

MIZORAM PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF JUNIOR GRADE OF MAH & VS I.E. VETERINARY OFFICER UNDER ANIMAL HUSBANDRY AND VETERINARY DEPARTMENT. NOVEMBER, 2019

AH & VETY PAPER - I

Time Allowed : 2 hours

Full Marks : 200

All questions carry equal marks of 2 each.

Attempt all questions.

1. India rank 1st position as the highest producer of _____ in the world (Livestock production statistics of India, 2018)
 - (a) Chicken
 - (b) Milk
 - (c) Egg
 - (d) All of these
2. A new Ministry of Fisheries, Animal Husbandry and Dairying was newly formed in _____ by honourable Prime Minister Shri Narendra Modi government.
 - (a) January, 2019
 - (b) March, 2019
 - (c) May, 2019
 - (d) July, 2019
3. The highest egg producing states in India (Livestock production statistics of India, 2018)
 - (a) Haryana
 - (b) Andra Pradesh
 - (c) Uttar Pradesh
 - (d) Rajasthan
4. The castrated male goat is
 - (a) Buck
 - (b) Billy
 - (c) Wether
 - (d) Doe
5. The temperature for chlorine and iodine-based disinfectants for poultry premises should not exceeds
 - (a) 68° C / 20 °F
 - (b) 98.6 ° C / 37 ° F
 - (c) 110 ° C / 43 ° F
 - (d) 167 ° C / 75 ° F
6. The average thickness of suitable litter material for rearing poultry in deep litter system should be (in inch)
 - (a) 1-2
 - (b) 5-7
 - (c) 3-5
 - (d) 7-10
7. Gilts should have a minimum of _____ evenly spread teats
 - (a) 8 (Eight)
 - (b) 10 (Ten)
 - (c) 12 (Twelve)
 - (d) 16 (Sixteen)
8. Colostrum feeding in the calf should be done:-
 - (a) within two hours after calving
 - (b) within three days of calving
 - (c) within twelve hours after calving
 - (d) none of these
9. The average body weight of Zovawk is (in kg)
 - (a) 30-40
 - (b) 50-60
 - (c) 70-75
 - (d) 90-100

10. Farrowing pen should be disinfected on
 - (a) 1 month before expected day of farrowing
 - (b) 3-4 days before expected day of farrowing
 - (c) One day before expected day of farrowing
 - (d) 2-3 days after farrowing
11. _____ is a device by which piglets access high quality concentrate feed.
 - (a) Creep
 - (b) Feeding bay
 - (c) Piglet box
 - (d) All of these
12. Age at first kidding in Mehsani goat breed is:-
 - (a) 18 to 24 months
 - (b) 24 to 30 months
 - (c) 12 to 18 months
 - (d) 30 to 36 months
13. The sloping for the floor of the cattle shed should be:-
 - (a) 1 inches in 5 ft.
 - (b) 1 inches in 10 ft.
 - (c) 2 inches in 5 ft.
 - (d) 2 inches in 10 ft.
14. _____ disinfectant is effective against FMD in cattle as well as Ranikhet disease in poultry.
 - (a) Sodium hydroxide
 - (b) Sodium Carbonate
 - (c) Sodium hypochlorite
 - (d) None of these
15. The incubation period of quail egg is (in days)
 - (a) 17-18
 - (b) 20-21
 - (c) 24-26
 - (d) 14-15
16. White muscle disease is caused by _____ deficiency.
 - (a) Vit-A
 - (b) Vit-E
 - (c) Vit-C
 - (d) Vit-D
17. The best and most economic method of carcass disposal.
 - (a) Burial
 - (b) Incinerator
 - (c) Rendering
 - (d) Fermentation
18. The most common sexing method of day old chick is
 - (a) Colour sexing
 - (b) Feather sexing
 - (c) In-ovo sexing
 - (d) Vent sexing
19. _____ is a natural area, owned privately or by government which is designated for protection of a particular species of wild animal.
 - (a) National park
 - (b) Biosphere Reserve
 - (c) Wildlife Sanctuary
 - (d) Zoo
20. The per-capita availability of milk in India is higher than the rest of the world accounting to be (gm/day)
 - (a) 294
 - (b) 150
 - (c) 502
 - (d) 374
21. Swath curing is the method apply to _____.
 - (a) Cutting the crop
 - (b) Hay making
 - (c) Silage making
 - (d) Straw making.
22. For ensiling the fodder crop should contain moisture percent.
 - (a) 40 to 50 %
 - (b) 50 to 60 %
 - (c) 65 to 70 %
 - (d) 70 to 75 %

