

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Course: Epidemiology and Disease Management

Program: MSc Microbiology

Course Code: HSMB 7019

Semester: IInd

Time : 03 hrs.

Max. Marks: 100

Instructions: Answer all questions

Q.No	Section A Short answer questions/ MCQ	(20Q x1.5M= 30 Marks)	COs
Q	Statement of question		CO
1.	What is epidemiological triad?	1.5	CO1
2.	What is a pandemic? Give two examples.	1.5	CO3
3.	Enlist the symptoms of Myocardial Infarction?	1.5	CO4
4.	What are the risk factors for developing cancer of breast?	1.5	CO4
5.	A person in your locality has come to you after being bitten by a snake. What are the first aid which you will give?	1.5	CO4
6.	What is accidentology? What does it deal with?	1.5	CO2
7.	What is Post Exposure Prophylaxis for HIV? Who are eligible for PEP ?	1.5	CO2
8.	Define Reemerging diseases and give two examples.	1.5	CO5
9.	Define Nosocomial Infection. What are the standard precautions taken to prevent nosocomial infections?	1.5	CO2
10.	What is syndromic approach to STD?	1.5	CO2
11.	Name the two rotavirus vaccines introduced for routine use in industrialized and developing countries?	1.5	CO2
12.	What is ICTC, what are its's functions?	1.5	CO5

13.	Name any three vaccines which are approved for public use in COVID 19 pandemic?	1.5	CO2
14.	What is the full form of RNTCP?	1.5	CO3
15.	What is Case Fatality Ratio?	1.5	CO1
16.	Which of the following is a pathogen identified in children with acute diarrhea in treatment centers in developing countries? a) Rotavirus b) Shigella c) Cryptosporidium d) All the above	1.5	CO2
17.	A two year old child is found to have wheezing with chest in drawing. As per the classification of illness, which category will this child be put in to? a) Very severe disease b) Severe pneumonia c) Pneumonia (not severe) d) No pneumonia: cough and cold	1.5	CO2
18.	Mediterranean fever is caused by a) Leptospira b) Brucella c) Arbovirus d) Mycobacteria	1.5	CO3
19.	What is the bacteria involved with stomach cancer? a) E coli b) Mycobacterium c) Salmonella d) H pylori	1.5	CO3
20.	A person comes to you to check his weight. It was noted that he weighs 100 kg and his height is 180 cm. What is his BMI? a) 24 b) 20 c) 30 d) 35	1.5	CO4
	Section B	(4Qx5M=20 Marks)	CO

Q	Statement of question		
1.	What is Janani Suraksha Yojana? What are its objectives and salient features?	5 (2+3)	CO5
2.	What is stroke? How do you classify stroke? What are the risk factors and preventive strategies.	5 (1+1+3)	CO3
3.	What is the causative agent and vector for Malaria? Briefly explain the vector control measures for malaria?	5 (2+3)	CO2
4.	Briefly explain the organizational structure of National Tuberculosis Elimination Programme.	5	CO5
Section C		(2Qx15M=30 Marks)	
Q	Statement of question (Case studies)		CO
1.	<p>A 30 year old man who is a resident of Saharanpur presented to a hospital in Dehradun with complaints of sudden onset fever, chills, headache, muscles and joint pains. He says he feels like his bones are breaking and has pain behind his eye which is preventing his eye movements. His platelet count was found to be 20,000 in the hospital. (normal is 1-3lakh). When asked he told that there are plenty of mosquitos in the locality.</p> <p>(a) What is the probable condition this patient is suffering from?</p> <p>(b) Explain the agent, host and environmental factors involved in this condition.</p> <p>(c) Name four diseases where mosquito is the vector?</p> <p>(d) Discuss the various strategies to control mosquito breeding in a community and safety measures at household level?</p> <p>What is NVBDCP? What is its strategy to prevent and control vector borne illness?</p>	15 (3+5+2+2+3)	CO2
2.	<p>A sixty five year old man presented to the hospital with history of headache and inability to sleep. He is diabetic and has a BMI of 35. On examination his BP was found to be 170/100 mm Hg and he was admitted for further evaluation. He says he smokes two packs of cigarettes and drinks alcohol daily as he is retired and has got nothing to do. He was admitted in the hospital and was found to be having blood pressure readings above 170/100 in the next 48 hours.</p> <p>(a) What is the medical condition this person is suffering from?</p> <p>(b) What are the risk factors which lead this person to this condition?</p> <p>(c) Name two other disease conditions which this person can develop if he doesn't keep his blood pressure within normal limits?</p> <p>(d) What is tracking of blood pressure?</p> <p>(e) You are given the task to counsel this person after he is discharged from the hospital. How will you do the same?</p> <p>(f) How will you measure the burden of any non-communicable disease in the community? Mention any four parameters</p>	15 (1+2+1+1+3+2+5)	CO3

	(g) Briefly explain any cardiovascular illness with the help of epidemiological triad?		
	Section D	(2Qx10M=20 Marks)	
Q	Statement of question		CO
1.	a) What is Case Control Study? b) What are the basic steps in conducting case control studies? c) What is Odd's Ratio? d) What are the advantages and disadvantages of Case Control Studies?	10 (2+3+2+3)	CO1
2.	a) What is AIDS? b) What are the modes of transmission? c) What are the laboratory findings in HIV infection? d) How is counselling and HIV testing services done in the country?	10 (2+3+2+3)	CO2