be placed in the centre or at the end of the lawn and at the junction or termination of a path.
- (d) Floral Clocks are nothing but huge clocks, generally operated by electricity, having huge hands for showing the seconds, minutes, and hours.
- (e) Garden Seats are seats made of durable, artistic, and comfortable materials.
- (f) Statues are inanimate objects placed in gardens to improve the look. They are carved out of stone or made of bronze.
- (g) Ornamental Tubs / Urns and Vases are beautifying objects placed in the garden. They are usually made of bricks, concrete, or stone.

**23. Describe any four commercial products obtained from Rose.**

**Ans:** Rose oil, rose water, gulkand, and pankhuri are the four commercial products obtained from roses.

- Rose oil is extracted from the rose petals through steam distillation. It has medical properties.
- Rose water obtained from rose petals is used in the perfume industry, medicines, confectionery, and cosmetics.



- Gulkand is a tonic and laxative from preserved rose petals prepared by pounding equal portions of petals and white sugar.
- Pankhuri is dried rose petals, occasionally used as sweetened cold drinks.

**24. Describe the establishment and maintenance of lawn on the given points:**

**(a) Site selection and soil preparation**

**(b) Irrigation**

**Ans:**

**(a) Site selection and soil preparation:**

- A sunny site that has access to sufficient water for preparation and maintenance is preferred.
- The selected area is cleared of stones.
- Soil is manually dug up to 45 cm deep and ploughed 2-3 times.
- It is exposed to the sun's rays for 15-20 days to kill the weeds.

**(b) Irrigation**

- Lawn requires frequent watering, with heavy watering after a long interval.
- In summer, it is watered once in two days while it is once a week in winter.

BioSmartNotes