JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -3 EXAMINATION- 2023
PhD -I Semester

COURSE CODE (CREDITS): 14M31CE114 (3)   MAX. MARKS: 35
COURSE NAME: EIA and Risk Management
COURSE INSTRUCTORS: Dr. Rishi Rana Kalia   MAX. TIME: 2 Hours

Note: (a)All questions are compulsory.
(b)Marks are indicated against each question in square brackets.
(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.1 Explain in detail the models used for water impact predictions linked with the environmental impact assessment?   **[3 Marks]** (CO-2)

Q.2 (a) Discuss Econometric approaches?   **[3 Marks]** (CO-3)

(b) In a water treatment plant, the pH values of incoming and outgoing waters are 8.9 and 9.5 respectively. Assume a linear variation with time; determine the average pH value of water?
[3Marks] (CO-4)

Q.3 (a) Calculate the sound pressure level of the sources emanating the sound at every 10 minutes interval in the given following data: **[3 Marks]** (CO-2&3)

Time	DB
10	74
20	85
30	80
40	87
50	78
60	80
70	85
80	74
90	76
100	78

(b) Discuss box model in detail?   **[4 Marks]** (CO-2)

Q.4 What are the human health effects of nitrogen dioxide as a air pollutant? **[3 Marks]** (CO-3)

Q.5 Discuss the concept of alternative analysis in the Environmental Impact Assessment process. How does the consideration of alternatives contribute to the overall effectiveness of an EIA?

[5 Marks] (CO-4)

Q.6 (a) Discuss the role of public participation in the Environmental Impact Assessment process. How can effective public engagement contribute to the overall success of an EIA? **[5 Marks]** (CO-3)

(b) Discuss the 10 major mitigation measures for soil and geological impact assessment?

[6 Marks] (CO-5)