WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 4th Semester Examination, 2020

BOTACOR10T-Botany (CC10)

Time Allotted: 2 Hours																		Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

1.		Answer the following questions:												$1×6 = 6$
	(a) What is virtual herbarium?
	(b) Define taxon.
	(c) What is lectotype?
	(d) What is cladogram?
	(e) What is meant by OTU?
	(f) What is tautonym?

2.		Answer any *eight* questions from the following:							$3×8 = 24$
	(a) State the functions of botanical garden.																3
	(b) Write briefly on e-flora and monographs.															3
	(c) Write a short note on biological species concept.									$1\frac{1}{2}+1\frac{1}{2}$
	(d) Mention the situations leading to the rejection of name of any taxon.					3
	(e) What are the limitations to the principle of priority?											3
	(f) State the merits of Angiosperm Phylogeny Group (APG III) classification.				3
	(g) Differentiate between parallelism and convergence.											3
	(h) Give a brief idea on monophyly, paraphyly and polyphyly.								3
	(i) Explain the importance of palynology in taxonomic elucidation citing two specific examples.		3
	(j) Explain double citation with an example.															3
	(k) What is meant by artificial, natural and phylogenetic system of classification?			3
	(l) Explain the terms homology and analogy. Give examples of organs met in plants.		$2+1$

3.		Answer any *two* questions from the following:							$5×2 = 10$
	(a) State the major categories of secondary metabolites having taxonomic significance.		5
	(b) Write a note on the basic principles of numerical taxonomy.								5
	(c) Write down the principles of ICN.																	5
	(d) Give the outline of Bentham & Hooker's system of classification of seed plants (up to series). Name the book where this system was proposed.		$4+1$

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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