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**SEMESTER END THEORY EXAMINATION**  
**B.Sc. (Hons.) Agriculture**  
**Model Answer**

Semester	:	VI	Term	:	II	Academic Year	:	2021-22
Course No.	:	ELE HORT - 367	Title	:	Landscaping			
Credits	:	3 (2+1)						
Day & Date	:	28.04.2022	Time	:	2.00 Hr	Total Marks	:	80

**Note :** 1) Solve ANY EIGHT questions from SECTION-A  
2) Solve ANY TWELVE questions from SECTION-B  
3) ALL questions from SECTION-C are compulsory

<b>SECTION-A</b>	
<b>(Write the answers in 4-5 sentences only. Each question carries 4 marks)</b>	
<b>Q. 1</b>	<b>Define Landscape gardening. Write the importance of landscape gardening.</b>
<b>Ans.-</b>	<p><b>Landscape gardening</b> – It is the application of garden forms, different styles, methods and materials with a view to improving the landscape.</p> <p><b>Importance of landscape gardening</b></p> <ul style="list-style-type: none"> <li>-It increases the awareness towards nature-developed eco-friendly concept and provides the feeling of responsibility towards plants, birds and animals.</li> <li>- It helps in soil- moisture retention, prevent erosion</li> <li>- It helps in modifying air temperature, creating microclimate, and removal of noise and dust pollution.</li> <li>- It provides a habitat for birds and animals.</li> <li>- One fully developed large tree in a landscape can change the microclimate and brings down the temperature by 2 to 5<sup>0</sup> C.</li> </ul>
<b>Q. 2</b>	<b>Enlist the principles of landscaping. Write on mass effect and balance in brief.</b>
<b>Ans. -</b>	<p><b>Principles of landscaping are -</b></p> <p>Axis, Unity, Mass effect, Repetition, Focal point, Space, Balance, Rhythm, Divisional lines, Proportion and scale, Texture, Time and Light, Colour and Mobility</p> <p><b>Mass effect</b>-The use of single plant species in large numbers in one place is done to have a mass effect. One should see that such mass arrangements do not become monotonous, the sizes of masses should be varied.</p> <p><b>Balance</b>-it refers to equilibrium or quality or usual attraction.  Correct positioning of plants and features create a well-balanced design  It is used to maintain optimum symmetry in the garden.</p>

<p><b>Q. 3</b></p> <p><b>Ans.-</b></p>	<p><b>Enlist garden adornments. Explain in brief about ornamental stones and garden seats.</b></p> <p><b>Garden Adornments are -</b></p> <p>Garden seat, Ornamental stones, Ornamental tubes, Urns, and Vases, Fountain, Sundial, Floral clock, Japanese Lanterns, Statues, Plant stands, Garden bridges.</p> <p><b>Ornamental stones</b> – Ornamental stones, pillars, or pieces of rounded form or other abstract design. It improves the look of any garden to a great extent. The stone can be placed near a lily pool or in streams and waterfalls.</p> <p><b>Garden seat</b> – Garden seats are necessary for any garden. The seat should be comfortable, durable, artistic-looking, and should not look out of place. Wooden and fabric seats are comfortable to sit on as compared to those built in stone or iron. The chair or bench should have an appropriate design.</p>
<p><b>Q. 4</b></p> <p><b>Ans.-</b></p>	<p><b>Define tree. Write uses of trees. Enlist the types of canopy.</b></p> <p><b>Tree</b> – Trees are big, tall perennial plants having very thick and hard distinct stems called trunk and crown at the top. This single main stem i.e. trunk gives rise to many branches bearing leaves and fruits.</p> <p><b>Uses of Trees-</b> Trees used for Beautification</p> <ul style="list-style-type: none"> <li>- Used as Windbreaks, for shade</li> <li>- Use for medicine, protection</li> <li>- Use for food, fodder, wood and pollution control</li> </ul> <p><b>Types of canopy-</b> Round, Oval, Columnar Umbrella, Pyramidal, Weeping Spreading and Irregular</p>
<p><b>Q. 5</b></p> <p><b>Ans.-</b></p>	<p><b>Define garden. Enlist classification of the garden according to style and write in brief about a formal garden.</b></p> <p><b>Garden</b> – It is a design with definite use of plants to serve a certain aesthetic or utilitarian purpose <b>OR</b> An area embellished with plants is a valuable and pleasurable adjunct to a house.</p> <p><b>According to style</b> – the garden is classified into – (i) Formal (ii) Informal (iii) Freestyle</p> <p><b>Formal Garden-</b></p> <ul style="list-style-type: none"> <li>- It is laid out in a symmetrical or a geometrical pattern</li> <li>- Everything is done in a straight and narrow way and planned in a straightway.</li> <li>- Balance is symmetrical as the same feature is replicated on both sides of the central axis.</li> <li>- Land is leveled. Road and paths cut at a right angle.</li> </ul>

