JUNIOR INTER PREVIOUS EAMCET QUESTIONS
EVALUATE YOURSELF SERIES - II
BOTANY

UNIT-IV

(EAM-2009)

1. **Assertion (A) :** An ascending taxonomic sequence of Gossypium herbaceum indicates its placement in progressively higher groups.
Reason (R) : Ascending taxonomic hierarchy indicates that a taxon is treated as belonging to a number of taxa
The correct answer is
1) Both (A) and (R) are true and (R) is the correct explanation of (A)
2) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
3) (A) is true, but (R) is false 4) (A) is false, but (R) is true

2. A plant with actinomorphic and hypogynous flowers, heterochlamydeous perianth, dorsifixed and extrorse anthers dehiscing transversely belongs to **(EAM-2009)**
1) Coronariae 2) Bicarpellatae 3) Thalamiflorae 4) Calyciflorae

3. Study the following lists **(EAM-2008)**

List - I	**List - II**
A) Arachis	I) Swolen placenta
B) Cichorium	II) Epicalyx
C) Lilium	III) Fasciculate tuberous roots
D) Physalis	IV) Geocarpy
	V) Bulbils

The correct match is

	A	**B**	**C**	**D**		**A**	**B**	**C**	**D**
1)	IV	III	II	V	2)	IV	I	II	III
3)	V	IV	III	I	4)	IV	III	V	I

4. Which one shows the correct desending sequence with reference to the number of cohorts **(EAM-2008)**
1) Thalamiflorae, Calyciflorae, Disciflorae, Inferac
2) Heteromerae, Inferae, Discitlorac, Calyciflorae
3) Bicarpellatae, Disciflorae, Heteromerae, Calyciflorae
4) Disciflorae, Thalamiflorae, Calyciflorae, Heteromerae

5. Which one of the following families shows both freedom and fusion in four successive whorls of the flower from exterior in different members ? **(EAM-2007)**
1) Malvaceae 2) Solanaceae 3) Asteraceae 4) Liliaceae

6. Identify the characters of gynoccium found in members of Astaraceae, Fabaceae, Liliaceae and Solanaceae, respectively. **(EAM-2007)**
I) Tricarpellary synearoous, ovary superior and trilocular
II) Bicarpellary syncarpous, ovary superior and usually bilocuar
III) Bicarpellary syncarpous, ovary inferior and unilocular
IV) Monocarpellar, ovary half inforior and unilocular
1) II, I, III, IV 2) III, IV, I, II 3) IV, III, II, I 4) I, II, IV, III

7. Two plants 'A' and 'B' belonging to solanaceae are observed. In plant 'A', the number of locules in the ovary of a flower is half of that of its carpel number. In plant 'B', the number of locules in the ovary of a flower is double the number of carpels. Indentify the plants 'A' and 'B' respectively. **(EAM-2007)**
1) Capsicum, Datura 2) Cestrum, Pentunia
3) Withania, Solanum 4) Lycopersicon, Nicotiana

(EAM-2006)

8. **Assertion (A) :** A morphology based approach to taxonomy is called 'alpha taxonomy' and it is old fashioned.
Reason (R) : A multi-disciplinary appraoch to taxonomy called 'Omega taxoomy' is favoured in recent years, as it excludes morphologica features.
1) A and R are true and R is the correct explanation of A
2) A and R are true but R is not the correct explanation A
3) A is true but R is false
4) A is false but R is true

9. In which one of th following the usual taxonomic hierachy is not followed ? **(EAM-2006)**
1) Polypetalae and Gamopetalae 2) Gamopetalae and Monochlamydae
3) Monochlamydae and Monocots 4) Polypetalae and Monocots

UNIT-VI

10. From evolutionary point of view, tracheids and sieve cells are more primitive tha tracheae and sieve tubes respectively. The angiosperms have **(EAM-2009)**
1) Tracheae and sieve tubes 2) Tracheids, Tracheae and sieve tubes
3) Tracheae, sieve cells and sieve tubes 4) Tracheids, Tracheae and sieve cells

11. Arrange the following in the order of their location from periphery to centre in the entire dicotyledonous plant body **(EAM-2009)**
I) Fusiform cells II) Trichoblasts III) Collocytes IV) Tyloses
1) IV, I, II, III 2) II, III, I, IV 3) III, II, I, IV 4) I, IV, III, II

(EAM-2009)

12. **Assertion (A) :** Apical and intercalary meristems contribute to the growth in length while the lateral meristems bring increase in girth in maize
Reason (R) : Apical and intercalary meristems always increases the height of plants
The correct answer is
1) Both (A) and (R) are true and (R) is the correct explanation of (A)
2) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
3) (A) is true, but (R) is false 4) (A) is false, but (R) is true

13. Read the following lists **(EAM-2008)**

List - I	**List - II**
A) Extra foliar nectaries	I) Achras
B) Schizogenous cavities	II) Tropaeolum
C) Laticiferous ducts	III) Passiflora
D) LAticiferous ducts	IV) Eucalyptus
	V) Pinus

The **correct** match is

	A	**B**	**C**	**D**		**A**	**B**	**C**	**D**
1)	III	I	II	IV	2)	II	I	III	IV
3)	III	V	I	II	4)	V	II	I	III

14. The internal structure of a plant stem is observed. There is a discontinuous ring of angular collenhyma below the epidermis. Type of vascular bundles are of the same type as in the stems of solanaceous plants. Sieve tube elements possess simple sieve plates. Identify the plant. **(EAM-2007)**
1) Helianthus 2) Cucurbita 3) Zea 4) Hydrilla

15. Arrange the following plants in ascending order based on the number of xylem strands in their roots: **(EAM-2007)**
I. Trapa II. Pisum III. Castanea IV. Nicotiana
1) II, IV, III, I 2) III, IV, II, I 3) IV, III, I, II 4) I, IV, II, III

