

[Time: Three Hours]

[Marks: 100]

N.B: 1. **All** questions are compulsory.

2. Figures to the right indicate full marks.

3. Draw **neat and labelled** diagrams wherever necessary.

Q.1. (A) Choose the correct option from the following & rewrite the sentence. 10

- i. Ascospores are _____ in origin.
 - a. exogenous
 - b. endogenous
 - c. epigynous
 - d. perigynous
- ii. The fruiting body of *Erysiphe* is called _____.
 - a. apothecium
 - b. perithecum
 - c. cleistothecium
 - d. peridium
- iii. *Usnea* is an example of _____ Lichen.
 - a. crustose
 - b. fruticose
 - c. terricose
 - d. foliose
- iv. *Selaginella* is a _____.
 - a. Angiosperm
 - b. Pteridophyte
 - c. Bryophyte
 - d. Gymnosperm
- v. _____ is not used as fungicide to control Late blight of Potato.
 - a. Xanthane
 - b. Karathane
 - c. Elosal
 - d. Morocide
- vi. _____ is heterosporous.
 - a. *Rhynia*
 - b. *Calamites*
 - c. *Nephrolepis*
 - d. *Selaginella*
- vii. _____ fossil is the best kind of fossil.
 - a. Pterified
 - b. Cast
 - c. Mummified
 - d. Amber
- viii. *Pinus* archegonium do not possess _____.
 - a. egg
 - b. neck cells
 - c. venter canal cell
 - d. neck canal cell
- ix. In *Pinus*, the pollen grains are _____ in colour .
 - a. yellow
 - b. red
 - c. green
 - d. brown

- x. Inner cortex of *Cordia* stem show _____.
 a. gum canals b. vascular canal
 c. resin canal d. tube canal

Q.1.(B) Answer the following in **one or two sentence**: **10**

- i. Name the fruiting body of *Xylaria*. Mention the number of spores found in one ascus .
- ii. Name the plant disease and symptoms caused by *Phytophthora infestans*.
- iii. What is geological time scale? Name any one era.
- iv. Mention the types of shoot seen in *Pinus*.
- v. Give the other name of root and seed of *Cordia*.

Q.2. Answer **any two** from the following: **20**

- i. With the help of neat labeled diagram explain sexual reproduction in *Xylaria*.
- ii. Explain in detail the sexual reproduction in *Erysiphe*.
- iii. Give a detailed account of disease cycle of powdery mildew. Add a note on its control measures.
- iv. Discuss the economic importance of Lichen.

Q.3 Answer **any two** from the following: **20**

- i. Give an account of Lepidophyta. Add a note on its classification up to order.
- ii. With reference to *Selaginella* describe i) T.S. of rhizophore ii) T.S. of stem
- iii. What is fossilization? Describe any two types of fossil studied by you.
- iv. Explain the asexual reproduction in *Rhynia*. Add a note on its classification.

Q.4 Answer **any two** from the following: **20**

- i. Give the salient features of Coniferophyta.
- ii. Describe T.S. of *Pinus* old stem with the help of neat labelled diagram.
- iii. Describe the male cone of *Pinus*. Add a note on its systematic position.
- iv. With reference to *Cordia* describe i) Male strobilus ii) Female Strobilus

Q.5 Write short notes. **(Any Four)** **20**

- i. Systematic position of *Xylaria*.
- ii. Classification on lichen based on habitat.
- iii. T.S. of *Selaginella* leaf.
- iv. T.S. of *Rhynia* stem
- v. Structure of *Pinus* seed
- vi. Systematic position of *Cordia*
