

**DEPARTMENT OF VETERINARY PUBLIC HEALTH & EPIDEMIOLOGY****M J F COLLEGE OF VETERINARY & ANIMAL SCIENCE CHOMU, JAIPUR****Tentative Course Outline for Theory (Session: 2021-22)****Teaching Programme (MSVE-2016)****Course No: VPE (III<sup>rd</sup> Year B.V.Sc. & A.H.)****Credit Hrs. (3+1)****Course Title: VETERINARY PUBLIC HEALTH & EPIDEMIOLOGY****Duration of Lecture Class: 25-08-2021 to 08-07-2022**

Sr. No.	Topic	Hrs	Date
	<b>Unit-1 VETERINARY PUBLIC HEALTH AND FOOD SAFETY</b>		
1.	Aims and scope of Veterinary Public Health	1	25-8-2021
2.	Role of veterinarians in public health. One Health concept and initiatives	1	26-8-2021
3.	Veterinary Public Health administration. Sources of contamination	1	27-8-2021
4.	Principles and concepts of food hygiene and safety	1	2-09-2021
5.	Milk hygiene in relation to public health	1	3-9-2021
6.	Hygienic and safe milk production practices including steps for prevention and control of milk contamination, adulterants, antimicrobial residues, agrochemicals, subclinical mastitis orudder infection etc.	3	8-9-2021 9-9-2021 15-9-2021
7.	Microbial flora of milk and milk products	2	16-9-2021 17-9-2021
8.	Milk plant and dairy equipment hygiene	2	22-9-2021 23-9-2021
9.	Quality control of milk and milk products. Milk hygiene practices in India and other countries	2	24-9-2021 29-9-2021
10.	Elements of meat inspection and meat hygiene practices. Pathological conditions associated with the transport of food animals	1	30-9-2021
11.	Hygiene in abattoirs and meat plants	1	1-10-2021
12.	Detection of conditions or diseases and judgements during ante mortem and post mortem inspection	2	6-10-2021 8-10-2021
13.	Examination of lymph nodes	1	21-10-2021
14.	Meat as a source of disease transmission. Sources of contamination of meat and methods of carcass decontamination	2	22-10-2021 27-10-2021

15.	Speciation of meat. Animal welfare and public health issues	1	28-10-2021
16.	Classification of low risk and high risk material generated in an abattoir and its hygienic disposal.	2	29-10-2021 3-11-2021
17.	Inspection of poultry for human consumption. Occupational health hazards in abattoir and meat plants	2	11-11-2021 12-11-2021
18.	Foodborne infections and intoxications associated with foods of animal origin	2	17-11-2021 18-11-2021
19.	Toxic residues (pesticides, antibiotics, metals and hormones) in foods and associated health hazards. Types of biohazards	1	25-11-2021
20.	Hazard analysis and critical control points (HACCP) system	2	26-11-2021 1-12-2021
21.	Importance of ISO 9000 and 14000 series in meat industry. Risk analysis, assessment and management	1	2-12-2021
22.	International food safety standards	2	3-12-2021
23.	Food Safety and Standards Act and Regulations. Role of Food Safety and Standards Authority of India (FSSAI)	2	8-12-2021 9-12-2021
24.	Bureau of Indian Standards (BIS) and other national agencies	1	10-12-2021
	<b>Unit-2 Veterinary epidemiology</b>		
25.	Definitions, components and aims of epidemiology Determinants of disease	2	15-12-2021 16-12-2021
26.	Factors influencing occurrence of livestock diseases and animal production	1	17-12-2021
27.	Determinants of disease	1	22-12-2021
28.	Transmission and maintenance of infections	1	23-12-2021
29.	Ecology of disease. Measures and patterns of disease occurrence	1	29-12-2021
30.	Survey and surveillance of animal diseases and related parameters	2	30-12-2021 31-12-2021
31.	Epidemiological methods- Descriptive, analytical, experimental, theoretical, serological and molecular	3	5-1-2022 6-1-2022 7-1-2022
32.	Animal disease forecasting	1	12-1-2022
33.	Strategies of disease management: prevention, control and biosecurity	1	19-1-2022
34.	Economics of animal diseases. National and international regulations on livestock diseases	2	20-1-2022 21-1-2022

