

CBSE – DEPARTMENT OF SKILL EDUCATION

Horticulture (SUBJECT CODE: 816)P

Marking Scheme

Class XII (Session 2019–2020)

Time: 3 Hours

Max. Marks: 60

General Instructions:

- This Question Paper consists of two parts viz. Part A: Employability Skills and Part B: Subject Skills.*
- Part A: Employability Skills (10 Marks)**
 - Answer any 4 questions out of the given 6 questions of 1 mark each.*
 - Answer any 3 questions out of the given 5 questions of 2 marks each.*
- Part B: Subject Skills (50 Marks):**
 - Answer any 10 questions out of the given 12 questions of 1 mark each.*
 - Answer any 5 questions from the given 7 questions of 2 marks each.*
 - Answer any 5 questions from the given 7 questions of 3 marks each.*
 - Answer any 3 questions from the given 5 questions of 5 marks each.*
- This question paper contains 42 questions out of which 30 questions are to be answered.*
- All questions of a particular part/section must be attempted in the correct order.*
- The maximum time allowed is 3 hrs.*

PART A: EMPLOYABILITY SKILLS

Q.NO.	EXPECTED ANSWERS/VALUE POINTS	MARKS	TOTAL MARKS
	<u>Answer any 4 questions out of the given 6 questions</u>		
1	c) Article writing	1	1
2	b) Standard bar	1	1
3	a) Dependent	1	1
4	d) Chief sustainability officers	1	1
5	Entrepreneurship is a process of developing a business plan, launching and running a business using innovation to meet customer needs and to make a profit.	1	1
6	b) Gossip	1	1
	<u>Answer any 3 questions out of the given 5 questions</u>		
7	Two points difference between listening and hearing- Listening Hearing	½	2

	It is active.	It is passive.	$\frac{1}{2}$	
	It requires a conscious effort.	It does not require a conscious effort.	$\frac{1}{2}$	
	(Any other, any two points)		$\frac{1}{2}$	
8	<p>Four steps to insert a text box in a slide are-</p> <ol style="list-style-type: none"> 1. Click the text button on the drawing bar 2. The mouse pointer changes to + the sign 3. Place the mouse pointer on the slide where you want to add the text box 4. Click and drag on the side to draw a text box. <p>(Any four points)</p>		$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
9	<p>Two traits of extraversion personality-</p> <ol style="list-style-type: none"> 1. Gregarious 2. Assertive <p>(Any other, any two points)</p> <p>Two traits of agreeableness personality-</p> <ol style="list-style-type: none"> 1. Cooperative 2. Agreeable <p>(Any other, any two points)</p>		$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
10	<p>Four green jobs in building and construction field are-</p> <ol style="list-style-type: none"> 1. Construction worker 2. Concrete labors 3. Highway laborers 4. Building planner and coordinators <p>(Any other, any four points)</p>		$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
11	<p>Chemist Shop or Pharmacy is an example for trading as there buying and selling of goods is takes place. Doctor giving a medical consultation is an example of services as here we pay for a doctor's expertise or services</p>		2	2

PART B: SUBJECT SKILLS (50 MARKS)

Answer any 10 questions out of the given 12 questions:

1.	Pothos/Money Plant and Dieffenbachia	(1)
2.	Asteraceae	(1)
3.	Rose	(1)

4.	Dalma and Rosalin	(1)
5.	AutoCAD and ArchiCAD.	(1)
6.	<i>Cynodon dactylon</i> or Doob grass	(1)
7.	Gulkand, Rose water	(1)
8.	Rose and Calendula.	(1)
9.	8HQC and 8 HQS	(1)
10.	Public area, service area and living area	(1)
11.	Japanese	(1)
12.	Banyan tree and Peepal tree	(1)

Answer any 5 questions out of the given 7 questions of 2 marks each:

13.	Topiary: The art of clipping and shearing shrubs and small trees and sometimes even herbaceous perennials into ornamental or abstract shapes.	(2)
14.	Value Addition: Value addition is any step taken to increase the value of a raw product anytime between harvesting and sale of the final product.	(2)
15.	Indoor plants: These are the plants that are best adapted to indoor environment <i>and</i> grown <i>indoors</i> in places such as residences and offices.	(2)
16.	Mowing: It is the cutting of lawn grass for maintaining its attractiveness for maximum utility.	(2)
17.	Pinching: It refers to removal of the growing point of a shoot along with a few leaves so as to encourage branching or to produce a bushy growth.	(2)
18.	Pulsing: It consists of placing the lower portion of cut flower stems in solution containing high percentage of sugar and germicide for a period of few hours to two days. Specific formulations developed vary with the flower species as sucrose 2-20% for 12-48 hours at 20 -27 ° C and relative humidity 80-100% under 2000-2500 lux cool light.	(2)
19.	Role of APEDA in promotion of floriculture: APEDA is responsible for export promotion and developing of Floriculture and floriculture products, the following assistance and promotional efforts have been made for Export Oriented Floriculture	(2)

	<p>units:</p> <ul style="list-style-type: none"> • Scheme for development of infrastructure and services. • Scheme for Development of Post-harvest Infrastructure • Scheme for Packaging Development. • Scheme for Export Promotion and Market Development. • Scheme for Survey, Feasibility, Consultancy and Database • Scheme for Air Freight Subsidy • Scheme for assistance to promote Quality Control and Quality Assurance. • Research & Development • Establishment of Cold Stores at major International Airports for Perishables • Scheme for establishment of Auction Houses for Flowers. 	
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Answer any 5 questions out of the given 7 questions of 3 marks each:

20.	<p>Advantages of Computer Aided Design</p> <ul style="list-style-type: none"> • Accuracy to landscape designs • Cost saving • Increased Productivity • Time saving • Uniform Designs • Editing • Quick learning of software than hand drafting 	(3)
21.	<p>Employment avenues in floriculture sector</p> <ul style="list-style-type: none"> • Traditional flower cultivation • Cut flower cultivation • Nursery industry • Hybrid seed production • Lawn industry • Florist and floral decorations • Value added products • Bonsai • Fillers • Specialty flowers 	(3)
22.	<p>Outdoor room concept: Just like the interior of our homes, these outdoor spaces reflect our lifestyle, tastes and needs. Also just like our homes, they have specific functions. There are three main functions to a given outdoor space: the living area, public area and service area. These specific areas are often referred to as outdoor rooms. Thinking and planning in this way is known to landscape designers as the outdoor room concept. Composition is the same as the indoor room comprised of – Outdoor Wall – Outdoor floor – Outdoor Ceiling.</p>	(3)
23.	<p>Methods of drying flowers</p> <ul style="list-style-type: none"> • Air drying • Embedded drying • Press drying • Water drying 	(3)

	<ul style="list-style-type: none"> • Glycerine drying 	
24.	Lawn establishment methods <ul style="list-style-type: none"> • Seeding • Dibbling • Turf Plastering • Turfing 	(3)
25.	Methods of propagation of chrysanthemum The most common methods of propagation in chrysanthemum are by suckers and cuttings A) Suckers: After the flowering is over the plants are beheaded to a height of about 15-20 cm from the ground level. During January –February, new suckers start appearing round the base of the stool and these are separated and planted in 10 cm pots. The suckers have their own root system. The pots should be kept in light shade to allow more rooting. B) Cuttings- After flowering is over the plants are cut to ground level as stated above. New shoots arise from the base as well as from axils of leaves. Young tip cuttings measuring 5-8 cm are taken just above a node. The lower leaves are removed and the basal portion of the cuttings are treated with some root promoting hormones like seradix before planting.	(3)
26.	Hedge and edge Hedge: Shrubs or trees planted at regular intervals to form a continuous screen. The two main functions are for ornamental and protective purpose. Edge: Evergreen, low growing plants having same characteristics as for planting a hedge are grown to form an edge. The main purpose is to direct traffic in the garden and to divide different areas or features in the garden.	(3)

Answer any 3 questions out of the given 5 questions of 5 marks each:

27.	Protected Cultivation of Rose Soil: Well drained, loamy soil having adequate organic matter, pH 6.0-6.5. Climate: <ul style="list-style-type: none"> • Temperature (Day 18-28 °C and night 15-18 °C) • Relative humidity (50-60%) • Light (photoperiod over 12 hours and intensity 6000- 8000 foot candles) • Carbon dioxide (1000-3000 ppm) Important varieties: First Red, Grand Gala, Konfetti, Noblesse, Tajmahal, Sangaria, Gladiator Propagation method: T- budding Planting distance: Single, double or four row planting system in bed is being followed and spacing of 30 x 25 cm is kept. Major Insects-pests: Red Scale, Aphids, Thrips, Jassids, Chafer beetles, Red Spider mite, Digger wasp. Major diseases: Die Back, Black Spot, Powdery mildew, Rust, Grey mould, Wilt Mosaic, Leaf blight	(5)
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28.	<p>Post harvest factors affecting vase life of cut flowers are</p> <ul style="list-style-type: none"> • Temperature • Light • Humidity • Water Quality • Ethylene sensitivity • Preservatives • Ventilation • Packaging • Diseases and pests 	(5)
29.	<p>Different features of gardens</p> <ul style="list-style-type: none"> • Garden drives • Paths • Garden steps • Garden walls • Fences • Gates • Arches • Pergolas • Bridges • Lawns • Flower beds • Borders • Carpet Bedding • Shrubbery • Hedge • Edge • Terrace • Dry wall • Greenhouse • Conservatory • Garden adornments (statues, Garden seats, ornamental vases, sun dials, bird baths, floral clock, fountains, statues etc.) • Specialised gardens (water garden, rock garden, paved garden, sunken garden, vertical garden, etc.) 	(5)
30.	<p>Ikebana: The Japanese method of flower arrangement is known as Ikebana. Different types of Ikebana:</p> <ul style="list-style-type: none"> • Moribana • Nageire • Jiyubana • Zeneika, 	(5)

- Zeneibana
- Morimono.

31.	<p>Commercial cultivation of marigold</p> <p>Soil: Marigold can be cultivated in a wide variety of soils. A deep fertile, friable soil having good water holding capacity and aeration is suitable for its cultivation. Sandy loam soil with a pH of 7.0-7.5 having good drainage is most preferred.</p> <p>Climate: The environmental conditions markedly influence the growth and flowering of marigold. Mild temperature during growing period greatly improved flowering.</p> <p>Varieties: Pusa Narangi Gaiinda, Pusa Basanti Gaiinda, Pusa Arpita, Bidhan Marigold-1, Bidhan Marigold-2 etc.</p> <p>Propagation method: Mostly through seeds and in some varieties by cuttings.</p> <p>Planting distance: Generally distance between rows is kept 45-60 cm and from plant to plant it is 30-45 cm.</p> <p>Insect pests: Red spider mite, hairy caterpillars and leaf hoppers</p> <p>Diseases: Damping off, Leaf spots and blight, flower bud rot and viral diseases.</p>	(5)
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