

**Answer Key for Botany Paper 1 Sem IV Exam - code 33002**

<b>Q.1.A</b>	<b>Choose the correct option from the following</b>	<b>10 Marks</b>
i.	Ectoparasite	01
ii.	Ascomycetes	01
iii.	Lichen	01
iv.	<i>Phytophthora infestans</i>	01
v.	Branches	01
vi.	Psilophyta	01
vii.	Amber	01
viii.	Chilgoza	01
ix.	Cordiaianthus	01
x.	Wind	01
<b>Q.1.B</b>	<b>Answer the following in one or two sentences</b>	<b>10 Marks</b>
i.	<b>Two examples of Crustose Lichen</b> <i>i. Graphis</i> <i>ii. Rhizocarpon</i> <i>iii. Lecanora</i> <i>iv. Verrucaria</i> (any two of the above)	02
ii.	<b>Location and function of trabeculae in the stem of <i>Selaginella</i></b> <b>Location:</b> older stem of <i>Selaginella</i> the endodermal cells (1mark) <b>Function:</b> is to maintain the contact between the cortex and stele. (1 mark)	02
iii.	<b>Geological time scale</b> Geological time scale is the representation of the sequence of geological periods in the history of earth.	02
iv.	<b>Pycnoxylic wood</b> The wood is more compact with less parenchyma is pycnoxylic wood	02
v.	<b>Different types of shoot in <i>Pinus</i></b> Long shoot or branches of unlimited growth & dwarf shoots or branches of limited growth.	02
<b>Q.2.</b>	<b>Answer any two of the following</b>	<b>20 Marks</b>
i.	<b>Sexual reproduction in <i>Erysiphe</i></b> Description 05 <b>Cleistothecium</b> Description 03 Diagram 02	10

ii.	<b>Asexual reproduction of <i>Xylaria</i></b> Description 05 Diagram 02 <b>Systematic position</b> giving reasons 03	10
iii.	<b>Late blight of Potato</b> Causal organism 01 Symptoms 02 Disease cycle 05 Control measure 02	10
iv.	<b>V.S. of Heteromorous and homomorous types of Lichen thallus</b> Description 06 Diagram 04	10
<b>Q.3.</b>	<b>Answer any two of the following</b>	<b>20 Marks</b>
i.	<b>Lepidophyta</b> Description 05 <b>Psilophyta</b> Description 05	10
ii.	<b>External &amp; internal structure of <i>Selaginella</i> leaf</b> Description 06 Diagram 04	10
iii.	<b>Process of fossilization</b> Description 05 <b>Pterification</b> Description 05	10
iv.	<b>External morphology of <i>Rhynia</i> plant</b> Description 04 Diagram 03 <b>Systematic position</b> Systematic position giving reason 03	10
<b>Q.4.</b>	<b>Answer any two of the following</b>	<b>20 Marks</b>
i.	<b>Salient features of Coniferophyta</b> Any 10 points	10
ii.	<b>External and internal structure of male cone of <i>Pinus</i></b> Description 06 Diagram 04	10
iii.	<b>T.S of <i>Pinus</i> needle</b> Description 5 Diagram 03 <b>Xerophytic adaptation</b> 02	10
iv.	<b>T.S. of <i>Cordaites</i> leaf</b> Description 03	10

	Diagram 02 <b>T.S. of <i>Cordaites</i> root</b> Description 03 Diagram 02	
<b>Q.5.</b>	<b>Write short Notes on any four</b>	<b>20 Marks (5 Marks Each)</b>
i.	<b>Systematic position of <i>Erysiphe</i></b> Systematic position with reasons 05	05
ii.	<b>Ecological significance of Lichen</b> <ul style="list-style-type: none"> <li>• Soil formation</li> <li>• Sensitive to air pollution</li> <li>• Pioneer initiators of rock vegetation</li> <li>• Accumulation of radioactive substance</li> </ul>	05
iii.	<b>T.S. of rhizophore of <i>Selaginella</i></b> Description 03 Diagram 02	05
iv.	<b>Compression</b> Description 05	05
v.	<b>V.S. of <i>Pinus</i> ovule</b> Description 03 Diagram 02	05
vi.	<b>Economic importance of Coniferophyta</b> Any five economic importance of Coniferophyta	05