

Master of Science (Botany)
Second Semester Main Examination, June-2021
Plant Development and Reproduction [MSB201T]

Time: 3:00 Hrs

Max Marks 85

Note: (i) Attempt all questions.
(ii) All questions carry equal marks.

- Q.1 (a) What are the features of plant growth & development
(b) What is the important of plant development.
OR
(a) What is the function of the shoot apical meristem
(b) How do apical meristems grow
- Q.2 (a) What are the four categories of cell lineage.
(b) What is the primary and secondary anomalies
OR
(a) What are the some environment factors associated with wood.
(b) How does the environment affect development
- Q.3 (a) What is the difference between sexual propagation and vegetative propagation.
(b) What is the function of tappet layer in anther?
OR
(a) Why microsporogenesis is important for a following plant?
(b) What is the process of microsporogenesis
- Q.4 (a) How do ovules develop into seeds and the shape of ovule?
(b) What is the pistil and its function
OR
(a) What is the role of pollen tube.
(b) What are the types of pistil
- Q.5 (a) What is self incompatibility with example.
(b) What is Gametophytic phase
OR
(a) What is the difference between sporophyte and Gametophytic self incompatibility.
(b) What is the molecular basis of fruit ripening.

Master of Science (Botany)
Second Semester Main Examination, June-2021
Morphology & Taxonomy of Angiosperms [MSB202T]

Time: 3:00 Hrs

Max Marks 85

Note: Attempt all questions are compulsory. All questions carry equal marks.

- Q.1 (a) What is flower morphology.
(b) What is the structure of stamen.
OR
(a) What is placentation write different types of placentation with an example each?
(b) What is a carpel evolution .
- Q.2 (a) What is Binomial nomenclature describe in detail including ICBN .
(b) What is photochemistry in taxonomy .
OR
(a) What are modern trends in taxonomy.
(b) What is the study of embryology.
- Q.3 (a) Write the identic classification biology discussion.
(b) What is herbarium .
OR
(a) What are the types of herbarium.
(b) What are floras & monographs .
- Q.4 (a) Write taxonomy of ranales -
(b) Write the floral structure & phylogeny of asterales.
OR
(a) Write the taxonomy floral structure and phylogeny of Rosales.
(b) What is meant by Caryophyllales.
- Q.5 (a) Write the taxonomy floral structure and phylogeny of Orchidales.
(b) Write the floral structure & phylogeny of Arecales.
OR
(a) Write the floral structure & phylogeny of Lamiae's.
(b) Write the floral structure & taxonomy of euphobiales.

Master of Science (Botany)
Second Semester Main Examination, June-2021
Utilization & conservation of plant resources [MSB203T]

Time: 3:00 Hrs

Max Marks 85

Note: Attempt all questions.
All questions carry equal marks.

- Q.1 (a) What are the different aquatic ecosystems?
(b) What is the different between a boreal forest and a temperate forest?
OR
(a) What are the four types of grasslands?
(b) Write the Desert plants & types of desert.
- Q.2 (a) What are the three types of forest resources?
(b) What are non timber forest products give example's.
OR
(a) What is the best cryo banking?
(b) What is a seed bank in plants?
- Q.3 (a) How does pollution affect climate change?
(b) How does climate change affect air quality?
OR
(a) What is the difference between ozone layer and ozone hole?
(b) How does global warming affect climate.
- Q.4 (a) What are 5 national parks?
(b) What is role of humans and greenhouse gasses in climate change?
OR
(a) How are ecosystems structured and function of ecosystems?
(b) How does water affect soil?
- Q.5 (a) What are the application of remote sensing in forestry.
(b) How can GIS be used in forestry.
OR
(a) What is the difference between visual interpretation & digital interpretation.
(b) What are remote sensing tools & four example of remote sensing?

Master of Science (Botany)
Second Semester Main Examination, June-2021
Cell Biology of Plants [MSB204T]

Time: 3:00 Hrs

Max Marks 85

Note: Attempt all questions. All questions carry equal marks.

- Q.1** (a) What is the Structure and function of a plant cell.
(b) What are the different types of plant cell's.

OR

- (a) Write the Biogenesis & Structure and functions of cell wall.
(b) What is the composition of cell wall in plant cell.

- Q.2** (a) What is Plasma membrane and its function.
(b) What is the Special function of gap junctions and the Structure?

OR

- (a) What is the Movement of Molecules into cell?
(b) Which cell structure has Plasmaodesmata?

- Q.3** (a) What is nucleus Structure and function in plant cell.
(b) How is the Genome organized.

OR

- (a) What is the function of Lysosomes in plant's cell's.
(b) What is the purpose of ATPase.

- Q.4** (a) What happens to the nucleus clueing the cell cycle.
(b) What is the nucleus structure & function.

OR

- (a) Why are banding patterns important and what is Replication banding.
(b) What are the 4 types of Chromosomes and describe it.

- Q.5** (a) What is duplication in Meiosis & type of mutation is called duplication?
(b) What is Auto polyploidy & Allopolyploidy.

OR

- (a) How are Chromosomal rearrangement's formed.
(b) What is the function of the endoplasmic reticulum in a cell.