35.	Role of OIE and laws on international trade of animals and animal products	2	27-1-2022 28-1-2022
	<b>Unit- 3 Zoonotic disease</b>		
36.	Definition, history and socio-economic impact of zoonotic diseases	2	2-2-2022 3-2-2022
37.	Classification of zoonoses and approaches to their management. Multisectoral approach for zoonoses prevention and control	3	4-2-2022 9-2-2022 10-2-2022
38.	Emerging, re-emerging and occupational zoonoses	1	17-2-2022
39.	Role of domestic, wild, pet and laboratory animals and birds in transmission of zoonoses	2	18-2-2022 23-2-2022
40.	Zoonotic pathogens as agents of bioterrorism.	1	24-2-2022
41.	Epidemiology, clinical manifestations and management of the following zoonoses(cont.... from 40 to 46): Rabies, Japanese encephalitis	2	25-2-2022 2-3-2022
42.	influenza, Kyasanur forest disease	2	3-3-2022 4-3-2022
43.	Crimean Congo haemorrhagic fever, Nipah encephalitis, Ebola virus infection	2	9-3-2022 10-3-2022
44.	Anthrax, brucellosis	1	11-3-2022
45.	Tuberculosis, leptospirosis, listeriosis, plague, glanders	2	16-3-2022 23-3-2022
46.	Q fever, rickettsiosis, chlamydiosis	1	24-3-2022
47.	Taeniasis, cysticercosis, hydatidosis, larva migrans, diphyllbothriasis, trichinellosis, toxoplasmosis,	2	25-3-2022 30-3-2022
48.	Fasciolosis, paragonimiasis, sarcocystosis, cryptosporidiosis, amoebiasis, giardiasis, leishmaniasis, superficial and systemic mycosis and prion diseases	2	31-3-2022 1-4-2022
49.	Foodborne bacterial zoonoses: salmonellosis, E. coli infection, staphylococcal gastroenteritis, clostridial food poisoning, campylobacteriosis etc	2	6-4-2022 7-4-2022
	<b>Unit-4 (Environmental hygiene)</b>		
50.	Scope and importance	2	8-4-2022 13-4-2022
51.	Ecosystem: Components structure and functions	2	20-4-2022 21-4-2022
52.	Biodiversity: uses, threats and conservation	1	22-4-2022
53.	Natural resources: types, uses and abuses	1	27-4-2022
54.	Environmental contaminants in food chain-bioaccumulation, biomagnification and persistent organic pollutants	2	28-4-2022 4-5-2022

55.	Environmental pollution: Sources, nature of pollutants, effects on animal and human health. Rural and urban pollution	3	5-5-2022 6-5-2022 11-5-2022
56.	Air pollution, sources and hazard. Air pollution in animal houses, effect on health and productivity	2	12-5-2022 13-5-2022
57.	Airborne diseases – Classification, health hazard, prevention and control	2	18-5-2022 19-5-2022
58.	Water-Sources, contamination & their prevention. Water qualities- Physical, chemical, bacteriological and radiological	2	20-5-2022 25-5-2022
59.	Water purification methods for community water supplies	2	26-5-2022 27-5-2022
60.	Waterborne diseases – Classification, health hazard, prevention and control	1	1-6-2022
61.	Soil, marine and thermal pollution- Classification, sources, hazard, prevention and control	2	2-6-2022 3-6-2022
62.	Noise pollution – Sources, hazards, prevention and control. Nuclear hazards or radiological hazard-Types, hazards and radiation protection	1	8-6-2022
63.	National rules and legislations related to environmental pollution and role of pollution control board in India	2	9-6-2022 10-6-2022
64.	Biosafety: Importance, classification and biosafety measures for prevention of risk hazards	1	15-6-2022
65.	Disaster management and mitigation	2	16-6-2022 17-6-2022
66.	Solid and liquid waste management at farms and biomedical waste management	2	22-6-2022 23-6-2022
67.	Sanitation and disinfection of farm and hospital environment in veterinary public practice for infection control	2	24-6-2022 29-6-2022
68.	Global warming and greenhouse effect- Definition, greenhouse gases, impact of climate change and international treaties or protocols	2	30-6-2022 1-7-2022
69.	Management of waste from animal industries	2	6-7-2022 7-7-2022
70.	Stray and fallen animal management and carcass disposal. Vector and reservoir control	1	8-7-2022

**Head of Department**

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**Tentative Course Outline for Practical (Session: 2021-22)**

**Teaching Programme (MSVE-2016)**

**LECTURE SCHEDULE (PRACTICAL)**

VPE (3+1)

III<sup>rd</sup>Year B.V.Sc. & A.H.

