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SUBJECT CODE NO:- B-2160
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. F.Y (Sem.-II) Examination OCT/NOV 2019
Botany Paper-V
Histology, Anatomy and Embryology

[Time: Three Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

- N.B
- i) Attempt all questions.
 - ii) Draw neat and well – labeled diagrams whenever necessary.

- Q.1 Describe Various theories for Root Apex organization 20
 OR
 Describe microsporogenesis and development of male gametophyte 20
- Q.2 Describe in detail the T. S of Dicot leaf. 20
 OR
 Write short Notes on (any four) 20
- a) Anemophily
 - b) L.S. of orthotropous ovule.
 - c) Collenchyma
 - d) Structure of phloem
 - e) Structure of Dicot and monocot seed
 - f) Helobial type of endosperm
- Q.3 Multiple choice questions. 10
- 1) When xylem is surrounded by phloem the vascular bundle is called -----
 a) Collateral b) Radial c) Amphiceribal d) Amphivasal
 - 2) Wood is the common name of -----
 a) Cambium b) Vascular bundles c) Phloem d) secondary xylem
 - 3) Sap wood differ from heart wood in being -----
 a) Darker and non- conducting
 b) Softer and non- conducting
 c) Lighter and conducting
 d) Harder, darker and less conducting.
 - 4) Dermatogen is a tissue formed by apical meristem and it develops into -----
 a) cortex b) Xylem c) Epidermis d) Pith

- 5) In fertilization -----
- synergids fuse with the antipodal cell.
 - The egg cell fuses with antipodal cell.
 - Pollen is transferred to the stigma.
 - The male nucleus fuses with the egg cell.
- 6) The entry of pollen tube into ovule through micropyle is called -----
- mesogamy
 - Anisogamy
 - Porogamy
 - chalazogamy
- 7) A microspore mother cell forms -----
- An ovule
 - Embryo sac
 - Pollen sac
 - Pollen grains
- 8) After fertilization, seed coat develops from -----
- Integuments
 - Embryo sac
 - chalaza
 - Ovule
- 9) In angiosperms free nuclear division occurs during -----
- Gamete formation
 - Embryo formation
 - Endosperm formation
 - flower formation
- 10) Pollination which can occur in the same plant is -----
- Herkogamy
 - Cleistogamy
 - Dichogamy
 - Dicliny.