16. Which one of the following is the correct sequence of tissues present in dicotstem during secondary growth ? **(EAM-2007)**
1) Phellogen, cork, primary cortex, secondary cortex
2) Cork, primary cortex, secondary cortex, phellogen
3) Primary cortex, secondary cortex, phellogen, cork
4) Secondary cortex, cork, phellogen, primary cortex

17. Which one of hte following statements is correct, for "Bundle sheath of monocot leaves is similar to that of monocot stem", as both them : **(EAM-2006)**
1) Posses outer layer of chlorenchyma and inner layer of thick walled cells without chloroplasts
2) Possess extensions made up of sclerenchyma
3) Resemble the endodermis in possession f casparian strips
4) Encircle hte vascular bundles, which are conjoint and collateral

18. Study the following table : **(EAM-2006)**

I. Polysiphonous pollen	Floral nectaries	Simple sieve plate
II. Angular cllocyte	Monosiphonous pollen	Synandry
III. Inserted stamens	Simple leaves	Spines
IV. Exerted statemens	Reticulate divergent venation	Pepo

Select the correct pair of answer in which the former in the pair shows the set of characters present in Cucurbita and the latter in the pair shows the set of character absent in Acacia :
1) I and III 2) I and II 3) II and III 4) III and IV

(EAM-2006)

19. **Assertion (A) :** Libriform fibres are true fibres.
Reason (R) : Libriform fibres develop from non-functional tracheids by reduction.
1) A and R are true and R is the correct explanation of A
2) A and R are true but R is not the correct explanation A
3) A is true but R is false 4) A is false but R is true

20. Which of the following is indicative of the term alburnum ? **(EAM-2006)**
1) Spring wood 2) Autumn wood 3) Heart wood 4) Sap wood

UNIT-VII

21. Study the following **(EAM-2009)**

List - I	**List - II**
A) Spongy aril	I) Jussiaea
B) Multiple epidermis	II) Pistia
C) Respiratory roots	III) Nerium
D) Root pockets	IV) Sagittaria
	V) Nymphaea

The **correct** match is

	A	**B**	**C**	**D**		**A**	**B**	**C**	**D**
1)	I	III	II	V	2)	II	I	IV	III
3)	IV	II	III	I	4)	V	III	I	II

(EAM-2009)

22. **Assertion (A) :** True xerophytes store water in the form of mucilage which helps to withstand prolonged period of drought.
Reason (R) : Vascular and mechanical tissues are well developed in true xerophytes
The correct answer is
1) Both (A) and (R) are true and (R) is the correct explanation of (A)
2) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
3) (A) is true, but (R) is false 4) (A) is false, but (R) is true

23. Which of the following conditions is seen in the roots of a plant having submerged assimilatory roots and spongy petioles **(EAM-2008)**
1) Triarch 2) Monarch 3) Tetrarch 4) Diarch

24. Study the following table **(EAM-2008)**

I) Peperomia	Leaf succulent	Leaf epidermal cells store water
II) Calotropis	Non-succulent	Root cells with thickened cell walls
III) Tribulus	Ephemeral	Stem stores water
IV) Ammophila	Dicot plant	Rolling in of leaves to check water loss

Identify the correct pair of answer
1) I, II 2) I, II 3) II, III 4) II, IV

25. Study the following lists : **(EAM-2007)**

Lists - I	**List - II**
(A) Ephemeral	I. Nerium
(B) Mucilage	II. Ziziphus
(C) Multiple epidermis	III. Calotropis
(D) Spine	IV. Tribulus
	V. Aloe

	A	**B**	**C**	**D**		**A**	**B**	**C**	**D**
1)	II	IV	V	I	2)	V	II	I	IV
3)	IV	V	I	II	4)	IV	III	II	I

26. Seeds possess spongy aril in **(EAM-2007)**
1) Eichhornia 2) Potamogeton 3) Sagittaria 4) Nymphaea

27. Study the following lists : **(EAM-2007)**

	List-I	**List-II**
A)	Population	I. Part of the earth consisting of all the ecosystems of the world
B)	Community	II. Assemblage of all the individuals
C)	Ecosystem	III. Group of similar individuals belonging to the same species found in an area.
D)	Ecosphere	IV. Interaction between the living organisms and their physical environmental components.
		V. Classification of organisms based on the type of environment.

The **correct** match is :

	A	**B**	**C**	**D**		**A**	**B**	**C**	**D**
1)	I	IV	V	III	2)	V	II	III	I
3)	II	III	V	IV	4)	III	II	IV	I

28. A student collected a hydrophyte with swollen petiole and with a single vascular bundle in the root. The plant which he collected was : **(EAM-2007)**
1) Jussiaea 2) Trapa 3) Ceratophyllum 4) Potamogeton

UNIT-VIII

29. In garden pea yellow colour of cotyledons is dominant over green and round shap of seed is dominant over wrinkled. When a plant with yellow and wrinkled seeds, the progeny showed segregation for all the four characters. the probability of obtaining green round seeds in the progeny of this cross is **(EAM-2009)**

1) $\frac{1}{4}$ 2) $\frac{1}{8}$ 3) $\frac{1}{16}$ 4) $\frac{3}{16}$

30. A homozygous sweet pea plant with blue flowers (RR) and long pollen (R_0R_0) is crossed with a homozygous plant having red flowers (rr) and round pollen (r_0r_0). The resultant F_1 hybrid is test crossed. Which of the following genotype does not appear in its progeny **(EAM-2009)**
1) RRR_0R_0 2) $RrRr_0$ 3) Rrr_0r_0 4) rrR_0r_0