

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of _____ Back Paper Examination Even Semester (Non - Graduating Batches) – June 2024 [Programme:B.Sc ZBC/Zoology] [Semester: II]				
Course Title: Archegoniates & Plant Architecture			Max Marks: 100	
Course Code: B040201T / C2UD201B			Time:3 Hrs.	
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Level	COs	Marks
SECTION-A (15 Marks) 5 Marks each				
1.	Describe the ecological significance and adaptive features of early land plants (e.g., Rhynia).	K1	CO1	5
2.	Discuss the evolutionary importance and main characteristics of gymnosperms.	K2	CO2	5
3.	Outline the distinguishing traits of Cycadales, Ginkgoales, and Coniferales with examples.	K3	CO3	5
SECTION-B(40 Marks) 10 Marks each				
4.	Explain the concept of heterospory and its role in the evolution of seed plants.	K2	CO1	10
5.	Describe the development, structure, and function of pollen, including its role in plant reproduction and implications for pollen allergies.	K3	CO2	10
6.	Provide a detailed account of fossilization processes, types of fossils, and techniques used in their study.	K3	CO3	10
7.	Define and describe various types of inflorescences, along with detailed explanations of flower parts, fruit types, and placentation patterns.	K3	CO4	10
SECTION-C (45 Marks) 15 Marks each				
8.	Illustrate and discuss anomalous secondary growth in plants such as Bignonia, Boerhaavia, Dracaena, and Nyctanthese, highlighting the differences among them.	K2	CO3	15
9.	Describe the structure and function of apical meristems, and critically evaluate the apical cell theory, histogen theory, and tunica-carpus theory.	K3	CO4	15
10	Explain the process of fertilization in flowering plants, including the structure of dicot and monocot embryos, endosperm formation, double fertilization, apomixis, and polyembryony.	K3	CO5	15