


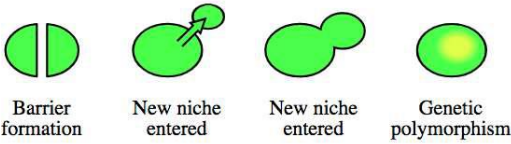
<b>Name:</b>			
<b>Enrolment No:</b>			
<b>UPES</b> <b>End Semester Examination, May 2024</b>			
<b>Course:</b> Fossils and Their Applications		<b>Time</b> :03 hrs.	
<b>Semester:</b> IV		<b>Max. Marks:</b> 100	
<b>Program:</b> B.Sc. PCM (Honours)			
<b>Course Code:</b> PEGS 2033G			
<b>Instructions:</b>			
I. All questions are compulsory.			
II. Read question carefully and write appropriate answer.			
III. Write correct unit in numerical after calculation.			
IV. Draw neat diagram with proper labeling to explain the answer.			
<b>SECTION A (5Qx4M=20Marks)</b>			
Q. No.		Marks	CO
1	Write about five different types of true fossils and explain difference between dubio-fossils and pseudo-fossils?	4	CO1
2	Briefly describe various steps in fossilization and list five fossiliferous Palaeozoic palaeontological horizons of India?	4	CO2
3	Define speciation and list different speciation models?	4	CO2
4	Which agencies are responsible for erection of Geological Boundaries?	4	CO3
5	Write short notes on different types of marine depositional environments?	4	CO4
<b>SECTION B (4Qx10M= 40 Marks)</b>			
6	What are the acritarchs? Write characteristics morphological traits of different types of acritarchs.	10	CO4
7	Name different scientific agencies involved in naming of Genus and Species that requires adherence to respective codes. Write in detail about ICN.	10	CO2
8	What is an ichnofacies? List five different ichnofacies, their characteristic ichnofossil assemblage and their typical environment.	10	CO2
9	Write different steps of fossilization. Give definition of taphonomy and what are amin Taphonomic processes?  OR Discuss the fossilization process of flora and fauna with examples.	10	CO3
<b>SECTION-C (2Qx20M=40 Marks)</b>			
10	Define the Index Fossil. Write the characteristics of ammonites and their role as Index Fossils?	20	CO3

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Describe general characteristics of Aves and the fossil which is considered a link between birds and reptile?

**OR**

**Allopatric    Peripatric    Parapatric    Sympatric**



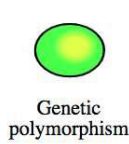
Barrier formation



New niche entered



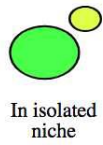
New niche entered



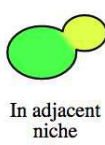
Genetic polymorphism



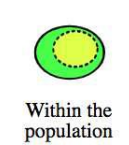
In isolation



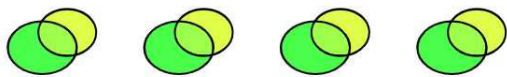
In isolated niche



In adjacent niche



Within the population



20

CO2

Briefly describe the above four types of speciation