	<ul style="list-style-type: none"> <li>- Hedges, edges, and topiary are trimmed.</li> </ul> <p><b>Example</b> – Mughal, Persian, Italian, Chinese, and American gardens.</p>
<p><b>Q. 6</b></p> <p><b>Ans.-</b></p>	<p><b>Define lawn. Write points to be considered while site selection for lawn</b></p> <p><b>Lawn</b> - The lawn is defined as the green carpet for a landscape.</p> <p><b>Site selection</b> –</p> <ul style="list-style-type: none"> <li>- A site should receive full sunshine</li> <li>- The best situation will be the southern side and then South- East or South – West of the building             <ul style="list-style-type: none"> <li>- No big tree should be existing at the site.</li> <li>- Soil moisture capacity and drainage is also important</li> </ul> </li> </ul>
<p><b>Q. 7</b></p> <p><b>Ans.-</b></p>	<p><b>Define bonsai. Write types of bonsai.</b></p> <p><b>Bonsai</b> -A tree or plant grown in a shallow pot or container and expressing the beauty and volume of a tree in the natural environment is called Bonsai.</p> <p><b>Types of Bonsai-</b></p> <ol style="list-style-type: none"> <li>1. Micro – 5 -18 cm</li> <li>2. Miniature – 18 – 30 cm</li> <li>3. Medium tall - 30-60 cm</li> <li>4. Tall – more than 60 cm</li> </ol>
<p><b>Q. 8</b></p> <p><b>Ans.-</b></p>	<p><b>Define shrub. Write utility of shrubs in gardening.</b></p> <p><b>Shrubs</b> – are defined as woody or semi-woody perennial plants, the branches of which arise from the base of the plant and grow up to a height ranging from 50 cm to 4 m.</p> <p><b>Utility of shrubs in gardening-</b></p> <ul style="list-style-type: none"> <li>- They form part of the framework of the garden</li> <li>- Shrubs act as foundation plants for building.</li> <li>- They create a very pleasing picturesque effect if selected and planted carefully.</li> <li>- Flowering can be seen throughout the year from one or another plant.</li> <li>- They can be used for hedging, fencing, and also topiary.</li> <li>- They can also be grown as potted plants.</li> </ul>

<b>Q. 9</b>	<b>Enlist garden components. Write in brief on arches, drives, and paths.</b>
<b>Ans.-</b>	<p><b>Garden components are –</b></p> <ul style="list-style-type: none"> <li>- Garden wall, Fencing, Steps, Drives and paths, Hedge, Edging, Arches, Pergolas, Terraces, Pavements, Lawn, Carpet bedding, Flower beds, Shrubbery, Border, Rock garden, Water Garden, Marshy/ Boggy garden, Sunken garden, Gardening shade, Conservatory.</li> </ul> <p><b>Arches</b> - It may need for training climbers</p> <ul style="list-style-type: none"> <li>- It constructed near the gate or over paths</li> <li>- It should be at least 2 to 2.5 meters in height</li> <li>- The roof of arches may be made of wood or angle iron-binding wires.</li> </ul> <p><b>Drives and Paths</b> - All these occupy minimum space and not are too many numbers They should serve to link one part with the other. The path may be made up of soil, bricks, concrete, or pavers. Drives and paths are the inside and outside entries of the garden.</p>
<b>Q. 10</b>	<b>Define Climbers. Enlist different propagation methods with examples.</b>
<b>Ans.-</b>	<p><b>Climbers</b> – Plants having a weak stem and possessing a special structure to climb over support are defined as climbers.</p> <p><b>Propagation methods</b> - By Seed- Asparagus, Morning glory, Railway creeper By Cutting – Curtain creeper, Jai, Chameli By Air layering – Bougainvillea, Rose By root suckers – Asparagus, Clerodendron, Lasoonvel, Allamanda By Grafting - Petrea , Allamanda</p>
<b>SECTION-B</b>	
<b>(Write the answers in one sentence only. Each question carries 2 marks)</b>	
<b>Q. 11</b>	Do as directed (Any Twelve)
	a) <b>Balance</b> refers to equilibrium or quality of usual attraction.
	b) <b>Annuals</b> are plants that complete their life cycle from seed to flower and die in 3 to 6 months or within a year.
	c) <b>Axis</b> -this is an imaginary line in any garden around which the garden created striking balance.
	d) <b>Vertical</b> gardening involves gardening with upright structures so as to utilize the vertical space.
	e) <b>Landscape Architecture</b> is the art of designing a garden layout on paper.
	f) <b>Pergola</b> means a series of arches joined together.
	g)Mountains, hills. Valleys are <b>natural</b> elements of the garden.
	h) <b>Repetition</b> refers to repeated use of features like plants with identical shapes, in form, texture and colour.