23. Which milk has the highest fat and protein content.
- (a) Cow milk (b) Camel milk
(c) Yak milk (d) Goat milk
24. Gastration period of an African bush elephant:-
- (a) 16 months (b) 18 months
(c) 22 months (d) 24 months
25. The permanent dentition of cattle is
- (a) 0/4 0/0 3/3 0/0 (b) 0/4 0/0 3/3 3/3
(c) 0/4 0/1 0/3 3/3 (d) 0/4 0/0 0/0 3/3
26. An average size of chicken egg is weighing about (in gram)
- (a) 50 (b) 53
(c) 57 (d) 59
27. Scientist who coined the term Genetics.
- (a) William Bateson (b) W. Johanssen
(c) W. S. Sutton (d) None of these
28. Father of modern animal breeding.
- (a) Robert Bakewell (b) S.Wright
(c) J.L. Lush (d) Gauss
29. A new breed can be evolved by_____.
- (a) out crossing (b) cross breeding
(c) grading up (d) none of these
30. The modal chromosome number (2n) of Zovawk is
- (a) 19 (Nineteen) (b) 76 (Seventy six)
(c) 38 (Thirty eight) (d) 46 (Forty six)
31. Total number of genotypes in human ABO blood group system
- (a) 3 (b) 12
(c) 6 (d) 4
32. Eye colour in drosophila is an example of
- (a) sex linked inheritance (b) sex limited inheritance
(c) sex influenced inheritance (d) incomplete dominance
33. A segment of DNA that codes for protein is called
- (a) Histone (b) Gene
(c) Allele (d) Chromosome
34. The estimate of degree of variation in phenotypic character within a population due to genetic variation between individuals in a population is
- (a) Variation (b) Heritability
(c) Regression (d) Repeatability
35. The largest possible population of a particular organism is
- (a) Genus (b) Breed
(c) Family (d) Species

36. Crossing over takes place in
(a) mitosis (b) meiosis II
(c) meiosis I (d) all of these
37. Epistasis is _____ type of interaction.
(a) inter allelic (b) intra allelic
(c) allelic genetic (d) both (a) & (c)
38. Sickle cell anaemia is an example of:-
(a) Point mutation (b) Segmental mutation.
(c) Frame shift mutation (d) None of these
39. The most effective method of selection is _____.
(a) mass selection (b) pedigree selection
(c) progeny testing (d) selection index
40. Each outcome at a random experiment is
(a) Primary event (b) Derived event
(c) Compound event (d) None of these
41. In open nucleus breeding system (OPNS) the rate of genetic improvement may be achieved at (in %)
(a) 5-8 (b) 15-20
(c) 10-15 (d) >20
42. The level of calcium in the ration of poultry layers (BIS, 2007)
(a) 1.0% (b) 2.0%
(c) 3.0% (d) None of these
43. The chemical name of vitamin D2 is _____.
(a) Ergocalciferol (b) Cholecalciferol.
(c) Calciferol (d) None of these
44. Efficiency of conversion of β carotene to vitamin A is in the order.
(a) Rat>Ruminants> Pig> Poultry (b) Rat>Poultry>Pig>Ruminants
(c) Rat>Poultry>Ruminants>Pig (d) Pig>Poultry>Ruminants>Rat
45. Least cost ration can be formulated using
(a) Linear programming method (b) Algebraic method
(c) Factorial method (d) Trial and error method
46. The dry matter percentage of the silage should be:
(a) 40-50% (b) 15-20%
(c) 60-65% (d) 30-35%
47. Which of the following is protein supplement for livestock
(a) Cereals (b) Non-leguminous roughage
(c) Cereal byproduct (d) Oilcake
48. Which of the following is most important in inhibiting the digestibility of paddy straw?
(a) Lignin (b) Silica
(c) Hemicellulose (d) Oxalate

