JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

B.Tech 7th 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) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

*(c)**SCIENTIFIC CALCULATOR IS ALLOWED***

Q. No	Question	CO	Marks
Q1	Suggest EIA-based mitigation measures?	CO-1 & 3	4 Marks
Q2	Explain air quality standards. Identify and enlist the major primary and secondary air pollutants?	CO-4	5 Marks
Q3	A Category A mining project undergoing EIA generates the following impacts: Increased AQI during construction, Noise from blasting, Loss of vegetation, Risk to nearby community, Change in groundwater level. Select any two EIA methodologies and explain how both would be applied for the above scenario. Identify 3 Environmental Indicators for each environmental component (Air, Water, Noise, and Biological).	CO-5	7 Marks
Q4	With the help of an example discuss policy based screening approach for a project during environmental impact assessment?	CO-2	3 Marks
Q5	A wastewater treatment plant disposes of its effluent in a river stream. The characteristics of the stream are as given below: a) What will be the DO concentration after two days? b) what will be the lowest DO concentration	CO-4	2 Marks
Q6	How do expert systems help in prediction and evaluation of impacts?	CO-3	4

	Wastewater	Stream
Flow, m^3/s	0.2	5.0
DO, mg/l	1.0	8.0
Temp, °C	15	20.2
BOD @20°C, mg/l	100	2.0
K1@20°C, d^{-1}	0.2	-
K2@20°C, d^{-1}	-	0.3

	Discuss with an example?		**Marks**
Q7	What are the mitigation measures and monitoring techniques for environmental assessment of biotic impacts?	CO-4	**4 Marks**
Q8	a) What do you understand by risk assessment? What are the factors on which risk depends?	CO-2 & 3	**2.5 Marks**
	b) Determine the volume occupied by 8 mol of gas at 25°C and 820 mm Hg		**1.5 Marks**
Q9	Discuss environmental impacts of noise?	CO-2	**2 Marks**