

QUESTION BANK
FOR
INTERMEDIATE PRACTICAL EXAMINATION
IN
BOTANY & ZOOLOGY
2005-2006

BOARD OF INTERMEDIATE EDUCATION
HYDERABAD

Practical syllabus in Botany and Zoology for 1st year and 2nd year effective from the academic year 2005-2006. The existing practical syllabus Question paper pattern and Question Bank in respect of Physics and Chemistry subjects remains the same

INTERMEDIATE PUBLIC EXAMINATIONS

BOTANY (PRACTICALS)

QUESTION PAPER WITH SCHEME OF VALUATION

(With effect from I.P.E., March, 2006.)

Time: 3 Hours

Max. Marks : 30

- I. Describe the given twig 'A' in technical terms. Draw labelled diagrams of the twig with inflorescence and L.S. of flower. Give floral diagram and floral formula. Identify its family giving reasons. Marks: 6**

Technical description of Vegetative Characters	½ Mark
Technical description of Floral Characters	2 Marks
Identification of the family	½ Mark
Reasons	1 Mark
Floral Formula	½ Mark
Floral diagram	½ Mark
Labelled diagrams of :	
Twig with inflorescence	½ Mark
L.S. of flower	½ Mark

- II Take T.S. of the given material 'B'. Stain, mount and leave the preparation for evaluation. Identify it giving reasons. Draw neat labelled diagrams. Marks: 6**

Preparation of Slide	2½ Mark
Identification	½ Mark
Reasons	1 Mark
Labelled diagrams :	
Ground plan	½ Mark
Sector	1½ Mark

- III Describe the given experiment 'C' with the help of neat labelled diagram**

Marks: 3

Description of experiment with aim, apparatus, Principle, procedure and inference	2 Marks
Labelled diagram	1 Mark

IV	Identify D, E, F, G, H, I, J and K giving reasons (Diagrams are not needed)	Marks: 8 (Each 1 mark)
	Identification	½ Mark
	Reasons	½ Mark
V	Record and Herbarium	Marks : 7
	Record (based on I and II year Practical syllabus)	5 Marks
	Herbarium (Minimum of 15 herbarium sheets representing the families included in the syllabus)	2 Marks

QUESTION BANK IN BOTANY PRACTICALS

I. A. PLANT TAXONOMY

1. Malvaceae
2. Fabaceae
3. Asteraceae
4. Solanaceae
5. Liliaceae

II B. ANATOMY

6. T.S. of Dicot stem (Primary)
7. T.S. of Monocot stem
8. T.S. of Dicot root (Primary)
9. T.S. of Monocot root.

III C. PHYSIOLOGY EXPERIMENTS

10. Osmosis (Thistle Funnel) experiment.
11. Bell-jar experiment.
12. Ganong's Potometer experiment.
13. Hydrilla Funnel experiment.
14. Ganong's light Screen experiment
15. Mohl's half leaf experiment
16. Aerobic respiration experiment.
17. Anaerobic respiration experiment.

IV. D. VEGETATIVE MORPHOLOGY

18. Storage root (Radish/Carrot/Beet root)
19. Epiphytic roots: Vanda
20. Rhizome: Zinger/Curcuma
21. Corm: Colocasia/Amorphophallus
22. Stem tuber: Potato
23. Bulb: Onion
24. Stem tendril: Passiflora/Cissus
25. Thorns: Carissa/Bougainvillea
26. Hooks: Artabotrys/Hugonia
27. Phylloclade: Opuntia/Casuarina
28. Phyllode: Parkinsonia/Acacia auriculiformis
29. Reproductive Leaves: Bryophyllum/Scilla
30. Trap leaves: Nepenthes

E. REPRODUCTIVE MORPHOLOGY AND REPRODUCTION IN ANGIOSPERMS

31. Simple Umbel: Onion
32. Simple Spadix: Colocasia/Aroid
33. Verticillaster (Leucas)
34. Cyathium (Poinsettia/Euphorbia)
35. Hypanthodium(Ficus)
36. Berry (Brinjal/Tomato)
37. Hesperidium (Citrus)
38. Pepo (Cucumis)
39. Pome (Apple)
40. Drupe (Mango/Coconut)
41. Aggregate Fruits (Annona/Artabotrys)
42. Sorosis (Jack Fruit/Pine apple)
43. Orthotropous Ovule
44. Anatropous Ovule

F. ECONOMIC BOTANY

45. Paddy
46. Jowar
47. Red gram
48. Groundnut
49. Cotton
50. Mango
51. Neem

G. CYTOLOGY, HISTOLOGY AND ECOLOGY

52. Metaphase of Mitosis
53. Anaphase of Mitosis
54. Parenchyma
55. Collenchyma
56. Sclerenchyma
57. T.S. of Stem of Hydrilla/Petiole of Nymphaea
58. T.S. of Nerium leaf

H. ALGAE AND FUNGI

59. Spirogyra - Vegetative filament
60. Spirogyra - Scalariform Conjugation
61. Spirogyra - Lateral Conjugation
62. Rhizopus - Asexual stage
63. Rhizopus - Sexual stage

I. BRYOPHYTA AND PTERIDOPHYTA

64. Funaria plant with sporophyte
65. Funaria - L.S. of antheridial Branch
66. Funaria - L.S. of archegonial Branch
67. Funaria - L.S. of capsule
68. Pteris - T.S. of Rhizome
69. Pteris - T.S. of Sporophyll
70. Pteris - Prothallus

J. GYMNOSPERMS

71. Cycas - Coralloid Root
72. Cycas - T.S. of Leaflet
73. Cycas - Microsporophyll
74. Cycas - Megasporophyll
75. Cycas - L.S. of Ovule

K. PLANT PATHOLOGY

76. Red rot of Sugarcane
77. Grain smut of Sorghum
78. Citrus Canker