

SEAL**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**

Booklet Serial No.

003534

Test Booklet Series

TEST BOOKLET - 2020
VETERINARY ASSISTANT SURGEON
(02)

B**Time Allowed: Two Hours****Maximum Marks: 120****INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet/Response Sheet. Any omission/ discrepancy will render the Answer Sheet/Response Sheet liable for rejection.
3. You have to enter your Roll Number on the
Test Booklet in the Box provided alongside.
DO NOT write *anything else* on the Test Booklet.
4. This Test booklet contains **120** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer Sheet/Response Sheet provided. See directions in the Answer Sheet/Response Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer Sheet/Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet/Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet/Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet/Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Answer Sheet/Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**02(B)/2020****SEAL**

Q.7) Starch equivalent system is based on

- A) NE & Digestible True Protein
- B) DCP, TDN & NE
- C) DCP & TDN
- D) DM, DCP & TDN

Q.8) A method of determining the least-cost ration using a series of mathematical equations.

- A) Pearson Square method
- B) Algebraic method
- C) Linear Programming
- D) Two by Two Matrix method

Q.9) The corpus hemorrhagicum:

- A) Develops from a follicle soon after it ovulates.
- B) Is the largest of the luteal structures found in the ovary.
- C) Produces maximal amounts of progesterone.
- D) Develops into a Graafian follicle.

Q.10) The luteolytic factor originating from the uterus is

- A) Oxytocin
- B) Progesterone
- C) PG F₂ alpha
- D) Estrogen

Q.11) More number of rotations in the torsioned cow may lead to

- A) Uterine rupture
- B) Uterine inertia
- C) Uterine eversion
- D) None of the above

Q.12) CL of pregnancy is called as

- A) haemorrhagicum
- B) albicans
- C) nigrum
- D) verum

Q.13) The number of isolation pens required in a piggery is

- A) 10 % of total stock
- B) 5 % of total stock
- C) 15 % of total stock
- D) 20 % total stock

Q.14) The deficiency of which nutrient causes Grass staggers in milch animals?

- A) Manganese
- B) Magnesium
- C) Sodium
- D) Chlorine

Q.15) As per Olver (1938) which of the following cattle breed entered India along with Aryans

- A) Deoni
- B) Haryana
- C) Tharparkar
- D) Punganur

Q.16) Assertion (A): Plants and animals benefit each other as members of food chains and ecosystems. **Reason (R):** When animals die and decompose, they enrich the soil with nitrates that stimulate plant growth.

- A) A & R are true and R is the correct explanation of A
- B) A & R are true and R is the not correct explanation of A
- C) A is true but R is false
- D) A is false but R is true

Q.17) Which of the following is not an acceptable means of euthanasia in animals intended for humans consumption

- A) Metomidate
- B) Pentasol
- C) Euthasol
- D) CO₂

Q.18) Assertion (A): Ketamine is combined with xylazine for better anaesthesia ()

Reason (R): Xylazine causes muscle relaxation

- A) A & R are true and R is the correct explanation of A
- B) A & R are true and R is the not correct explanation of A
- C) A is true but R is false
- D) A is false but R is true

Q.19) For calculation of acidity in milk, the following solutions are used

- A) 1N Sulphuric acid & Methelene blue
- B) 2 N HCl & Methyl orange
- C) 1N NaOH 7 Methyl red
- D) 0.1N NaoH & Phenopthelene

Q.20) Which of the following property indicates the resistance to flow

- A) Refractive Index
- B) Acidity
- C) Viscosity
- D) Surface tension

Q.21) Milk sugar contains the following.

