Domain Knowledge Test for recruitment of Assistant Professor in DUVASU, Mathura
Subject: Veterinary Epidemiology

Q. No. 1 When large number of animals suffering from the same disease and at the same time, it is called

a. Epidemic
b. Endemic
c. Pandemic
d. Sporadic

Q. No. 2 When a disease is continuously present to a high level, affecting all age groups equally, it is known as:

a. Hyper endemic
b. Endemic
c. Epidemic
d. Pandemic

Q. No. 3 All the following are example of pandemic except one:

a. COVID 19
b. Bird Flu (H_5N_1)
c. Hong Kong Flu
d. Nipah Virus infection

Q. No. 4 The terms like *epidemic* and *endemic* in medical history were used for the first time by.

a. Hippocrates
b. John Graunt,
c. Aristole
d. John Snow

Q. No. 5 Who is known as Father of Veterinary Epidemiology?

a. Calwin Schwabe
b. M Kaplan
c. James Steel
d. John Snow

Q. No. 6 The interaction between host, agent, and environment determines the onset of disease in the population. This association is called as:

a. Epidemiological association
b. Epidemiological triad
c. Epidemiological interface
d. Epidemiological pyramid

Q. No. 7 All the following are example of secondary extrinsic determinants except

a. Nutritional status
b. Vaccination status,
c. Seasonal stress
d. Hormonal status

Q. No. 8 All the following are example of secondary intrinsic determinants except

a. Immunological status
b. Vaccination status
c. Functional status
d. Hormonal status

Q. No. 9 Which of the following is primary intrinsic determinant of disease?

a. Sex
b. Breed
c. Age
d. Metabolic disorder

Q. No. 10. All the following are environmental determinants in epidemiology except:

a. Location
b. Climate
c. Husbandry
d. Sex

Q. No. 11. The ecosystem coming from land itself is called-

a. Autochthonous ecosystem
b. Anthropurgic ecosystem
c. Synanthropic ecosystem
d. Terrestrial ecosystem

Q. No. 12. Special position of an organism in its biotic community is called:

a. Niche
b. Biotope
c. Nidus
d. Home range

Q. No. 13. The aggregation of all living species inhabiting an environment is called

a. Biome
b. Biotic community
c. Biotope
d. Food Web

Q. No. 14. When plant, animal, microbe, soil all have evolved a stable, balanced relationship, it is called:

a. Ecological climax
b. Ecological mosaic
c. Ecological interface
d. Ecological balance

Q. No. 15. Certain animals have a natural restriction to the area over which they roam. This is known as:

a. Home range
b. Social dominance
c. Territory
d. Sanctuary

Q. No. 16. Discovery of Kyasanur Forest disease in Karnataka, is an example of:

a. Landscape epidemiology
b. Observational epidemiology
c. Sero-epidemiology
d. Experimental epidemiology

Q. No. 17. Which of the following data element indicates number of truly positive cases in population?

a. Accuracy
b. Sensitivity
c. Precision
d. Specificity

Q. No. 18. Which of the following denotes number of truly negative in population?

a. Sensitivity
b. Specificity
c. Predictive Value
d. Repeatability

Q. No. 19. Non-experimental cross-sectional investigation of disease is called:

a. Survey
b. Surveillance
c. Study
d. Trial

Q. No. 20. Biasness due to extraneous factor is called.

a. Selection bias
b. Interviewer's bias
c. Measurement bias
d. Confounding

Q. No. 21. Any systematic error in design, conduct or analysis of a study that renders the results invalid is called

a. Bias
b. Standard error
c. Standard deviation
d. Finger trouble

Q. No. 22. The ratio of incidence of disease in exposed animals to the incidence in unexposed animals is called:

a. Relative risk
b. Odds ratio
c. Attributable risk
d. Attributable fraction

Q. No. 23. A population can be surveyed by following methods except

a. Interview
b. Questionnaire
c. Screening test
d. Clinical trial

Q. No. 24. All the following are examples of biomes except one

a. Tropical
b. Tundra
c. Mesotherm
d. Sonoram

Q. No. 25. A modified patch of vegetation created by man within a biome is called.

a. Ecological climax
b. Ecological mosaic
c. Ecological interface
d. Ecological pyramid

