

B.V.Sc. & A.H. (Third Professional) Examination – 2022
Veterinary Public Health and Epidemiology Paper –I
(MSVE 2016)

Time: Three Hours

Maximum Marks: 100
Weightage: 20

Unit-1 (Veterinary Public Health and Food Safety)
Unit-2 (Veterinary Epidemiology)

Instructions:

- 1) Attempt all questions
- 2) Answer of all questions is to be written in the space provided along with the question in question-booklet.
- 3) Overwriting is not allowed in the objective type question.

Q.1 Write T for True and F for False statement.

(20 x 0.5 = 10)

- 1.1 Incidence measures new cases of a disease in a population. ()
- 1.2 Mesophilic organisms can survive and replicate at 55 -70°C temperature. ()
- 1.3 *Brucella melitensis* is more infectious for humans than *Brucella abortus*. ()
- 1.4 Time-Temperature of vat-pasteurization was increased from 61.7°C to 62.8°C to ensure the destruction of *Coxiella burnetti*. ()
- 1.5 In experimental studies investigator has no freedom in design of study. ()
- 1.6 Cohort study is well suited for the study of chronic diseases. ()
- 1.7 Excessive feeding of fish meal results in fishy odour of meat, and in pigs it causes a disease known as brown fat disease. ()
- 1.8 Food poisoning outbreaks are considered as point source epidemic. ()
- 1.9 Competitive exclusion has been used in the disease control programmes. ()
- 1.10 Presence of phosphatase enzyme is taken as indication of proper pasteurization. ()
- 1.11 Constant occurrence of disease in a population or usual frequency of occurrence of disease is known as endemic. ()
- 1.12 High pH of the flesh favors the bacterial growth in the meat. ()
- 1.13 Bleeding of animals in inverted condition is known as scalding. ()
- 1.14 Epidemiologist focus on individual level rather than population level. ()
- 1.15 In Jewish method of slaughter the meat unfit for consumption by Jews is called as terefa. ()
- 1.16 In case the bacterial count of milk is high, methylene blue takes more time to decolourize. ()

DO NOT WRITE ACROSS THIS LINE

- 1.17 Tiger heart appearance in calves is associated with foot and mouth disease. ()
- 1.18 The questionnaire which has fixed number of options for the respondent to answer is known as open questionnaire. ()
- 1.19 Saxitoxin produced by microscopic algae, such as dinoflagellates causes diarrhoeic shellfish poisoning. ()
- 1.20 The ratio of the probability that an event will occur to the probability that it will not occur is called odds. ()

Q.2 Choose the most suitable answer and write the number of the correct answer 1 or 2 or 3 or 4 in the space given against each sub question: (20x 0.5 = 10)

- 2.1 ICSMF stands for ()
1. Indian Council of Microbiological Safety of Foods
 2. International Commission on Microbiological Specifications for Foods
 3. Indian Commission on Microbiological Specifications for Foods
 4. None of the above
- 2.2 Most of the foodborne outbreaks associated with consumption of soft cheese have been reported to be caused by ()
1. *Yersinia enterocolitica*
 2. *Escherichia coli*
 3. *Staphylococcus aureus*
 4. *Listeria monocytogenes*
- 2.3 Descriptive epidemiology involves ()
1. Observing diseases with possible causal factors
 2. Recording with possible causal factors
 3. Observing and recording with possible causal factors
 4. Observing and recording without possible causal factors
- 2.4 Comparison of groups of animals occur in ()
1. Monitoring
 2. Surveillance
 3. Studies
 4. None of the above
- 2.5 A confounding variable must be ()
1. Associated with the explanatory variable
 2. Associated with the response variable
 3. Both a & b
 4. None of the above
- 2.6 The larval stages of *Taenia saginata* is in flesh and organs of infected animal is referred to as ()
1. *Cysticercus cellulosae*
 2. *Cysticercus bovis*
 3. *Visceral larva migrans*
 4. *Echinococcus granulosus*

