

# PUNJAB PUBLIC SERVICE COMMISSION

**Objective Type Test (November-2016) for Recruitment of Veterinary Officers in the Department of Animal Husbandry, Fisheries & Dairy Development, Govt. of Punjab**

READ INSTRUCTIONS BEFORE FILLING ANY DETAILS OR ATTEMPTING TO ANSWER THE QUESTIONS

Candidate's Name \_\_\_\_\_

Father's Name \_\_\_\_\_

Date of Birth        
DD MM YYYY

Category Code\*    
(\*as given in the admit card)

OMR Response Sheet No. \_\_\_\_\_

Roll No. \_\_\_\_\_

Candidate's Signature (Please sign in the box)



Question Booklet Series

A

Booklet Sr. No.

00001758

## INSTRUCTIONS

- |  |  |
|--|--|
| <p>1. The candidate shall NOT open this booklet till the time told to do so by the invigilation Staff. However, in the meantime, the candidate can read these instructions carefully and subsequently fill the appropriate columns given above in CAPITAL letters. The candidate may also fill the relevant columns (other than the columns related to marking responses to the questions) of the Optical Mark Reader (OMR) response sheet, supplied separately.</p> | <p>9. The candidates shall ensure that the responses are marked in correct manner and any adverse impact due to wrong marking of responses would be the responsibility of the respective candidate. The following are some of the examples of wrong marking of responses on the OMR response sheet.</p> <div style="text-align: center;">  </div>        |
| <p>2. Use only blue or black ball point pen to fill the relevant columns on this page. Use of fountain pen may leave smudges which may make the information given by the candidate here illegible.</p>   | <p>10. The candidates, when allowed to open the question paper booklet, must check the booklet to confirm that the booklet has complete number of pages, the pages printed correctly and there are no blank pages. In case there is any such error in the question paper booklet then the candidate should immediately bring this fact to the notice of the invigilation Staff and obtain a booklet of the same series as given earlier.</p> |
| <p>3. The candidate shall be liable for any adverse effect if the information given above is wrong or illegible.</p>   | <p>11. The serial number of the new booklet should be entered in the relevant column of the OMR. The Invigilation Staff must make necessary corrections in their record regarding the change in the serial no. of question booklet.</p>  |
| <p>4. The candidate must fill all the columns given above on this page and sign at the appropriate place.</p>  | <p>12. The question paper booklet has 14 pages.</p>  |
| <p>5. Each candidate is required to attempt 100 questions in 120 minutes, except for visually impaired candidates, who would be given 40 minutes extra, by marking correct responses on the OMR sheet which would be supplied separately to the candidates.</p>  | <p>13. Each question shall carry three marks.</p>  |
| <p>6. The candidate must write the following on the OMRs sheet:<br/>                 (a) Serial number of OMR sheet supplied to him/her for marking the responses to the questions.<br/>                 (b) Serial number of the question booklet.<br/>                 (c) Series of the question booklet. Failure to do so may lead to cancellation of candidature or any other action which the Commission may deem fit.</p>                                     | <p>14. There are four options for each question and the candidate has to mark the MOST APPROPRIATE answer on the OMR response sheet using blue or black ball point pen.</p>  |
| <p>7. The candidate should darken the appropriate response to the question by completely darkening the appropriate circle/oval according to his/her choice of response i.e. a, b, c or d in the manner shown in the example below.</p> <div style="text-align: center;">  </div>  | <p>15. There is no negative marking for wrong answers or questions not attempted by the candidate.</p>   |
| <p>8. Partly darkening the circle/oval on the OMR response sheet or using other symbols such as tick mark or cross would not result in evaluation of the response as the OMR scanner can only interpret the answers by reading the darkened responses in the manner explained in preceding paragraph. Darkening more than one circle/oval as response to a question shall also be considered as wrong answer.</p>  |  |

1. Selection on the basis of individuality is most important, when  $h^2$  of the trait is:
  - a) Low
  - b) Medium
  - c) High
  - d) None of the above
  
2. A polyphenol present in cotton seeds which interferes with utilization of metal ions is:
  - a) Propofol
  - b) Gossypol
  - c) Mimosine
  - d) Thioglucoside
  
3. Dental formula (ICPM) for permanent teeth in male horse is:
  - a) 3133/3133
  - b) 3033/4122
  - c) 0030/3333
  - d) 3033/4033
  
4. Which of the following compounds from smoke contribute to smoky flavor of meat:
  - a) Phenol
  - b) Alcohol
  - c) Formaldehyde
  - d) Caproic acid
  
5. Which of the following is an abnormal constituent of urine:
  - a) Glucose
  - b) Urea
  - c) Creatinine
  - d) Bile pigments
  
