



**WEST BENGAL STATE UNIVERSITY**  
B.A./B.Sc. Honours 5th Semester Examination, 2020, held in 2021

**GEOADSE01T-GEOGRAPHY (DSE1/2)**

**SOIL AND BIOGEOGRAPHY**

Time Allotted: 2 Hours

Full Marks: 50

*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.*

**CATEGORY-A**

**Answer any two questions from the following (Each within 600 words) 10×2 = 20**

1. Explain the role of climate and time in soil formation. 10
2. Define biosphere. Critically discuss a terrestrial ecosystem with its energy sources, energy exchange and food chain. 2+8
3. How does the pH of soil affect plant growth? Explain the importance of soil organic matter for the diversification of crops. 4+6

**CATEGORY-B**

**Answer any four questions from the following (Each within 150 words) 5×4 = 20**

4. Briefly discuss the horizons of Laterite soil.
5. State the importance of NPK on crop growth.
6. Discuss the role of soil texture on formation of soil structure.
7. What are the orders and their characteristics in U.S.D.A.'s Seventh Approximation of soil classification?
8. Distinguish between food chain and food web. State the importance of the food chain.
9. How does biomass pyramid differ from energy pyramid?



10. Discuss the problem of soil salinization leading to its degradation.

**CATEGORY-C**

**Answer any five questions from the following (Each within 50 words)**

2×5 = 10

11. Define the term Pedon.
12. What is hygroscopic water?
13. What is red data book?
14. Distinguish between solum and regolith.
15. Define ecocline and ecotone.
16. What is the biological clock?
17. What is field capacity?
18. What is carbon-nitrogen ratio?
19. Define Biodiversity Hotspot.

**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.*

—×—