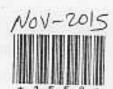
Seat Number



कांजी - 021

BOTANY PAPER - I : BOT- 241 Plant Anatomy (24145)

P. Pages: 3

Time: Two Hours

Max. Marks: 40

Instructions to Candidates :

Do not write anything on question paper except Seat No.

Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.

Students should note, no supplement will be provided.

4. All questions are compulsory.

Figures to the right indicate full marks.

Draw neat labelled diagrams wherever necessary.

Solve any eight:

8

- a) In monocot leaf vascular bundles are ----
 - i) Conjoint, amphicribral
 - ii) Radial
 - iii) Conjoint collateral and closed.
 - iv) None of these
- b) When stoma remain surrounded by three subsidiary cells of which one is much smaller than the other two, the stoma is of ---- type.
 - anisocytic

ii) paracytic

iii) anomocytic

- iv) Diacytic
- c) Deposition of lignin on epidermis is called as
 - i) cutinization

ii) suberization

iii) lignification

- iv) None of these
- d) Nectaries belongs to ----- tissue system.
 - i) mechanical

ii) secretary

iii) epidermal

iv) None of these

| | e) | In sunflower stem V.B. are i) Radial | | type. | |
|-------------|---|--|------|---|---|
| | | ii) Conjoint collateral and | open | | |
| | | iii) Conjoint collater and c | | | |
| | | iv) Concentric amphivasal | | | |
| | f) | f) During secondary growth in dicot root cork cambium is formed from | | | |
| | | i) Endodermi's | ii) | Cortex | |
| | | iii) Xylem | iv) | Pericycle | |
| | g) Branched tree like epidermal outgrowth are called as | | | | |
| | | i) Stellate | ii) | | |
| | | iii) Peltate | iv) | All of these | |
| | h) In collenchyma, wall thickenings are deposited around inter cellular spaces. | | | | |
| | | i) Lacunar | ii) | Angular | |
| | | iii) Lamellar | iv) | 120000000000000000000000000000000000000 | |
| | i) arises from epiblema. | | | | |
| | | i) Glandular trichomes | ii) | Stellate hairs | |
| | | iii) Dendroid trichomes | iv) | | |
| | j) Water conducting element in plant is | | | | |
| | 36 | i) phloem | ii) | Xylem | |
| | | iii) Sclerenchyma | iv) | Collenchyma | |
| 2. | Attempt any four. | | | | 8 |
| | a) | Describe Secretary tissue. | | | |
| | b) | Define Simple tissue. | | | |
| | c) | Define Stoma. | | | |
| | d) | Describe vascular bundle in sunflower leaf. | | | |
| | e) | Define plant anatomy. | | | |
| | f) | Define epidermis. | | | |
| -: A | 004 | | | | |
| कांजी - 021 | | | 2 | | |

Solve any two:

8

- a) Sketch and label T.S. of sunflower stem.
- b) Explain types of meristems based on their position.
- c) Explain principle of inflexibility.
- a) Solve any two:

6

- Distinguish between dicot leaf and monocot leaf.
- ii) Explain digestive glands.
- iii) Explain primary structure of sunflower root.
- b) Describe graminaceous types of stoma.

2

8

 With the help of neat labelled diagram describe primary structure of monocot root.

OR

With the help of labelled sketch explain secondary growth in dicot (sunflower) stem.