Q. No. 26. Which of the following measure is a snapshot of disease?

a. Incidence
b. Prevalence
c. Death rate
d. Survival rate

Q. No. 27. Examination of aggregate of units in epidemiology is called:

a. Survey
b. Study
c. Monitoring
d. Census

Q. No. 28. Recording event at a particular time is called_____.

a. Cross sectional survey
b. Longitudinal survey
c. Prospective survey
d. Retrospective survey

Q. No. 29. Following are example of quantitative data except:

a. Incidence
b. Breed
c. Prevalence
d. Body weight

Q. No. 30. Which of the following is incorrect for case-control study?

a. Case comparison study
b. Retrospective study
c. Case-history
d. Incidence

Q. No. 31. An animate or inanimate object in which an infectious pathogen naturally lives, reproduces and survives is called:

a. Carrier
b. Reservoir
c. Maintenance host
d. Vector

Q. No. 32. Factors which are associated with definite onset of disease, are called:

a. Predisposing factors
b. Enabling factors
c. Precipitating factors
d. Reinforcing factors

Q. No. 33. Factors which tend to aggravate the presence of a disease, are called:

a. Predisposing factors
b. Enabling factors
c. Precipitating factors
d. Reinforcing factors

Q. No. 34. The host that does not usually transmit an infectious agent to other animals is called:

a. Amplifier host
b. Incidental host
c. Paratenic host
d. Link host

Q. No. 35. Which of the following animal acts as amplifier host for JE:

a. Pig
b. Mosquitoes
c. Horse
d. Sheep

Q. No. 36. The list of members of study population is called as

a. Sampling unit
b. Sampling frame
c. Sampling fraction
d. Cluster

Q. No. 37. The collection of elementary units grouped according to common characteristics is called:

a. Sample
b. Cluster
c. Stratum
d. Sampling fraction

Q. No. 38. What variable comes first in a hypothesis:

a. Dependent variable
b. Independent variable
c. Confounding variable
d. Controlled variable

Q. No. 39. Testing of hypothesis is done by using:

a. Observational studies
b. Experimental studies
c. Survey
d. Clinical trial

Q. No. 40. The term ecosystem was coined by:

a. Charles Elton
b. Sir Arthur G Tansley
c. Evans
d. Oikas

Q. No. 41. The important characteristics of a pathogens that affect the transmission of infection in a population is/are

a. Virulence
b. Virulence and Stability
c. Virulence and Pathogenecity
d. Virulence, Infectivity and Stability

Q. No. 42. The work of which scientist provided necessary impetus to launch epidemiology as a modern diagnostic discipline.

a. John Graunt
b. William Farr
c. John Snow
d. James steel

Q. No. 43. A rubbish dump in the vicinity of human dwelling harbouring variety of vermin, is an example of:

a. Autochthonous ecosystem
b. Anthropurgic ecosystem
c. Synanthropic ecosystem
d. Terrestrial ecosystem

Q. No. 44. Following are examples of Autochthonous ecosystem except:

a. Deserts,
b. Mountains
c. Tropical rain forests
d. Cultivated pastures

Q. No. 45. An area in which reservoir of the diseases predominate is called:

a. Niche
b. Biotope
c. Nidus
d. Home range

Q. No. 46. If one type of Adenovirus infects lungs, then no other virus can infect, this is called as

a. Intracellular parasitism
b. Extracellular parasitism
c. Epidemiological interference
d. Epidemiological interface

Q. No. 47. A minimum density of susceptible animals is required to allow a contact transmitted epidemic to commence. This is defined mathematically by:

a. Reed Frost
b. Kendall
c. Lotka Voltera
d. Elton

Q. No. 48. Some arthropods only transmit infectious agents from one developmental stage to another. This is called:

a. Transovarian transmission
b. Trans-stadial transmission
c. Congenital transmission
d. Iatrogenic transmission

Q. No. 49. In epidemiological model, a measuring tool which is used most frequently to record the data is called:

a. Interview
b. Screening test
c. Questionnaire
d. Proforma

Q. No. 50. The infections, which are acquired from hospitals or health care centre, are called

a. Occupational disease
b. Opportunistic infection
c. Notifiable disease
d. Nosocomial infection

Q. No. 51. A group exposed to a factor is compared with the group not exposed to factor with respect to development of disease. This is called:

a. Experimental study
b. Cross-sectional study
c. Case-control study
d. Cohort study

