

2012
B.A./B.Sc. (Hons.) Third Semester
Botany

Paper - B: Development of Plants and Their Utilization –I

Time allowed: 3 Hours

Max. Marks: 36

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. A) MCQ:-

a) Root pocket occurs in

i) Maize

ii) Banyan

iii) Water hyacinth

iv) Pandanus

b) Lateral meristem is responsible for

i) Growth in length

ii) Growth in cortex

iii) Growth in thickness

iv) Growth in Parenchyma

c) _____ is present at the base of the internode

i) Apical meristem

ii) Intercalary meristem

iii) Lateral meristem

iv) All of these

d) Histogen theory was proposed by

i) Hainstein

ii) Nageli

iii) Schiiepp

iv) None

B) Fill in the blanks:-

e) Epiphytic roots occur in _____.

f) Phylloclades are present in _____.

g) Phyllogen is _____ meristem.

h) The term wood refers to _____.

(8x1)

UNIT – I

II. Write an account on:-

a) Diversity in plant forms on the basis of longevity

b) Parts of a typical root

(4,3)

P.T.O.

- III. Explain shoot systems in higher plants. (7)

UNIT – II

- IV. Define root apical meristem. Describe different theories related to organization of this meristem.

- V. Write a note on:-

- a) Range of form and structure of leaf
b) Lateral meristem and its functions (4.3)

UNIT - III

- VI. Differentiate:-

- a) Secondary xylem and secondary phloem
b) Importance of secondary growth in plants (4.3)

- VII. Define periderm. Describe its different components and function. (7)

UNIT – IV

- VIII. Give detailed account on role of wild plants in ecosystem functioning. (7)

- IX. a) Differentiate primary and secondary centres of diversity.
b) Give a brief note on plant introduction. (4,3)