S.No	Name of Practical	Hrs	Day
1.	COLLECTION OF THE MILK SAMPLES FOR CHEMICAL AND BACTERIOLOGICAL EXAMINATION GRADING OF MILK ON THE BASIS OF METHYLELE BLUE REDUCTION TEST (MBR TEST)	2	25-8-2021
2.	BACTERIOLOGICAL EXAMINATION OF RAW MILK & PASTEURISED MILK	2	1-9-2021
3.	STANDARD PLATE COUNT TEST	2	8-9-2021
4.	PRESUMPTIVE COLIFORM TEST	2	15-9-2021
5.	FAECAL STREPTOCOCCI COUNT	2	22-9-2021
6.	PSYCHROPHILIC COUNT	2	29-9-2021
7.	DETECTION OF ADULTERATION IN MILK	2	6-10-2021
8.	DETECTION OF ADULTERATION IN GHEE SYNTHETIC MILK	2	27-10-2021
9.	ISOLATION & IDENTIFICATIONS OF PATHOGENIC BACTERIA OF PUBLIC HEALTH SIGNIFICANCE FROM MILK & MILK PRODUCTS	2	3-11-2021
10.	TEST FOR DETECTION OF MASTITIC MILK- Indirect test for detection of sub-clinical mastitis in a dairy herd	2	17-11-2021
11.	ANTE MORTEM INSPECTION OF FOOD ANIMALS	2	1-12-2021
12.	POST MORTEM INSPECTION OF FOOD ANIMALS	2	8-12-2021
13.	DIFFERENTIATION OF MEAT OF DIFFERENT SPECIES MICROBIOLOGICAL EXAMINATION OF MEAT	2	15-12-2021
14.	COLLECTION OF EPIDEMIOLOGICAL SAMPLE	2	22-12-2021
15.	MEASUREMENT OF DISEASE IN POPULATION & DETERMINATION OF MORBIDITY AND MORTALITY RATES AND RATIO	2	29-12-2021
16.	SOURCES AND COLLECTION OF EPIDEMIOLOGICAL DATA	2	5-1-2022
17.	DIFFERENT MODES OF DISPLAYING THE EPIDEMIOLOGICAL DATA	2	12-1-2022

	DEMONSTRATION OF SELECTED SOFTWARE PROGRAM MODELS/EPIZOO HANDI STATUS ADMASS & EPITRAK, EPIZOO		
18.	EVALUATION OF SENSITIVITY AND SPECIFICITY OF DIAGNOSTIC TESTS BY EPIDEMIOLOGICAL METHODS	2	19-1-2022
19.	FIELD SURVEY OF ZONOTIC DISEASES ON A FARM	2	2-2-2022
20.	EPIDEMIOLOGICAL INVESTIGATION OF AN OUTBREAK	2	9-2-2022
21.	DETERMINATION OF ASSOCIATIONS OF DISEASE AND HYPOTHESIZED CAUSAL FACTORS	2	23-2-2022
22.	ISOLATION AND IDENTIFICATION OF IMPORTANT PATHOGENS OF ZONOTIC IMPORTANCE	2	2-3-2022
23.	DETECTION OF ZONOTIC DISEASE BY SEROLOGICAL, MOLECULAR AND HYPERSENSITIVITY TESTS	2	9-3-2022
24.	STUDY OF ENVIRONMENT AND HEALTH STATUS OF RURAL COMMUNITY	2	16-3-2022
25.	SAMPLING OF WATER FOR SANITARY EXAMINATION SAMPLING OF WATER FOR BACTERIOLOGICAL & CHEMICAL EXAMINATION	2	23-3-2022
26.	PHYSICAL EXAMINATION OF WATER QUALITATIVE CHEMICAL EXAMINATION OF WATER (METALLIC & NON METALLIC)	2	30-3-2022
27.	ESTIMATION OF TOTAL HARDNESS ESTIMATION OF TOTAL SOLIDS IN WATER	2	6-4-2022
28.	PATHOGENIC MICROBES IN WATER	2	13-4-2022
29.	ESTIMATION OF RESIDUAL CHLORINE AND CHLORINE DEMAND	2	20-4-2022
30.	SAMPLING OF AIR FOR SANITARY EXAMINATION ISOLATION AND IDENTIFICATION OF PATHOGENS IN AIR / BACTERIA OF AIR	2	27-4-2022
31.	SAMPLING METHODS FOR TESTING QUALITY OF SOIL	2	4-5-2022
32.	ISOLATION AND IDENTIFICATION OF PATHOGENS FROM ENVIRONMENTAL SOURCES	2	11-5-2022
33.	DISINFECTION OF ANIMAL HOUSES DETERMINATION OF EFFICACY OF DISINFECTANTS- PHENOL COEFFICIENT , MIC AND MBC	2	18-5-2022
34.	DEMONSTRATION OF WATER PURIFICATION PLANT	2	25-5-2022
35.	DEMONSTRATION OF VARIOUS VENTILATION SYSTEMS IN ANIMAL HOUSES AND SPECIALIZED LABS	2	1-6-2022
36.	DEMONSTRATION OF TOXIC RESIDUES IN WATER AND OTHER ENVIRONMENTAL SOURCES	2	22-7-2021

37.	VISIT TO LOCAL POLLUTED SITE AND DOCUMENTATION OF LOCAL ENVIRONMENTAL PROBLEMS LIKE, DUMPING GROUNDS, LOCAL SLUMS, CROWDED LOCALITIES ETC.	2	22-7-2021
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