Q. No. 52. Biasness due to extraneous factor is called.

a. Selection bias
b. Interviewer's bias
c. Measurement bias
d. Confounding

Q. No. 53. When the animals selected for study have systemically different characteristics from the target population, the bias is called.

a. Selection bias
b. Interviewer's bias
c. Measurement bias
d. Confounding

Q. No. 54. Misclassification of animals as diseased and non-diseased may result in:

a. Selection bias
b. Interviewer's bias
c. Measurement bias
d. Confounding

Q. No. 55. Representation of data is done by following method. Which one is less frequently used?

a. Alpha code
b. Numeric code
c. Alphanumeric code
d. Symbols

Q. No. 56. In which model, data are arranged in a tree like structure?

a. Record model
b. Network model
c. Hierarchic model
d. Relational model

Q. No. 57. Which of the following is a long-term characteristic of diagnostic technique?

a. Accuracy
b. Refinement
c. Reliability
d. Validity

Q. No. 58. Which of the following are two best indicators of validity?

a. Repeatability and reproducibility
b. Sensitivity and specificity
c. Refinement and precision
d. Accuracy and precision

Q. No. 59. Most important for a test to be good screening test is:

a. Specificity
b. Predictive value
c. Sensitivity
d. Reliability

Q. No. 60. Epidemiological survey of 'at risk' is called:

a. Survey
b. Monitoring
c. Screening
d. Surviellance

Q. No. 61. If a factor is common to a number of different circumstances in which a disease is present, the hypothesis can be formulated by:

a. Method of agreement
b. Method of concomitant variation
c. Method of difference
d. Method of analogy

Q. No. 62. If frequency or strength of a factor varies continuously with the frequency of the disease, which method is applicable for formulation of hypothesis:

a. Method of agreement
b. Method of analogy
c. Method of difference
d. Method of concomitant variation

Q. No. 63. Clinical trial is an example of:

a. Experimental studies
b. Cohort studies
c. Case control studies
d. Cross sectional studies

Q. No. 64. The diseases that occur irregularly and haphazardly, producing small, localized outbreaks covering few numbers of animals/ individuals is called

a. Sporadic.
b. Epidemic
c. Endemic
d. Pandemic

Q. No. 65. The course of typical epidemic can be divided into three phases or periods. The second phase represent to population which is

a. whole susceptible
b. whole immune
c. whole infected
d. half infected, half susceptible

Q. No. 66. Factors which increase the level of susceptibility in the host, are called:

a. Predisposing factors
b. Enabling factors
c. Precipitating factors
d. Reinforcing factors

Q. No. 67. Factors which facilitate manifestation of disease, are called:

a. Predisposing factors
b. Enabling factors
c. Precipitating factors
d. Reinforcing factors

Q. No. 68. Number of new cases of disease should be significantly higher in exposed population than unexposed according to:

a. Koch's postulates.
b. Evan's Postulates
c. Kendall's threshold theorem
d. Loeffler's postulates

Q. No. 69. When the samples are collected as per investigator's choice, such sampling are called:

a. Non-probability sampling
b. Probability sampling
c. Random sampling
d. Cluster sampling

Q. No. 70. When entire population is covered by collecting sample at regular but predetermined interval, it is called:

a. Simple Random sampling
b. Systematic random sampling
c. Cluster sampling
d. Stratified random sampling

Q. No. 71. In epidemiological investigation, disease is often considered as example of:

a. Response variable
b. Explanatory variable
c. Independent variable
d. Confounding variable

Q. No. 72. Suppose vehicle exhaust impacts incidence of asthma in children, then vehicle exhaust is an example of:

a. Dependent variable
b. Independent variable
c. Confounding variable
d. Controlled variable

Q. No. 73. An animal that because of sudden increase in host population size may suddenly increase the amount of infectious agent, is called:

a. Paratenic host
b. Intermediate host
c. Amplifier host
d. Definitive host

Q. No. 74. Which animal can be used as sentinel host to study occurrence of sylvatic yellow fever:

a. Rat
b. Monkey
c. Dog
d. Cattle

Q. No. 75. All the following errors in data are called finger trouble except one

a. Collation
b. Insertion,
c. Délétion
d. Transposition

Q. No. 76. What is the most primitive step of Epidemiologist for disease control?

a. Population study
b. Immunization
c. Economics of disease
d. Treatment of disease