- 2.7 Diagnostic power of the test is affected by ()
1. Sensitivity
 2. Specificity
 3. Predictive values
 4. Relative risk
- 2.8 An epidemic will die out when the reproductive number is ()
1. 1
 2. >1
 3. <2
 4. <1
- 2.9 The World trade organization was established on ()
1. 1st December 1975
 2. 1st January 1975
 3. 1st December 1968
 4. 1st January 1968
- 2.10 Most common pathogen causing typhoid fever is ()
1. *Staphylococcus aureus*
 2. *Brucella abortus*
 3. *Salmonella* spp.
 4. *Vibrio* spp.
- 2.11 Baird-Parker's agar is the selective media for ()
1. *Staphylococcus aureus*
 2. *E. coli*
 3. *Klebsiella* spp.
 4. *Bacillus cereus*
- 2.12 Imperfect bleeding in carcasses can be determined by ()
1. Frying test
 2. Haemocytometer test
 3. Malachite green test
 4. Ascoli test
- 2.13 Which of the following parasitic diseases is not fish borne? ()
1. *Diphyllobothrium latum* infections
 2. *Clonorchis sinensis* infections
 3. Echinostomiasis
 4. Cysticercosis/tacniosis
- 2.14 Rigor mortis is absent in ()
1. Anthrax
 2. Brucellosis
 3. Rabies
 4. Tuberculosis

- 2.15 *Trichinella spiralis* can complete its life cycle in ()
1. Single host
 2. One vertebrate and one invertebrate host
 3. Two vertebrate hosts
 4. One vertebrate and two invertebrate hosts
- 2.16 The most important source of microbial contamination of butter is ()
1. Pasteurization vats
 2. Butter churn
 3. Working blades
 4. Packaging material
- 2.17 The head quarter of World Health Organization (WHO) is located at ()
1. Rome
 2. New York
 3. New Delhi
 4. Geneva
- 2.18 Case fatality rate is a method measuring ()
1. Infectivity
 2. Pathogenicity
 3. Virulence
 4. Average duration of disease
- 2.19 The epidemiologic triad of disease causation refers to ()
1. Agent, host, environment
 2. Time, place, person
 3. Source, mode of transmission, susceptible host
 4. John Snow, Robert Koch, Kenneth Rothman
- 2.20 The regression phase of the epidemic is due to ()
1. Decrease in the infectivity of infectious agent
 2. Decrease in the availability of susceptible population
 3. Change in the transmission of the agent
 4. None of the above

Q.3 Attempt any ten out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (10x2.0= 20)

3.1 Milk Hygiene

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3.2 Prevalence

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3.3 Critical control Points

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3.4 Epidemiology

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3.5 Abattoir

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3.6 Veterinary Public Health

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3.7 Bactofugation

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3.8 Pandemic

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3.9 Ante-mortem Inspection

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3.10 Monitoring

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3.11 Shomer

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3.12 Food safety.

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Q.4 Attempt any six out of the follow eight questions. Answer of each question should be in 8 to 10 lines. (6 x 6 = 36)

4.1 Objectives of Epidemiology.

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4.2 World Organisation for Animal Health (OIE)

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Please write your Roll Number above this line

4.3 Effect of antibiotic and hormonal residues in milk

4.4 Discuss in brief the responsibilities of meat inspector

4.5 Cleaning in Place (CIP) system in dairy plants

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4.6 Intoxication and Toxi-infection.

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4.7 One health concept and initiatives.

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4.8 Cold shortening and freezing Shortening.

Q.5 Answer the following question in 2-3 pages (attempt any two). (2x12 = 24)

- 5.1 Discuss objectives, principles and application of HACCP system in meat industry.
- 5.2 What is biohazard and discuss its classification with suitable example ?
- 5.3 What are the different advantages of ante-mortem examination of food animals?