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Vellore Institute of Technology
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REG.NO.:

SCHOOL OF BIOSCIENCES AND TECHNOLOGY
CONTINUOUS ASSESSMENT TEST - I
WINTER SEMESTER 2025-2026

Programme Name & Branch : MSc. Integrated Biotechnology
Course Code and Course Name : TBIT413L and Epidemiology and Public Health
Slot(s) : E2+TE2
Faculty Name(s) : Dr. Subhash Kumar
Class Number(s) : VL2025260503501
Date of Examination : 31 Jan 2026, AN
Exam Duration : 90 minutes
Maximum Marks: 50

General instruction(s):

- Answer All Questions

Q. No	Question	M	CO	BL
1.	Describe the modern definition of epidemiology and explain its six core components with suitable examples.	10	1	1
2.	Explain the four fundamental concepts of health and write about the types of health indicators.	10	1	2
3.	a) Define incidence and prevalence. In a population of 1,000 people, 80 individuals already had tuberculosis at the beginning of the year, and 40 new cases were reported during the year. Calculate the incidence and prevalence and interpret the results. b) In a population of 150 people, 25 had a disease at the beginning of the year, and 15 new cases developed during the year. Calculate the period prevalence and interpret the result.	5+5	2	3
4.	a) Explain the case-control study. Describe its basic design, advantages, and limitations. b) What is a cohort study? Explain its basic design, advantages, and limitations.	5+5	2	2
5.	Explain: (a) What is a ratio and proportion? Give one example for each. (b) What is case fatality rate and crude death rate? (c) What is meant by relative risk (RR)?	10 (4+4+2)	2	2