6. Which of the following is a long acting tetracycline:
  - a) Oxytetracycline
  - b) Doxycycline
  - c) Methacycline
  - d) Both (a) and (c)
  
7. Boiled rice grain type of segments are observed during infestation with:
  - a) *Taenia*
  - b) *Hymenolepis*
  - c) *Moniezia*
  - d) None of the above

8. In order to collect blood sample for estimation of glucose, the following is added as preservative in order to ensure that the level of glucose does not go down with passage of time:
- Ethylene Diamine Tetra acetic acid
  - Sodium citrate
  - Sodium fluoride
  - Heparin
9. What is the right time to perform post-mortem of the animal suspected to be affected with anthrax:
- Immediately after the death of animal
  - Within 6 hours of the death of animal
  - Within 24 hours of the death of animal
  - None of the above
10. Lack of blood supply is known as:
- Emboli
  - Thrombus
  - Both (a) and (b)
  - Ischemia
11. The SPC in pasteurized milk per ml should not exceed:
- 3,000
  - 50,000
  - 30,000
  - 1,00,00
12. Which of the following is not an example of a non-random sampling technique?
- Purposive sampling
  - Quota sampling
  - Convenience sampling
  - Cluster sampling
13. Peg cells are found in:
- Oviduct
  - Vagina
  - Uterus
  - Ovary
14. White diarrhoea, pasting of feathers of vent region, shrill crying while voiding droppings in young chicks are the features of:
- Fowl typhoid
  - Pullorum disease
  - Fowl cholera
  - Fowl paratyphoid

15. Reciprocal apparatus operates in:
- Hind limbs
  - Fore limbs
  - All limbs
  - None of the above
16. If an animal consumes 5 kg Dry matter and excretes 6 kg of faeces with 50% moisture, the digestibility coefficient will be:
- 40%
  - 50%
  - 60%
  - None of the above
17. Cholesterol gives rises to all of the following except:
- Bile acids
  - Sex hormones
  - Steroid hormones
  - Bile pigments
18. Microscopic agglutination test (MAT) has been widely used as the reference test for antibody detection for which of the following diseases:
- Listeriosis
  - Rabies
  - Leptospirosis
  - Influenza
19. The brown dog tick of dog is:
- Boophilus tick*
  - Rhipicephalus tick*
  - Hyalomma tick*
  - Dermacentor tick*
20. Turkey egg appearance of kidneys, button ulcers in intestine in pigs are pathognomic lesions of:
- Swine fever
  - Swine erysipelas
  - Salmonellosis
  - Auzesky's disease
21. The principal constituent of the purulent exudate is:
- Macrophage
  - Lymphocyte
  - Neutrophils
  - Eosinophils

22. Efficacy of pasteurization is judged by:
- Dye reduction test
  - Alkaline phosphatase test
  - Amylase test
  - Malachite test
23. The branch of dentistry concerned with irregularities of teeth and mal-occlusion:
- Orthodontics
  - Periodontics
  - Endodontics
  - Exodontics
24. Dental formula (ICPM) for permanent teeth in ox is:
- 0033/4033
  - 3033/4122
  - 0030/3333
  - 3033/4033
25. 'Veiny' leather is a defect caused by:
- Imperfect bleeding
  - Demodexfollicularum*
  - Hypodermalineatum*
  - Actinomyces* spp
26. Proteins in milk are present in one of the following form:
- Emulsion
  - Soluble
  - Colloidal
  - Suspension
27. Which of the following vitamins is having hormone like properties?
- Vitamin A
  - Vitamin E
  - Vitamin D
  - Vitamin C
28. In physiological quantities thyroid hormones are:
- Anabolic
  - Catabolic
  - Both of the above
  - None of the above

29. *Brucella abortus* need to be incubated in an atmosphere containing which of the following for its isolation:
- a) 5-10 % of CO<sub>2</sub>
  - b) Erythritol
  - c) 5-10% nitrous oxide
  - d) None of the above
30. Which of the following is known as secretory antibody?
- a) IgM
  - b) IgA
  - c) IgG
  - d) IgE
31. In cyanide poisoning, the color of venous blood becomes:
- a) Bright cherry red
  - b) Brown
  - c) Chocolate
  - d) Both (ii) and (iii)
32. Swimmers itch is caused by:
- a) Ancylostomas
  - b) Ascarids
  - c) Taenia
  - d) Schistosomes
33. Drug of choice for treatment of amphistomosis is:
- a) Triclabendazole
  - b) Oxylozanide
  - c) Praziquantel
  - d) All of the above
34. Presence of albumin in urine indicates:
- a) Injury to glomeruli
  - b) Tubular injury
  - c) Both of the above
  - d) None of the above
35. Diabetes insipidus is characterized by:
- a) Polyuria
  - b) Polydipsia
  - c) Both of the above
  - d) None of the above

