

- 131. Which of the following statement(s) is /are correct?
 - (i) Many plants belonging to the family fabaceae are good ornamentals (Tulip, *Gloriosa*), source of medicine (*Aloe*) and vegetables (*Asparagus*).
 - (ii) The plumule and radicle are enclosed in sheaths which are called coleorhiza and coleoptile respectively.
 - (iii) A flower having either stamens or carpels is unisexual.
 - (iv) Basal, alternate, linear, exstipulate with parallel venation types of leaves is found in the family liliaceae.
 - (1) Only (i)
- (2) Both (i) and (ii)
- (3) Both (iii) and (iv)
- (4) All of these

- 132. Which of the following statements is correct?
 - (1) Imbricate aestivation is found in the papilionaceous family.
 - (2) Generally, sepals are green, leaf like and protect the flowers in the bud stage.
 - (3) In cymose type of inflorescence, the main axis terminates in a flower, hence is limitless in growth.
 - (4) In axile placentation ovary is one chambered but it becomes two cambered due to the formation of false septum.
 - (1) Only (1)
- (2) Both (1) and (2)
- (3) Both (3) and (4)
- (4) All of these

133. Assertion: A simple leaf has undivided lamina.

Reason: Leaves showing pinnate and palmate venations have various type of incisions.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
- (3) If Assertion is true but Reason is false.
- (4) If both Assertion and Reason are false.
- 134. Assertion: Ginger has a prostrate-growing rhizome.

Reason: Shoot growth is not effected by gravity.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
- (3) If Assertion is true but Reason is false.
- (4) If both Assertion and Reason are false.
- 135. Assertion: Many plants are propagated vegetatively even though they bear seeds.

Reason: Potatoes multiply by tubers, apple by cutting etc.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
- (3) If Assertion is true but Reason is false.
- (4) If both Assertion and Reason are false.
- 136. Assertion: In fabaceae family monocarpellary, unilocular ovary is present.

Reason: In fabaceae, placentation is parietal.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
- (3) If Assertion is true but Reason is false.
- (4) If both Assertion and Reason are false.
- 137. Assertion: In Australian Acacia leaf modified to perform photosynthesis.

Reason: In dicots, pericycle has the capacity to produce lateral roots.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion.
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion.
- (3) If Assertion is true but Reason is false.
- (4) If both Assertion and Reason are false.

138. Match the following stem modifications given in column I with their examples given in column II and select the correct combination from the options given below.

Column -I		Column -II	
(Stem Modification)		(Found in)	
A.	Underground stem	I.	Euphorbia
B.	Stem tendril	II.	Opuntia
C.	Stem thorns	III.	Potato
D.	Flattened stem	IV.	Citrus
E.	Fleshy cylindrical stem	V.	Cucumber

- (1) A I, B II, C III, D V, E IV
- (2) A II, B III, C IV, D V, E I
- (3) A III, B IV, C V, D I, E II
- (4) A III, B V, C IV, D II, E I
- 139. Match the androecium formula (given in column II) with their family (given in column I) and choose the correct combination from the options given below.

Column-I

(Family)

A. Brassicaceae

B. Fabaceae

C. Solanaceae

D. Liliaceae

- (1) A IV; B III; C II; D I
- (2) A I; B II; C III; D IV
- (3) A II; B III; C IV; D I
- (4) A III; B IV; C I; D II
- 140. Match column I with column II and choose the correct option.

Column-I

A. Bud in the axile of leaf

B. Outer layer of seed coat

C. Spines (modified leaves)

D. Leaves modified to catch insects

E. Fleshy leaves with stored food

(1) A - I, B - II, C - III, D - IV, E - V

(3) A - IV, B - III, C - II, D - I, E - V

Column-II

(Androecium formula)

I. A_{3+3}

II. $A_{(5)}$

III. $A_{(9)+1}$

IV. A_{2+4}

I. Pitcher plant

II. Cacti

III. Testa

IV. Simple leaf

V. Garlic and onion

(2) A - V, B - IV, C - III, D - II, E - I

(4) A – IV, B – II, C – III, D – I, E – V