49. Mustard oil cake contains anti nutritional factor as:
- (a) Oxalate (b) Glucosinolates
(c) Gossypol (d) Mimosine
50. _____ is known as “Animal Starch”.
- (a) Galactose (b) Glucose
(c) Glycogen (d) Fructose
51. The vitamins which contain sulphur are
- (a) Thiamin and biotin (b) Biotin and choline
(c) Riboflavin and thiamin (d) Choline and riboflavin
52. Which one of the following is an example of feed additives
- (a) Mineral mixture (b) Antibiotic
(c) Fish meal (d) Groundnut cake
53. Vitamin _____ is necessary for coagulation of blood.
- (a) Vitamin A (b) Vitamin C
(c) Vitamin K (d) Vitamin D
54. The synthesis of glucose is known as _____.
- (a) Glycolysis (b) Glycogenolysis
(c) Glycogenesis (d) Glucogenesis
55. Biological value of egg protein is
- (a) 94 (b) 67
(c) 85 (d) none of these
56. In cow, which volatile fatty acid is responsible for synthesis of milk fat
- (a) Acetic acid (b) Butyric acid
(c) Propionic acid (d) All of these
57. Which of the following cereal has more lysine content ?
- (a) Rice (b) Wheat
(c) Corn (d) Oats
58. “Perosis” or “slipped tendon” of young chicks is related to the element
- (a) Magnesium (b) Zinc
(c) Manganese (d) Cobalt
59. Concentrate are the feeding stuffs which are less bulky & contain Crude fibre less than
- (a) 16 % (b) 10 %
(c) 12 % (d) 18 %
60. Which type of feed contain the highest percentage of protein
- (a) Starter (b) Finisher
(c) Grower (d) Fattener
61. Starch digestibility in rumen ranging from _____.
- (a) 40 – 50 % (b) 60 – 70 %
(c) 71 – 80 % (d) 81 – 90 %
62. The type of protein present in Connective tissue.
- (a) Elastin (b) Keratin
(c) Albumin (d) Collagen

63. The maximum level of inclusion of urea in ruminant ration as percent of total DM intake is
(a) 1.0% (b) 3.0%
(c) 2.0% (d) 3.5%
64. Amino acid precursor of lignin?
(a) Phenylalanine (b) Tyrosine
(c) Alanine (d) Glycine
65. The word "Extension" comes from which language ?
(a) French (b) English
(c) Latin (d) Italian
66. The first KVK in India was established in the year 1974 at _____.
(a) Karnataka
(b) Puducherry (Formerly known as Pondicherry)
(c) Andhra Pradesh
(d) Rajasthan
67. Every member of SHG saves a certain amount of money every month which is known as
(a) Saving (b) Thrifting
(c) Common fund (d) Mohkuma
68. The Northeast Rural Livelihood Project (NERLP) aims to address rural poverty through creation of sustainable livelihood for
(a) Illiterate rural youth (b) Rural Women
(c) Educated unemployed rural youth (d) Pensioners
69. In rural community, the adoption of technology to improve productivity of animal is
(a) Rapid adoption (b) No adoption
(c) Low level adoption (d) All of these
70. Prices are normally determined by interaction of:-
(a) Demand and income (b) Supply and cost
(c) Demand and supply (d) None of these
71. Television is a medium of mass communication employing:-
(a) Visual device (b) Audio device
(c) Both (a) & (b) (d) None of these
72. General meeting is a teaching aid which comes under:-
(a) Visual aid (b) Audio aid
(c) Spoken aid (d) Written aid
73. The aim of extension education is to increase production of animal through application of scientific knowledge with
(a) Highly depending on funding agency (b) Minimum government assistance
(c) Both (a) & (b) (d) None of these
74. A farming technique, in which large farms are being cultivated, with relatively lower inputs, i.e. capital and labour.
(a) Intensive farming (b) Extensive farming
(c) Semi- Intensive farming (d) Mixed farming