36. All of the following except one are the tests for mastitis:
- Hotis test
  - Coombs test
  - White side test
  - Bromothymol blue test
37. Dourine is caused by:
- Trypanosomaequiperdum*
  - Trypanosomaequi*
  - Trypanosomaevensi*
  - Trypanosomabrucei*
38. World Rabies Day takes place each year on:
- September 28
  - September 08
  - September 18
  - April 28
39. Prevention of cruelty to animals Act and Glanders & Farcy Act were enacted in:
- 1960 & 1899
  - 1940 & 1898
  - 1965 & 1857
  - 1997 & 1947
40. Introduction of *Pseudomonas aeruginosa* through intramammary antibiotic preparations is:
- Iatrogenic infection
  - Cold mastitis
  - Inoculation
  - None of these
41. The most common method employed for semen collection in dog is:
- AV method
  - Digital Manipulation
  - Electroejaculation
  - None of the above
42. Zoonotic pathogens originate from:
- Animals
  - Food and animals
  - Both of above
  - None of above
43. An international bulletin of animal diseases is published by:
- OIE
  - World Veterinary Association
  - WHO
  - PeTA

44. Pre-cervical uterine torsion is diagnosed by:
- Per vaginal
  - Per rectal
  - Abdominal ballotment
  - Through radiography
45. Rhodents play important role in transmission of:
- FMD
  - Plague
  - Scrub typhus
  - None of above
46. The most appropriate, easy and economic method of pregnancy diagnosis in bovines is:
- Ultrasonography
  - Abdominal ballotment
  - Rectal examination
  - Progesterone assay
47. The most critical temperature which may cause maximum loss of sperms during freezing is between:
- 37°C to 4°C
  - 4°C to -1°C
  - 5°C to -15°C
  - 15°C to -30°C
48. Exogenous oxytocin has luteolytic action in:
- Bitch
  - Cow & Ewe
  - Cattle & Sow
  - Cow & Doe
49. In a herd in which the brucellosis is endemic; an infected cow:
- Aborts only once after exposure
  - Subsequent gestations appear normal
  - Lactations normal
  - All of above
50. The dermatophyte that does not give fluoresce under Wood's light include:
- Microsporum equi*
  - Microsporum canis*
  - Microsporum distortum*
  - Microsporum audouinii*
51. An outbreak of disease from drinking water well is an example of:
- Propagating epidemic
  - Repeated exposure
  - Seasonal trend
  - All of above



52. Selected theme for 2016 World Veterinary Day was:
- Continuing education with a one health focus
  - One health one mission
  - Food security for all
  - None of above
53. A circumscribed cavity with pus, situated in epidermis is called:
- Abscess
  - Carbuncle
  - Acne
  - Pustule
54. Major side effects of Vincristine treatment are:
- Myelosuppression
  - Gastrointestinal disturbances
  - Both of above
  - None of above
55. Haemolytic anaemia may be sequelae of:
- Babesiosis
  - Leptospirosis
  - Phosphorus deficiency
  - All of the above
56. The shelf life of pasteurized milk kept at less than 8°C is:
- 1-2 days
  - 3-5 days
  - 6-8 days
  - 10-15 days
57. In obligatory cyclozoonoses life cycle of agent is completed in:
- Man
  - Mosquitoes
  - Ticks
  - None of above
58. Blastokinin, a protein which influences blastocyst formation is secreted by uterus of:
- Cattle
  - Sheep
  - Goat
  - Rabbit
59. Macroepidemiology is concerned with the \_\_\_\_\_ of disease and the social, economic and political factors that influence them
- International pattern
  - National pattern
  - Forecasting
  - Disaster management

60. Major viral surface antigen important in avian influenza immunity is:  
a) Haemagglutinin  
b) Neuraminidase  
c) Fusion spikes  
d) None of above
61. The peripheral nerve disorder is associated with:  
a) Trivalent arsenic  
b) Pentavalent arsenic  
c) Organic arsenicals  
d) Arsine
62. Castration in a male dog is done by which of the following surgical approach:  
a) Pre-scrotal incision  
b) Scrotal incision  
c) Post-scrotal incision  
d) None of above
63. Calcium channel blocker is:  
a) Nifedipine  
b) Diltiazem  
c) Verapamil  
d) All of these
64. Following recovery from FMD, some animals may show sequels like:  
a) Panting  
b) Over growth of hair  
c) Anaemia  
d) All of above
65. Antibody isotype that provides defense against helminthes is:  
a) IgA  
b) IgM  
c) IgG  
d) IgE
66. The drug of choice for the treatment of pyometra in bovines:  
a) Estrogen  
b) Testosterone  
c) PGF<sub>2α</sub>  
d) PGE
67. In pigs, the lesions of chronic anthrax are restricted to:  
a) Cervical lymph nodes  
b) Tonsils  
c) Surrounding tissues  
d) All of above

