Anjuman Islam Janjira Degree College of Science Murud-Janjira, Raigad-402401 Affiliated to University of Mumbai	
Class: -S.Y.B.Sc	Subject: -Botany - I
Semester:- III	Course code: -USBOT301
Exam Event:- Winter 2023 (SH)	Marks: -100
Date: - 21.10.2023	Duration: - 03:00 Hours

N.B:

1. **All** questions are compulsory.
2. **Figures** to the right indicate full marks.
3. Draw **neat and labeled** diagrams wherever necessary.

Q1.A) Choose the Correct option from the following and rewrite the sentences. 10

i) In *Sargassum* bears flask shape cavities it contain gases called ----------

a. Air bladder b. Conceptacle c. Leaves d. Epidermis

ii) *Anthoceros* is commonly known as ----------

a. Liverwort b. Hornwort c. Seaweed d. Moss

iii) *Funaria* is ----------nature and plant body is ----------.

a. Terrestrial Thallophytic b. Amphipathic and Thallophytic

c. Amphipathic Sporophytic d. Hydrophytic and Thallophytic

iv) $\frac{\cdot}{G}$ in floral formula represent ---------- position of ovary.

a. Semi-superior b. Inferior c. Semi-inferior d. Superior

v) The Scientific taxonomic Botanical name always ……

a.Taxon b. trinomial nomenclature

c. Binomial nomenclature d. uninomial nomenclature

vi) '*Mimosa pudica* L.' Belongs to family…….

a. Mimosaceae b. Caesalpinaceae c. Papillionaceae d. Caryophyllaceae

vii) *Annona sqamosa* L. also known as……

a. Sitaphal b. Papaya c. Peru d. Ramphal

viii) In electrophoresis the migration of charged particles specifically occurs towards……

a. Cathode b. Anode c. Diode d. Electrode

ix) In chromography, the stationary phase can be……supported on solid.

a. Solid or liquid b. Liquid or gas c. Solid only d. Liquid only

x) Separation of genetic material (RNA) in ---------- electrophoresis.

a) Horizontal b) Vertical c) SDS PAGE d) a and c

Q1. B) Answer the following in one or two sentences. **10**

1. What is receptacle?
2. Any two characters of Anthredium in *Anthoceros*
3. Any two Economic importance of Family Caesalpiniaceae
4. Principle of electrophoresis.
5. Define Herbarium

Q2. Answer any two of the following. **20**

1. Explain in brief and neat labeled diagram of *Sargassum* thallus.
2. Explain life cycle of *Anthoceros*.
3. Explain Sporophyte of *Funaria*.
4. Give an account of general character and economic importance of Pheophyta.

Q3. Answer any two of the following. **20**

1. Give classification, distinguishing characters and floral formula of the subfamily Papilionaceae.
2. Assign any two plants to their respective families giving reasons and give their economic importance.

   a) *Areca catechu* b) *Cocos nucifera* c) *Caesalpinia pulcherrima*
3. Define Plant Nomenclature. Discuss the principles or rules of International code of Botanical Nomenclature.
4. Discuss the importance of Cytology in relation to Taxonomy.

Q.4 Attempt any two of the following. **20**

1. Explain the working and principle of Scanning Electron Microscope.
2. Described the herbarium method of plant preservation.
3. Explain the working and principle formula of TLC.
4. Explain horizontal gel electrophoresis.

Q.5 Write short notes on any four. **20**

1. General characters and pigments in Phaeophyta
2. Sexual reproduction of *Funaria*
3. Anatomy in relation to Taxonomy.
4. Economic importance of Asteraceae
5. Wet preservation techniques in plants
6. Vertical electrophoresis.

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