

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END-SEMESTER EXAMINATION)**

CLASS: BPHARMACY
BRANCH: PHARM SCI TECH

SEMESTER: II
SESSION: SP/19

SUBJECT: BP206T - ENVIRONMENTAL SCIENCES

TIME: 2.00 Hour

FULL MARK: 50

A. Short Answers

(Answer six out of eight)

(06 x 05 = 30 marks)

1. State the differences between gaseous and sedimentary cycles.
2. How does the Earth manage its heat radiation balance so as to maintain an average temperature of 15°C?
3. Explain: *El Nino* and *La Nina*. Mention their significance.
4. What do you understand by ozone depletion potential?
5. What is a disinfectant? Mention its important characteristics.
6. Why agricultural runoff is the main source of nitrogen in water?
7. Hydrolysis is a process where water is an essential reactant. Water and hydronium ions are agents of weathering. What are the main sources of hydronium ions?
8. Soils containing large amounts of humic material are often acidic. Explain.

B. Long Answers

(Answer two out of three)

(02 x 10 = 20 marks)

1. Draw the nitrogen cycle and explain its salient features.
2. Describe the thermal stratification of a water body. Explain *fall* and *spring* overturns.
3. Explain the working of a rapid sand filter with the help of diagram.

:03/05/2019:M