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**GIET UNIVERSITY, GUNUPUR – 765022**  
M. Sc. (Second Semester) Examinations, September – 2021  
**20LSPC204 – BIODIVERSITY AND EVOLUTION**  
(Life Science)

Time: 2 hrs

Maximum: 50 Marks

(The figures in the right hand margin indicate marks.)

**PART – A**

- Q.1. Answer **ALL** questions **(2 x 10 = 20 Marks)**
- What give common and differential features of cladogram and phylogenetic tree?
  - What is adaptive radiation? Give two examples.
  - What is difference between Alfa and Beta diversity ?
  - Australian marsupials like macropus shows which type of distribution? Mention the main reason behind it?
  - What are the main features of biodiversity hotspots?
  - What is genetic drift?
  - What is hardy Weinberg's equation and its significance?
  - What do you mean by biological species? How it is different from phylogenetic concept ?
  - Why biodiversity hotspots are very sensitive areas?
  - What is sexual selection? Mention two examples seen in animal kingdom.

**PART – B (6 x 5 = 30 Marks)**Answer ANY FIVE question

Marks

- What do you mean by Biodiversity? Write the significance of biodiversity and why biodiversity protection is essential? (6)
- Discuss the Oparin's theory and also the Urey and millers experiment to validate the theory? (6)
- Discuss four different types of species concept studied by you? (6)
- Write short notes on (6)
  - Chipko movement
  - Ex-Situ conservation
- What is natural selection? Who proposed the theory of natural selection? Show and discuss different type of selection with graph? (6)
- Give an account of salient features of Biodiversity act. (6)
- What is Adaptive radiation? Explain the causes of Adaptive radiation? Explain with one example. . (6)

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