- A) Glucose + galactose
- B) Glucose + Fructose
- C) Galactose + sucrose
- D) Glucose + Mannose

Q.22) Full form of CIP is

- A) Clean in place
- B) Cleaning in place
- C) Clean in plant
- D) Clean parts

Q.23) AGMARK special grade ghee is marked in

- A) Green letters
- B) Red letters
- C) Yellow letters
- D) Chocolate letters

Q.24) The Virus capable of Haemagglutinating erythrocytes of Poultry and Human beings is

- A) Avian paramyxovirus
- B) DNA Herpes virus
- C) Poxviridae
- D) Corona virus

Q.25) Plaque forming units (PFUs) for Marek's vaccine per dose should be in the range of

- A) 2000-7000
- B) 50-100
- C) 10-50
- D) 1-5

Q.26) The class of immunoglobins used to detect early infection in animals is

- A) IgA
- B) IgG
- C) IgM
- D) IgE

Q.27) The minimum age for active immunization by vaccination of a calf which has suckled sufficient quantity of colostrum is

- A) 4 weeks
- B) 9 weeks
- C) 2 months
- D) 3 months

Q.28) Consider the following statements Which one of the following statement is correct

- A) Composition of clarifier slime (moist) has water content 28.9
- B) Composition of clarifier slime (moist) has fat content 22.1
- C) Composition of clarifier slime (moist) has protein content 25.9
- D) Composition of clarifier slime (moist) has ash content 30.6

Q.29) Consider the following statements Which one of the following statement is correct?

- A) Soft curd has a curd tension less than 25g
- B) Soft curd milk contains high casein
- C) Soft curd milk contains high calcium content
- D) Curd tension of Human milk contains 100g

Q.30) Beta-lactoglobulins comprises approximately _____ the total whey proteins.

- A) $\frac{1}{2}$
- B) $\frac{1}{3}$
- C) $\frac{1}{4}$
- D) $\frac{1}{5}$

Q.31) Lactose is disaccharide containing:

- A) Glucose & Fructose
- B) Glucose & Galactose
- C) Glucose & Glucose
- D) Glucose & Maltose

Q.32) _____ gives intense blue colour with starches.

- A) Iodine solution
- B) Sugar solution
- C) Salt solution
- D) Boric acid solution

Q.33) Paneer shall not contain more than _____ percent moisture and the milkfat content shall not be less than _____ percent on dry matter.

- A) 60/40
- B) 70/50
- C) 50/25
- D) 30/15

Q.34) Which one of the following statement is correct

- A) UHT process leads to organoleptic changes in milk and changes the nutritional value significantly
- B) The high-heat pasteurization and ultra-high heat treatment not achieves 'commercial sterility
- C) HTST pasteurization completely inactivates the enzyme alkaline phosphatase
- D) The heat treatment increases the salt equilibrium in milk.

Q.35) GCMMF _____

- A) Gujarat Cooperative Milk Marketing Federation
- B) Gujarat Cooperative Marketing Milk Federation
- C) Gujarat Centre Milk Marketing Federation
- D) Gujarat Centre Marketing milk Federation

Q.36) Consider the statements Which of the following statement is correct

- A) Buffalo milk is preferred for manufacture of khoa as it results in higher yield, smooth texture with sweet taste.
- B) 14 kg of buffalo milk or 15 kg of cow milk yield one kg of khoa
- C) The colour of khoa becomes intense with brownish tinge due to formation of carotein pigment.
- D) Higher the moisture content in khoa, lower the yield and vice-versa

Q.37) _____ is the process of removal of microorganisms from milk using centrifugal force

- A) Bactofugation
- B) Chilling
- C) Pasteurization
- D) Sterilization

Q.38) _____ create trouble in dairy industry because of their resistance to pasteurization and sanitization procedure

- A) Spore forming bacteria
- B) Virus
- C) Mold
- D) Yeast

Q.39) Scarlet fever, a milk borne disease is caused by

- A) *Streptococcus agalactiae*
- B) *Streptococcus pyogenes*
- C) *Campylobacter jejuni*
- D) *Yersinia enterocolytica*

Q.40) Consider the following statements:

