## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -3 EXAMINATION- 2024

B.Tech 7<sup>th</sup> 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 Hour

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required

for solving problems

| Q. No |  |   | Question |           | i de la companya de | CO         | Marks      |
|-------|--|---|----------|-----------|---|------------|------------|
| Q1    | Distinguish bet examples?  | ween rapid  | EIA and  | Comprehen | sive EIA with   | · CO-3     | 4<br>Marks |
| Q2    |  | hat are the benefits of post environmental audit?                 |          |           |   |            | 5<br>Marks |
| Q3    | Explain the evo features?  | lain the evolution and development of NEPA. Discuss its key ures? |          |           |   |            | 4<br>Marks |
| Q4    | Briefly explain various types of socio economic impacts?   |   |          |           |   | CO-5       | 3<br>Marks |
| Q5    | A town has an average domestic sewage flow of 73,856 m³/day with a BOD concentration of 650 ppm. A neighboring industrial estate adds about 31,325 m/day of sewage having 8060 kg of BOD to it. Compute the concentration of BOD in industrial and the combined sewage, the probable population and per capita flow of sewage and the population equivalents based on the BOD load and hydraulic load. |   |          |           |   | CO-<br>3&4 | 5<br>Marks |
| Q6    | Explain about the Concept of ISO and ISO 14000 in EIA?   |   |          |           |   | CO-3       | 3<br>Marks |
| Q7    | Calculate the sound pressure level of the sources emanating the sound at every 10 minutes interval in the given following data:  |   |          |           |   | CO-<br>2&3 | 2<br>Marks |
|       |  | Time  | DB 74    |           |   |            |            |
|       |  | 20  | 85       |           |   |            |            |
|       |  | 30  | 80       |           |   |            |            |
|       |  | 40  | 87       |           |   |            |            |
|       |  | 50  | 78       |           |   | ļ          |            |
|       |  | 60  | 80       |           |   |            |            |
|       |  | 70  | 85       |           |   |            |            |
|       |  | 80  | 74       |           |   |            |            |
|       |  | 90  | 76       |           |   |            |            |

|     | 100 78  |                |          |
|-----|---|----------------|----------|
| Q8  | Give the list of different project activities which will give impact on   | CO-4           | 2        |
|     | air Environment?  |                | Marks    |
| Q9  | Discuss the 10 major mitigation measures for soil and geological          | CO-3           | 2        |
|     | impact assessment?  |                | Marks    |
| Q10 | (a) The 3 days 15°C BOD of a sample of sewage is 250 mg/l.                | CO-4           | 2        |
|     | Draw a graph of 5 day BOD as a function of temperature in                 | <b>&amp;</b> 5 | Marks    |
|     | the range 10°C to 30°C in steps of 5°C.                                   | 400            |          |
|     | (b) The average sewage flow from a city is 85×10 <sup>8</sup> 1/d. if the |                | jj.      |
|     | average 5 day BOD is 725 ppm, compute the total daily 5                   |                | <b>3</b> |
|     | day oxygen demand in kg, and the population equivalent of                 |                | Marks    |
|     | sewage. Assume per capita BOD of sewage per day as 225                    | l.             |          |
|     | g.  |                |          |