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 Darying 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 exceed
   (a) 68º C / 20 ºF            (b) 98.6 º C / 37 º F
   (c) 110 º C / 43 º F         (d) 167 º C / 75 º 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 devise 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 ll
   (c) meiosis l            (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) Algebric 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  (c) Gossypol  
   (b) Glucosinolates (d) Mimosine

50. ________ is known as “Animal Starch”.
   (a) Galactose  (c) Glycogen  
   (b) Glucose (d) Fructose

51. The vitamins which contain sulphur are
   (a) Thiamin and biotin  (c) Riboflavin and thiamin  
   (b) Biotin and choline (d) Choline and riboflavin

52. Which one of the following is an example of feed additives
   (a) Mineral mixture  (c) Fish meal  
   (b) Antibiotic (d) Groundnut cake

53. Vitamin ________ is necessary for coagulation of blood.
   (a) Vitamin A  (c) Vitamin K  
   (b) Vitamin C (d) Vitamin D

54. The synthesis of glucose is known as__________.
   (a) Glycolysis  (c) Glycogenesis  
   (b) Glycogenolysis (d) Glucogenesis

55. Biological value of egg protein is
   (a) 94  (c) 85  
   (b) 67 (d) none of these

56. In cow, which volatile fatty acid is responsible for synthesis of milk fat
   (a) Acetic acid  (c) Propionic acid  
   (b) Butyric acid (d) All of these

57. Which of the following cereal has more lysine content ?
   (a) Rice  (c) Corn  
   (b) Wheat (d) Oats

58. “Perosis” or “slipped tendon” of young chicks is related to the element
   (a) Magnesium  (c) Manganese  
   (b) Zinc (d) Cobalt

59. Concentrate are the feeding stuffs which are less bulky & contain Crude fibre less than
   (a) 16 %  (c) 12 %  
   (b) 10 % (d) 18 %

60. Which type of feed contain the highest percentage of protein
   (a) Starter  (c) Grower  
   (b) Finisher (d) Fattener

61. Starch digestibility in rumen ranging from__________.
   (a) 40 – 50 %  (c) 71 – 80 %  
   (b) 60 – 70 % (d) 81 – 90 %

62. The type of protein present in Connective tissue.
   (a) Elastin  (c) Albumin  
   (b) Keratin (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) Andra 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, ie 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) Intuition   (b) Empathy
   (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) 63ºC for 30 mins  (b) 74ºC for 10 secs
   (c) 72ºC for 15 secs  (d) 135 to 150ºC 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 temperature

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 ºC for 90 sec  (b) 60ºC for 60 sec
   (c) 100ºC for 30 sec  (d) 90 ºC 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

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