75. Ability of one person to understand the internal frame of other person mind is:-
(a) Intution (b) Emphathy
(c) Heterophily (d) Homophily
76. Operation Flood I was started in which year:-
(a) 1970 (b) 1980
(c) 1977 (d) 1988
77. GOI set target of doubling of farmers income by the year
(a) 2020 (b) 2022
(c) 2021 (d) 2023
78. _____ is a tool, hardware and software, that is use to provide information efficiently in a visually pleasing manner.
(a) Information Kiosk (b) CAD
(c) Power point slides (d) E-learning
79. The 1st and 2nd cloned buffalo calf (Garima) was born in 2009 at NDRI, Karnal through the technology called
(a) Directional cloning technique (b) Hand guided cloning technique
(c) TA cloning technique (d) All of these
80. India's share in total meat production is _____% (APEDA, 2018)
(a) 2 % (b) 3%
(c) 4% (d) 5%
81. During transportation of animals adequate food and water must be offered to the animals at least every _____ hours during the journey, except where a journey can be completed within 15 hours (whichever is the later).
(a) 8 hours (b) 10 hours
(c) 12 hours (d) 14 hours
82. Ante-mortem inspection should be conducted within _____ hours prior to slaughter.
(a) 12 (b) 24
(c) 32 (d) 48
83. Meat is an important source of vitamin _____ which is not found in vegetable foods.
(a) B1 (b) B2
(c) B12 (d) None of these
84. The omental fat is also called _____.
(a) Cod fat (b) Caul fat
(c) Crown fat (d) Scrotal fat
85. Electrical stunning is widely used in:-
(a) Pigs and poultry (b) Cattle and poultry
(c) Buffaloes and poultry (d) All of these
86. A standard chicken egg yolk consists of _____% of an egg.
(a) 11 % (b) 30 %
(c) 59 % (d) 41%

87. During drying of Meat, the final moisture content should not exceed _____ %
(a) 2% (b) 3%
(c) 4% (d) 8%
88. The major milk protein in a colloidal dispersion is
(a) Casein (b) Beta- lactoglobulin
(c) Lactose (d) Albumen
89. Addition of vitamins and minerals in milk is known as
(a) Flavoured milk (b) Fortified milk
(c) Mineralized milk (d) Vitaminized milk
90. Gelatin stabilizers is added in ice-cream to produce smoothness, reduce ice crystals and resistance to melting, the gelatin strength is measure by
(a) Hooping test (b) Bloom test
(c) Pressing test (d) Dariloid test
91. The permissible level of NaCl during cheese preparation shall not exceed (in %)
(a) 0.5 (b) 1.5
(c) 1 (d) 0.02
92. In-the-bottle pasteurization, a bottle is filled with raw milk and tightly sealed which are held a
(a) 63°C for 30 mins (b) 74°C for 10 secs
(c) 72°C for 15 secs (d) 135 to 150°C for no hold
93. During coliform count for meat quality check, presence of *Escherichia coli* indicates
(a) Inadequate heat treatment of canned meat (b) Faecal contamination
(c) Poor hygienic quality of frozen meat (d) All of these
94. In _____ the muscle fiber shrinkage, distortion and drip loss are less.
(a) Slow freezing (b) Batch freezing
(c) Fast freezing (d) Ultrafreezing
95. Emulsion for sausage preparation is conducted at _____ to get a desire emulsion consistency.
(a) Low temperature (b) Room temperature
(c) Lukewarm (d) Warm temperaure
96. Adulteration of beef with buffalo meat / Karabeef can be visually detected by
(a) Pure white fate in beef (b) Pure white fat in Karabeef
(c) Both (a) & (b) (d) Not possible visually
97. Scalding of broiler is carried out at
(a) 55 °C for 90 sec (b) 60°C for 60 sec
(c) 100°C for 30 sec (d) 90 °C for 45 sec
98. Luncheon meat is a canned product prepared from pork with addition of
(a) Soyabean (b) Cereal
(c) Extender (Gelatin) (d) Leafy vegetable
99. Freeze burn occurs due to
(a) Rapid freezing (b) Unwrapped meat
(c) Both (a) & (b) (d) Ultra-freezing
100. In the wholesale cut of beef carcass, the right side of the body is called
(a) Close (b) Jowl
(c) Open (d) Side/Ribbed