Q. No. 77. The investigation of disease in a population which involves systematic field information is

a. Analytical
b. Descriptive
c. Hypothetical
d. Experimental

Q. No. 78. Which of the following is an example of Trans-stadial transmission?

a. Theileriosis
b. Anaplasmosis
c. Q fever
d. Tick borne encephalitis

Q. No. 79. The measurement and description of the size of population and their characteristics is called

a. Demography
b. Polygraphy
c. Cartography
d. Census

Q. No. 80. If the agent undergoes multiplication but no development in vector, the transmission is known as.

a. Propagative
b. Cyclo-propagative
c. Developmental
d. Transovarian

Q. No. 81. The map that portrays discrete shaded unit showing intensity of disease between area without actual boundaries, are called:

a. Proportional circle map
b. Choroplethic map
c. Isoplethic map
d. Distribution map

Q. No. 82. To demonstrate causal association between disease and hypothesized causal factor, analytical study is done. The hypothesized causal factor is a:

a. Independent variable
b. Response variable
c. Dependent variable
d. Confounder variable

Q. No. 83. The first step in investigation of epidemic is:

a. Isolation
b. Immunization
c. Verification of diagnosis
d. Notification

Q. No. 84. Increase of milk production will decrease the cost of milk. It is called as:

a. Net price
b. Discount price
c. Shadow price
d. Market price

Q. No. 85. The propensity of infection to spread to another individual is called:

a. Morbidity rate
b. Dissemination rate
c. Fatality rate
d. Mortality rate

Q. No. 86. The shape of Kendall wave is determined by followings except one:

a. Ampitude
b. Peakedness
c. Skewness
d. Sharpness

Q. No. 87. The cost or benefit which are difficult to translate into monetary terms, are called:

a. Internalities
b. Externalities
c. Intangible
d. Discounting

Q. No. 88. When exposure is not precisely measured, the association between exposure and effect is likely to be:

a. Overestimated
b. Underestimated
c. Confounded
d. Random

Q. No. 89. NADRES web application for forecasting animal disease was developed by:

a. NIVEDI
b. IVRI
c. NISHAD
d. NDRI

Q. No. 90. The comparative vulnerability of the group to exposure is given by:

a. Relative Risk
b. Attributable Risk
c. Attack rate
d. Attributable Fraction

Q. No. 91. A host in which an agent is transferred mechanically without further development is called:

a. Paratenic host
b. Intermediate host
c. Amplifier host
d. Definitive host

Q. No. 92. Which of the following is also known as maintenance host?

a. Primary host
b. Link host
c. Paratenic host
d. Intermediate host

Q. No. 93. Birds play role of…… host in the transmission cycle of Japanese Encephalitis.

a. Maintenance
b. Amplifier
c. Incidental
d. Paratenic

Q. No. 94. The term passive surveillance is now replaced with new word known as

a. Target surveillance
b. Serological surveillance
c. Scanning surveillance
d. Clinical surveillance

Q. No. 95. The surveillance that involves examination of only clinically affected cases of specific disease is known as:

a. Active surveillance
b. Passive surveillance
c. Sentinel surveillance
d. Targeted surveillance

Q. No. 96. The degree of agreement between sets of observations made on the same animal by the same observer is called:

a. Reproducibility.
b. Accuracy
c. Repeatability
d. Precision

Q. No. 97. Koch's postulates don't satisfy following condition except one:

a. Effect of environmental factors in causation of disease
b. Diseases caused by mixed agents
c. Non-infectious diseases
d. Organism should be present in all cases of disease

Q. No. 98. The tendency of a condition to cause death of affected animals in a specified time is referred as:

a. Case fatality rate
b. Mortality rate
c. Death rate
d. Incidence rate

Q. No. 99. The amount of a disease in a population at a particular point in time:

a. Point prevalence
b. Period prevalence
c. Incidence
d. Attack rate

Q. No. 100. The organisms which cause disease only in a host whose resistance is lowered by drug therapy and other diseases are called:

a. Endogenous pathogens
b. Exogenous pathogens
c. Opportunistic pathogen
d. Fastidious pathogen

Q. No. 101. The questions that have two possible answers are called:

a. Open question
b. Dichotomous
c. Multiple choice
d. Paradox

Q. No. 102. Which of the pair is incorrect for sentinel host?

a. Horse- Venezeulan encephalitis
b. Stray Dogs- Parvovirus infection
c. Birds- Japanese encephalitis
d. Birds- St Louis encephalitis