i)	When shrubs planted on boundaries for fencing are called <b>Hedge</b>
j)	<b>Persian</b> garden based on the idea of heaven.
k)	Bottlebrush comes under the <b>weeping</b> type of canopy.
l)	Birdbath, Garden seats comes under Garden <b>adornments</b>
m)	<b>Pagodas</b> is a temple of Japanese and also called Stone Tower.
n)	Gulmohar comes under <b>Umbrella</b> type of canopy.

SECTION-C

(Choose the correct option. Each question carry 1 mark)

Q. 12

1)-----is repetition of the same object at equal distance.

a) Balance

b) Harmony

c) **Rhythm**

d) None of These

2)-----need for training climbers and constructed near the gate or over paths.

a) **Arches**

b) Lantern

c) Tomb

d) None of These

3) -----are plants which fail in their attempt to climb but somehow manage to support themselves over the trunk/ stem or branches of other plants.

a) Creepers

b) **Ramblers**

c) Twiners

d) None of These

4) -----describes the surface quality of an object that can be seen or left, surface in the landscape includes buildings, walks ground covers, and plants

a) **Texture**

b) Pergolas

c) Mobility

d) None of These

5)Outlineof the garden area or flowering beds, patches, rockery, and straight-line wall of the path is known as -----

a) Steps

b) Garden seats

c) **Borders**

d) None of These

6)-----garden laid out in mountain large area whether stones used for preparing waterfall

a) Flame

b) **Hill**

c)	Tea	d)	None of These
7)-----a perennial plant having many woody branches arising from the base of the plant.			
a)	<b>Shrub</b>	b)	Succulents
c)	Cacti	d)	None of These
8) Window gardening comes under -----gardening.			
a)	Outdoor	b)	Sunken
c)	<b>Indoor</b>	d)	None of These
9) When a terrace is used for the gardening purpose, it is known as -----			
a)	Vegetable	b)	Flower
c)	<b>Terrace</b>	d)	None of These
10) -----means gradual change or sudden change in garden			
a)	<b>Mobility</b>	b)	Space
c)	Baradari	d)	None of These
11) The graceful, sadness the idyllic are feelings of -----elements			
a)	<b>Natural</b>	b)	Historic
c)	Artificial	d)	None of These
12) Gulmohar, Bahunia are trees used for----- beautification			
a)	Foliage	b)	<b>Flower</b>
c)	Fruit	d)	None of These
13) When low growing plants are grown on the border of a plot they are -----plants			
a)	Shrub	b)	Hedge
c)	<b>Edge</b>	d)	None of These
14) -----Garden is laid below the ground level and the ideal depth is 120 cm.			
a)	<b>Sunken</b>	b)	Flower
c)	School	d)	None of These

15) ----- can be made of various materials but usually, some material used is bricks, paving stones, gravels, and crazy paving.

a)	Border	b)	Flower beds
c)	<b>Step</b>	d)	None of These

16) -----plants having a soft stem and live year after year.

a)	<b>Herbaceous perennial</b>	b)	Tree
c)	Bonsai	d)	None of These

17) Casurina, Eucalyptus trees are used for -----

a)	Weeping	b)	Foliage
c)	<b>Windbreaks.</b>	d)	None of These
18) In -----Garden the whole design looks informal as the plants are arranged in a natural way without following any rule			
a)	Formal	b)	<b>Informal</b>
c)	Local	d)	None of These
<b>19)</b> According to utility, school garden comes under ----- gardening.			
a)	<b>Outdoor</b>	b)	Sand
c)	Indoor	d)	None of These
20) Neem, Kusum, Raintree are mostly used for -----purpose			
a)	<b>Foliage</b>	b)	Flower
c)	Windbreak	d)	None of These
21) ----- is arbor like structure and has twelve doors			
a)	Tomb	b)	<b>Baradari</b>
c)	Terrace	d)	None of These
22) A tree or plant grown in a shallow pot or container and expressing the beauty and volume of a tree in the natural environment is called -----			
a)	<b>Bonsai</b>	b)	Shrub
c)	Hedge	d)	None of These
<b>23)</b> -----garden made with sand, gravels, and stones mostly used and no planting material used.			
a)	Passage	b)	Hanging
c)	<b>Sand</b>	d)	None of These
24)Plants that creep or climb on a surface with their rootlets are --			
a)	<b>Creeper</b>	b)	Runner
c)	Rhizomes	d)	None of These