

B.Sc. Semester - 5 (Remedial) (CBCS) Examination**March/April-2022 (NEW COURSE)****Biology of Seed Plants(Core)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que-1(A) Answer the following questions as per instruction. 04
Answer in very short:
 1. Define: Angiosperm
 2. What do you mean by Genus?
 3. Name the book in which classification of Bentham and Hooker is given?
 4. What is taxonomy?
- Que-1(B) Answer in brief (any one): 03
 1. Give conceptual understanding of taxon Family.
 2. What do you mean by species? Discuss the concept of species at various levels.
- Que-1(C) Answer in detail (any one): 07
 1. Describe Cycadales theory of origin of Angiosperm
 2. Discuss: Main criteria of Bentham and Hookers system of classification.
- Que-2(A) Answer the following questions as per instruction. 04
Answer in very short:
 1. Give the technical term: The arrangement of the tepal in bud.
 2. Opposite decussate phyllotaxy is a characteristic of family?
 3. Name the family having 3 angled stem and 3-ranked leaves with closed sheaths.
 4. Give vernacular name of *Morus alba*?
- Que-2(B) Answer in brief (any one): 03
 1. What are the unique features of following?
(a)androecium in Asteraceae (b) Inflorescence of Asclepiadaceae
 2. Place the following Genera to their respective families and indicate their economic importance:
(a)Bignonia (b)Capsicum (c)Polygonum
- Que-2(C) Answer in detail (any one): 07
 1. Exclusively on the basis of the gynoecium and androecium how would you distinguish the following families?
(a) Cucurbitaceae from Canaceae (b) Anonaceae from Asclepiadaceae
(c) Solnaceae from Polygonaceae
 2. Enumerate the salient features of any two families listed below and discuss their systematic position:
(a) Amaranthaceae (b) Moraceae (c) Capparidaceae
- Que-3(A) Answer the following questions as per instruction. 04
Answer in very short:
 1. In which series *Grewia* plant are included?
 2. Which type of fruit is observed in *Cucumis*?
 3. In which plant both androphore and gynophore are present?
 4. Give the technical term: An anther facing inwards.
- Que-3(B) Answer in brief (any one): 03
 1. Scientific and local names of four vegetable plants of the Solanaceae family.
 2. Write an account of floral structure of Lythraceae family.

Que-3(C)	Answer in detail (any one):	07
	1. Give distinguishing features of <i>Ipomea</i> genus and give its floral formula and floral diagram.	
	2. Give systematic position, salient features, and scientific name of two plants of family <i>Polygonaceae</i> .	
Que-4(A)	Answer the following questions as per instruction.	04
	Answer in very short:	
	1. Define: Embryo	
	2. State the role of Basal octant in embryo development.	
	3. What is adventive polyembryony?	
	4. In which plant Helobial endosperm is common?	
Que-4(B)	Answer in brief (any one):	03
	1. Explain: types of Embryo.	
	2. Explain Mature dicot embryo.	
Que-4(C)	Answer in detail (any one):	07
	1. What is embryo culture? describe its method and applications.	
	2. Describe with diagrams: Development of embryo in plant of <i>Monocot</i> family.	
Que-5(A)	Answer the following questions as per instruction.	04
	Answer in very short	
	1. Which type of fatty oil is obtained from Groundnut seed?	
	2. What is lint and fuzz fibre of Cotton?	
	3. Which popular oil seed crop of Saurashtra is used to making margarine?	
	4. Give scientific name and family of <i>Tea</i> .	
Que-5(B)	Answer in brief (any one):	03
	1. Describe Sun curing of Tobacco.	
	2. Discuss morphological characters of <i>Coffee</i> plants.	
Que-5(C)	Answer in detail (any one):	07
	1. Describe major processes of manufacture of Tea	
	2. Name main fibre yielding families? Discuss four common Oil yielding plants of Gujarat.	