Q. No. 103. The disease in which incubatory carrier state is seen:

a. Rabies
b. Salmonellosis
c. Canine distemper
d. Leptospirosis

Q. No. 104. All the following diseases are transmitted through inhalation of aerosol except one.

a. Tuberculosis
b. Q fever
c. Plague
d. Listeriosis

Q. No. 105. Which species acts as main reservoir host for KFD?

a. Ticks
b. Squirrel
c. Rat
d. Bats

Q. No. 106. Following factors favour the occurrence of JE outbreak except one:

a. High density of Culex mosquitoes
b. Presence of amplifier host
c. Alkaline soil
d. Paddy cultivation

Q. No. 107. Calf-hood vaccination is helpful to control which disease?

a. Colibacillosis
b. Salmonellosis
c. Brucellosis
d. Tuberculosis

Q. No. 108. The most important element of surveillance to disease control is

a. Data recording
b. Dissemination of information
c. Data analysis
d. Action taken

Q. No. 109. What is necessary to ensure exhaustiveness in closed questions?

a. Mutually exclusive
b. Mutually inclusive
c. Dumping category
d. Miscellaneous category

Q. No. 110. The propensity of a disease to spread to another herd is called ---------

a. Virulence
b. Morbidity
c. Dissemination rate
d. Pathogenicity

Q. No. 111. An option "other" in the questionnaire is an example of:

a. Dumping category
b. Miscellaneous category.
c. Dichotomous category
d. Open question

Q. No. 112. All the following diseases have association with monkey and mosquito in their transmission cycle except one:

a. Zika virus
b. Tanavirus
c. Yellow fever
d. Hantavirus

Q. No. 113. The term reverse Zoonoses is used for:

a. *Anthropozoonosis*
b. *Nosocomial zoonosis*
c. Zooanthroponosis
d. *Xenozoonosis*

Q. No. 114. The average quarantine period recommended for COVID 19 was

a. 10 days
b. 14 days
c. 21 days
d. 28 days

Q. No. 115. In which model, the data components are stored in nodes:

a. Network model
b. Hierarchic model
c. Relational model
d. Record model

Q. No. 116. Which quantitative evaluation of disease involves comparison of group:

a. Surveys
b. Surveillance
c. Modelling
d. Studies

Q. No. 117. Thrushfield definition of veterinary epidemiology gives emphasis on all except one:

a. Investigation of diseases
b. Investigation of health-related events
c. Investigation of production potential
d. Economics of disease