68. The following test is most sensitive for detection of ketone bodies in urine:
- Bendicks test
  - Benzidine test
  - Roberts test
  - Rothera's test
69. Carbaryl is an example of:
- OC insecticide
  - Carbamate
  - OP insecticide
  - Pyrethroid
70. In sows, maternal recognition of pregnancy is mainly due to the action of:
- Interferon tau
  - Oxytocin
  - Estrogen
  - Prostaglandins
71. Agglutination is a serological reaction in which?
- Antigen is in soluble form
  - Antibody is in particulate form
  - Antigen is in particulate form
  - Antibody is in soluble form
72. Standard treatment of acetonemia in dairy animals is:
- 50 % dextrose, glucose precursor and corticosteroids
  - Insulin and corticosteroid
  - Chloral hydras, cynocobalamine and cobalt
  - Single infusion of 50 % dextrose
73. Taq polymerase an enzyme used in PCR requires:
- Mg<sup>++</sup>
  - Temperature of 72°C
  - pH 8.4
  - All of above
74. Bromhexine is:
- Mucolytic
  - Antitussive
  - Analeptic
  - None of these
75. The animal disease that has been eradicated from India:
- Braxy
  - Ephemeral fever
  - Rinderpest
  - Peste des petits ruminants

76. Chronic hypertrophy of the horn producing tissues of the foot in horses is called:
- a) Laminitis
  - b) Corn
  - c) Subsolar abscess
  - d) Canker
77. A food borne outbreak is an example of:
- a) Point source epidemic
  - b) Propagating epidemic
  - c) Periodic fluctuation
  - d) None of above
78. Grossly the placentation in bitches is:
- a) Diffuse
  - b) Zonary
  - c) Discoid
  - d) None of the above
79. The milking equipments should preferably be made up of:
- a) Galvanized iron
  - b) Copper
  - c) Iron
  - d) None of the above
80. In developing follicles of hen, the chromosomal material of the ovum is present in the:
- a) Viteline membrane
  - b) Chalaza
  - c) Blastodisc
  - d) Yellow yolk
81. One of the following is not included a livestock:
- a) Turkey
  - b) Buffalo
  - c) Kangaroo
  - d) Dog
82. Powders are often administered as:
- a) Drenches
  - b) Pills
  - c) Electuary
  - d) Pessary

83. Body coat comprising of large irregular patches of black and white with well defined line of demarcation between two colours is called:
- Pie bald
  - Skew bald
  - Whole coloured
  - Roan
84. Frequency of two alleles in parents is 'p' and 'q'; then proportion of heterozygotes in progeny will be:
- 2pq
  - $p^2$
  - $q^2$
  - p+q
85. Selection differential depends on all except:
- Sex of the animal
  - Proportion selected
  - Heritability
  - Phenotypic standard deviation
86. Which of the following about heterosis is not true?
- Term coined by G H Shull
  - Depends on difference of gene frequency
  - Might be caused by Overdominance
  - Independent of degree of dominance
87. Energy requirement (Kcal/Kg feed) in broiler finisher ration as per BIS, 2007 is:
- 2800
  - 2900
  - 3100
  - 3200
88. Which of the following is not an essential amino acid for poultry:
- Arginine
  - Glicine
  - Valine
  - Glutamate
89. The protein accounts for about average.....% of total protein in the skeletal muscle:
- 13
  - 15
  - 19
  - 23

97. The mineral supplement in artificial diet of fishes should be:

- a) Nil
- b) 1-2 %
- c) 4-5 %
- d) Varies according to geographical distributions

98. Most of the draught breeds of cattle were developed in ----- region of India

- a) Dry northern region
- b) North eastern region
- c) Southern region
- d) Coastal region

99. Hinny is the cross between :

- a) Male horse (Stallion) X Female ass (Jennet)
- b) Male Ass (Jack) X Female Horse (Mare)
- c) Male Horse (Stallion) X Female zebra
- d) Female Horse (Stallion) X Male zebra

100. Which of the following is not a measure of reproductive efficiency?

- a) Fertility index
- b) Wilcox method of BE
- c) Osborne index
- d) AI per conception

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