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| BOT-21102 | PLANT TAXONOMY AND EMBRYOLOGY |
| TOPICS: | INTRDUCTION; PLANT TAXONOMY AND SYSTEMATICS;AIMS AND OBJECTIVES OF PLANT TAXONOMY  BRANCHES OF TAXONOMY,CONCEPT OF TAXON,MONOGRAPH,  FLORA MANNUAL,VEGETATION  NOMENCLATURE;INTRODUCTION,SCIENTIFIC VS VERNACULAR NAMES,  POLYNOMIALAND Binomial nomenclature. CLASSIFICATION: INTRODUCTION,CRITERIA OF CLASSIFICATION,HISTORY,  EMBRYOLOGY:STRUCTURE AND DEVELOPMENT OF STAMEN, MICROSPOROGENSIS AND MEGASPOROGENESIS,  DEVELOPMENT OF GAMETOPHYTES AND FERTILIZATION.  APOMIXIS  ,PARTHENOCARPY. STUDY, DISTRIBUTION, DIAGNOSTIC CHARACTERS AND ECONOMIC IMPORTANCE OF THE FOLLOWING FAMILIES: I. APIACEAE II. RANUNCULACEAE III. BRASSICACEAE IV. EUPHORBIACEAE V. MIMOCACEAE . VI. CESALPINACEAE vii CUCURBITACEA  VIII. MALVACEAE IX. POACEAE  X. ROSACEAE XI. SOLANACEAE  XII. MORACEAE XIII. LILIACEAE  XIV. ASTERACEAE XV. FABACEAE |
| PRACTICALS | TAXANOMIC DISCRIPTION OF REPRESENTATIVE FLORA OF DIFFERENT FAMILIES.  KEY TO IDENTIFICATION.  METHODS OF PLANT COLLECTION AND PRESERVATION.  HERBARIUM TECHNIQUES |
| SUGGESTED READINGS: | 1. Porter, C.L. ( ): Taxonomy of flowering Plants, Eurasia Publishing House, New Delhi. 2. Lawrence, G.H.M. (1953): Taxonomy of Vascular Plants, Oxford & IBH Publishers, New Delhi, Calcutta. 3. Jefferey, C.(1968) : An Introduction to Plant Taxonomy J.A. Churchill, London. 4. Mathur, R.C.(1970) : Systematic Botany (Angiosperms) Agra Book Stores Lucknow, Ajmer, Allahabad, Delhi. 5. Maheswari ,P(1963) :Recent Advances in the Embryology of Angiosperms(Ed., ) International Society of Plant Morphologists- University of Delhi. 6. Swamy. B.G.L. & Krishnamoorthy. K.V.(1980):From flower to fruit Tata McGraw Hill Publishing Co., Ltd., New Delhi. 1. Maheswari, P.(1985):An Introduction to the Embryology of Angiosperms Tata McGraw Hill Publishing Co.,Ltd., New Delhi. 8. Bhojwani, S.S. & Bhatnagar, S.P. (2000) : The Embryology of Angiosperms (4th Edition) Vikas Publishing House(P)Ltd., UBS Publisher’s Distributors, New Delhi. |