Q. No. 118. The important characteristics of computer is/are

a. Speed
b. Speed and Intelligence
c. Accuracy
d. Speed and accuracy

Q. No. 119. Feedback of data to their source is more important component of_____ veterinary recording scheme.

a. Microscale
b. Mesoscale
c. Macroscale
d. Miniscale

Q. No. 120. A project is considered to be viable if the ratio of benefit/cost is _____ one.

a. greater than or equal to
b. equal to
c. Less than or equal to
d. Not equal to

Key: Veterinary Epidemiology

Q. No. 1	a. Epidemic	Q. No. 61.	a. Method of agreement
Q. No. 2	a. Hyper endemic	Q. No. 62.	d. Method of concomitant variation
Q. No. 3	d. Nipah Virus infection	Q. No. 63.	a. Experimental studies
Q. No. 4	a. Hippocrates	Q. No. 64.	a. Sporadic.
Q. No. 5	a. Calwin Schwabe	Q. No. 65.	d. half infected, half susceptible
Q. No. 6	b. Epidemiological triad	Q. No. 66.	a. Predisposing factors
Q. No. 7	d. Hormonal status	Q. No. 67.	b. Enabling factors
Q. No. 8	b. Vaccination status	Q. No. 68.	b. Evan's Postulates
Q. No. 9	d. Metabolic disorder	Q. No. 69.	a. Non-probability sampling
Q. No. 10.	d. Sex	Q. No. 70.	b. Systematic random sampling
Q. No. 11.	a. Autochthonous ecosystem	Q. No. 71.	a. Response variable
Q. No. 12.	a. Niche	Q. No. 72.	b. Independent variable
Q. No. 13.	b. Biotic community	Q. No. 73.	c. Amplifier host
Q. No. 14.	a. Ecological climax	Q. No. 74.	b. Monkey
Q. No. 15.	a. Home range	Q. No. 75.	a. Collation
Q. No. 16.	a. Landscape epidemiology	Q. No. 76.	a. Population study
Q. No. 17.	b. Sensitivity	Q. No. 77.	b. Descriptive
Q. No. 18.	b. Specificity	Q. No. 78.	a. Theileriosis
Q. No. 19.	a. Survey	Q. No. 79.	a. Demography
Q. No. 20.	d. Confounding	Q. No. 80.	a. Propagative
Q. No. 21.	a. Bias	Q. No. 81.	b. Choroplethic map
Q. No. 22.	a. Relative risk	Q. No. 82.	a. Independent variable
Q. No. 23.	d. Clinical trial	Q. No. 83.	c. Verification of diagnosis
Q. No. 24.	c. Mesotherm	Q. No. 84.	c. Shadow price
Q. No. 25.	b. Ecological mosaic	Q. No. 85.	b. Dissemination rate
Q. No. 26.	b. Prevalence	Q. No. 86.	d. Sharpness
Q. No. 27.	a. Survey	Q. No. 87.	c. Intangible
Q. No. 28.	a. Cross sectional survey	Q. No. 88.	b. Underestimated
Q. No. 29.	b. Breed	Q. No. 89.	a. NIVEDI
Q. No. 30.	d. Incidence	Q. No. 90.	a. Relative Risk
Q. No. 31.	b. Reservoir	Q. No. 91.	a. Paratenic host
Q. No. 32.	c. Precipitating factors	Q. No. 92.	a. Primary host
Q. No. 33.	d. Reinforcing factors	Q. No. 93.	a. Maintenance
Q. No. 34.	b. Incidental host	Q. No. 94.	a. Target surveillance
Q. No. 35.	a. Pig	Q. No. 95.	b. Passive surveillance
Q. No. 36.	b. Sampling frame	Q. No. 96.	c. Repeatability
Q. No. 37.	c. Stratum	Q. No. 97.	d. Organism should be present in all cases of disease
Q. No. 38.	b. Independent variable	Q. No. 98.	a. Case fatality rate
Q. No. 39.	a. Observational studies	Q. No. 99.	a. Point prevalence
Q. No. 40.	b. Sir Arthur G Tansley	Q. No. 100.	c. Opportunistic pathogen
Q. No. 41.	d. Virulence, Infectivity and Stability	Q. No. 101.	b. Dichotomous
Q. No. 42.	c. John Snow	Q. No. 102.	c. Birds- Japanese encephalitis
Q. No. 43.	b. Anthropurgic ecosystem and c. Synanthropic ecosystem	Q. No. 103.	a. Rabies
Q. No. 44.	d. Cultivated pastures	Q. No. 104.	d. Listeriosis
Q. No. 45.	c. Nidus	Q. No. 105.	a. Ticks
Q. No. 46.	c. Epidemiological interference	Q. No. 106.	c. Alkaline soil
Q. No. 47.	b. Kendall	Q. No. 107.	c. Brucellosis
Q. No. 48.	b. Trans-stadial transmission	Q. No. 108.	d. Action taken

Q. No. 49.	c. Questionnaire	Q. No. 109.	c. Dumping category
Q. No. 50.	d. Nosocomial infection	Q. No. 110.	c. Dissemination rate
Q. No. 51.	d. Cohort study	Q. No. 111.	a. Dumping category
Q. No. 52.	d. Confounding	Q. No. 112.	d. Hantavirus
Q. No. 53.	a. Selection bias	Q. No. 113.	c. Zooanthroponosis
Q. No. 54.	c. Measurement bias	Q. No. 114.	b. 14 days
Q. No. 55.	d. Symbols	Q. No. 115.	b. Hierarchic model
Q. No. 56.	c. Hierarchic model	Q. No. 116.	d. Studies
Q. No. 57.	d. Validity	Q. No. 117.	d. Economics of disease
Q. No. 58.	b. Sensitivity and specificity	Q. No. 118.	d. Speed and accuracy
Q. No. 59.	c. Sensitivity	Q. No. 119.	a. Microscale
Q. No. 60.	c. Screening	Q. No. 120.	a. greater than or equal to