JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2023

B.Tech-VII Semester (CE)

COURSE CODE (CREDITS): 18B1WCE732 (3)

MAX. MARKS: 35

COURSE NAME: Environmental Management and Impact Assessment

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 Discuss the mitigation measures for soil and geological impact assessment?

[8 Marks] (CO-5)

Q.2 (a) Evaluate the role of technology and data analytics in modern Environmental Impact Assessments. How can advancements in technology enhance the accuracy and efficiency of environmental impact predictions?

[5 Marks] (CO-4)

(b) A sample of air is analyzed at 0°C and 1 atmospheric pressure is reported to contain 54 ppm of carbon monoxide. Determine the equivalent carbon monoxide in $\mu m/m^3$ and milligrams/ m^3? Mol.weight of carbon monoxide= 28 g/mol.

[4 Marks] (CO-1&2)

Q.3 Explain the framework of visual impact assessment?

[2 Marks] (CO-5)

Q.4 Define in details the various mitigation techniques and monitoring parameters for assessing biotic factors for a project?

[3 Marks] (CO-5)

Q.5 (a) Data from unseeded waste water from thermal power plant having BOD test are: 10 ml of waste in 300 ml bottle, initial DO of 8.5 mg/l, and 5 days DO equal to 5.6 mg/l, Compute the BOD and ultimate BOD. Assume a k-rate of 0.10 per day.

[5 Marks] (CO-4)

(b) Discuss the environmental impacts of noise?

[2Marks] (CO-2)

Q.6 Asian development bank has categorized projects for developing countries, explain those categories in detail?

[4 Marks] (CO-4)

Q.7 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?

[2 Marks] (CO-4)