


Name:			
Enrolment No:			
UPES End Semester Examination, December 2024			
Course: Epidemiology and Disease Management		Semester: V	
Program: INT-BMSC-MICROBIOLOGY		Time: 03 hrs.	
Course Code: HSMB3024P		Max. Marks: 100	
Instructions: Read the question paper carefully. Attempt the questions as mentioned.			
S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	Write primary goal of epidemiology in public health.	1.5	CO1
Q 2	Differentiate incidence from prevalence in epidemiology.	1.5	CO1
Q 3	Give the role of cohort in epidemiological research.	1.5	CO1
Q 4	Depict the significance of analytical study in epidemiology.	1.5	CO1
Q 5	Write the core elements involved in epidemiology.	1.5	CO1
Q 6	Define the terms a) epidemic b) endemic	1.5	CO1
Q 7	Enumerate the phases involved in the natural progression of diseases.	1.5	CO1
Q 8	Define a hypothesis in research.	1.5	CO1
Q 9	Following is the first step in the research process. A) Data analysis B) Literature review C) Formulating a research problem D) Sampling	1.5	CO2
Q 10	Write the main objective of sampling in research.	1.5	CO2
Q 11	Give the purpose of the measurement loop in research.	1.5	CO2
Q 12	Define the role of p value in statistics.	1.5	CO2
Q 13	Depict the importance of sample size in statistics.	1.5	CO2
Q 14	Write any two communicable diseases which are considered as diseases of national importance.	1.5	CO2
Q 15	The main purpose of a test of significance in research is - A) To calculate the mean B) To assess if results are due to chance C) To gather data D) To select a sample	1.5	CO2
Q 16	Following is commonly used as a significance level in hypothesis testing - A) 0.25 B) 0.10 C) 0.05 D) 0.50	1.5	CO2
Q 17	Give the role of confidence intervals in population parameter estimation.	1.5	CO2
Q 18	From the given options denote the major risk factor for the development of cardiovascular diseases.	1.5	CO2

	A) Excessive physical activity B) High salt intake C) High fruit consumption D) Smoking		
Q 19	Communicable diseases can be spread from person to person through direct or indirect contact. (True/False)	1.5	CO2
Q 20	Vaccination is not effective in preventing communicable diseases. (True/False)	1.5	CO2
Section B (4Qx5M=20 Marks)			
Q 1	Write the procedure and applications of survey in epidemiological research.	5	CO2
Q 2	Explain each component of critical appraisal cube.	5	CO2
Q 3	Discuss the major causes of air pollution and outline effective strategies for its prevention.	5	CO3
Q 4	Describe in detail the types of epidemiological study.	5	CO3
Section C (2Qx15M=30 Marks)			
Q 1	Discuss the government initiatives to combat communicable diseases in India. Explain the epidemiology of cardiovascular diseases in India.	5 + 10	CO4
Q 2	Briefly describe the important causes of noncommunicable diseases. Depict the epidemiology and management of Tuberculosis.	5 + 10	CO4
Section D (2Qx10M=20 Marks)			
Q 1	Discuss measures of Central Tendency in detail. Name the data visualization tool which is used to describe counts for variable.	10	CO5
Q 2	For the following dataset, calculate mean, median, mode and standard deviation. 10,10,10,10,10,10,20,30,40,50	10	CO5