



S H Kelkar Collage Devgad
F.Y.B.sc Botany paper -I

Sem -II Examination April 2023

Code No – USB0201, Plant diversity - I

Max. mark - 100

Duration – 3 hrs.

N B 1) All questions are compulsory.

2) Figure to right indicates full marks.

3) Draw neat labeled diagrams wherever necessary.

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Q. 1 A) Rewrite the sentences by choosing appropriate word.

- 1) *Sida acuta* plants belongs to ----- family.
a) *Malvacea* b) *Amaryllidaceae* c) *Rutaceae* d) *Solanaceae*
- 2) Reticulate venation is observed in ----- plant.
a) *syzigium* b) *Turmeric* c) *Banana* d) *None*
- 3) Long narrow leaf called linear lamina type is observed in ----- plant.
a) *Grass* b) *Banyan* c) *Pistia* d) *Lotus*
- 4) ----- are called vascular Cryptogames.
a) *Algae* b) *Gymnosperm* c) *pteridophytes* d) *Bryophytes*
- 5) *Nephrolepis* is included under the division -----.
a) *Coniferophyta* b) *Lepidopyta* c) *Psilophyta* d) *Pteridophyta*
- 6) ----- arises form rhizomatic stem and are extra -axillary in position.
a) *Root* b) *caudex* c) *spur* d) *stolon*
- 7) ----- is the most complex and highly evolved stele in which the vascular cylinder consist of widely separated vascular bundle in ground tissue.
a) *Dictyostele* b) *Atactostele* c) *Mixed stele* d) *Plectostele*
- 8) ----- are the most ancient seed plants that originate during the late Paleozoic era and flourished well in Mesozoic era.
a) *Angiosperm* b) *Pteridophyta* c) *Gymnosperm* d) *Bryophytes*
- 9) *Rhizopus* belongs to the class -----
a) *Ascomycetes* b) *Phycomycetes* c) *Basidiomycets* d) *None of these*
- 10) ----- is aquatic species of *Riccia*.
a) *R. bifurea* b) *R. glauca* c) *R. fluitans* d) *None of these*

(10)

Q. 1. B) Answer the following in one sentence

1. Give examples parallel venation (Plants)
2. Define helicoids cyme inflorescence?
3. Write about economic importance of *Cycas*
4. How the pollination occur in *Cycas*?
5. What do you meant by protandrous thallus of *Nephrolepis*



(20)

Q. 2. Answer any two of the following .

1. With suitable diagram discuss the Verticillaster inflorescence.
2. Give distinguishing characters of family Malvaceae and Add a note on its general characters with suitable diagram.
3. Discuss the family Amaryllidaceae with suitable diagram.
4. Explain about leaf spines and leaf tendril in detail.

(20)

Q.3. Answer any two of the following.

1. Describe the external morphology of *Nephrolepis*.
2. Write about internal morphology of T.S. of Stolon in *Nephrolepis*.
3. Give detail account on Asexual reproduction in *Nephrolepis*.
4. Describe advanced types of stele.

(20)

Q. 4. Answer any three of the following.

1. Give detail account of sporophyte in *Cycas*.
2. Describe T.S. of young root of *Cycas*.
3. Explain megasporophysis of *Cycas*.
4. Give short account on economic importance of gymnosperm.

(20)

Q. 5. Write short note on (Any Four)

1. Alternate phyllotaxy.
2. Diagram showing part of typical leaf
3. Hydathodes
4. Actinostele
5. Classification of *Cycas* with reason.