- 1) Even though the disease anthrax affects a wide variety of species, it is mainly a disease of herbivores
- 2) Rinderpest was termed as "cattle plague"; Swine Fever as "Swine plague"; and PPR as "goat plague"
- 3) FMD lesions are also seen on udder
- 4) Shooting diarrhoea is a feature of swine fever

Which of the following statements is / are correct

- A) 4 and 2
- B) 1 and 2
- C) 1 only
- D) 1, 2 and 4

Q.41) Consider the following statements:

- 1) BQ is characterised by inflammation of skeletal and cardiac muscle and toxemia
- 2) Dry gas bloat is associated with excess intake of grains
- 3) The RP virus is antigenically related to the virus of CD and PPR
- 4) Fluid therapy is indicated in pulmonary edema

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 1 and 3 | B) 2 only |
| C) 1 and 4 | D) 2 and 4 |

Q.42) Consider the following statements:

- 1) PPR in goats is clinically and pathologically “distinguishable” from RP
- 2) Theophylline is indicated in pneumonia
- 3) Lush green pasture causes constipation
- 4) Improper and insufficient colostrum predisposes calves to colibacillosis

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 2 and 4 | B) 1 and 2 |
| C) 2 only | D) 4 only |

Q.43) Consider the following statements:

- | | |
|-----------------------|---------------------------------------|
| 1) Steroids | - Indicated in Pneumonia |
| 2) Primary bloat | - Caused by choke |
| 3) Neonatal diarrhoea | - Dehydration and acid base imbalance |
| 4) Sneezing | - non-defensive mechanism |

Which of the above pairs are correctly matched?

- | | |
|------------|------------|
| A) 1 and 3 | B) 2 and 4 |
| C) 1 and 4 | D) 3 and 4 |

Q.44) Consider the following statements:

- 1) The faeces containing the organisms serve as a primary source of infection for Jhone's disease
- 2) Dry gas bloat is associated with excess intake of grains
- 3) Rinderpest virus is antigenically 'not related' to PPR virus
- 4) Swine fever virus is antigenically related to BVD

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 1 and 3 | B) 2 only |
| C) 1 and 4 | D) 2 and 4 |

Q.45) The presence of compromised immune response may result in:

- 1) Leukocytosis
- 2) Infections developing in the first 6 weeks of life
- 3) Administration of attenuated vaccines leading to immunity
- 4) Repeated or continuous infections that respond poorly to treatment

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 2 and 4 | B) 1 and 2 |
| C) 2 only | D) 4 only |

Q.46) Consider the following statements:

- 1) PPR in goats is clinically and pathologically "distinguishable" from RP
- 2) Various fetal and neonatal abnormalities have been attributed to exposure to swine fever virus during pregnancy
- 3) Though there are multiple strains of RP virus, immunity developed after infection / vaccination with one strain, protects all other strains
- 4) FMD also occurs in horses

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 2 and 3 | B) 1 and 2 |
| C) 2 only | D) 4 only |

Q.47) Consider the following statements:

- 1) Calf diphtheria is characterised by necrotic stomatitis, laryngitis and pharyngitis
- 2) Dry gas bloat is associated with excess intake of grains
- 3) The RP virus is antigenically "not related" to the PPR virus
- 4) Pathogenicity of M. Tuberculosis is due to its ability to escape killing by macrophages and induce delayed type hypersensitivity

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 1 and 3 | B) 1 and 4 |
| C) 1 only | D) 2 and 4 |

Q.48) Consider the following statements:

- 1) E.coli is the normal inhabitant of digestive tract of mammals and birds
- 2) In calf diphtheria, death is likely to occur from diarrhoea and dehydration
- 3) Anthrax spores are not formed until it has been exposed to air
- 4) BQ has a seasonal incidence with most cases in summer season

Which of the following statements is / are correct

- | | |
|------------|------------|
| A) 1 and 3 | B) 2 only |
| C) 2 and 3 | D) 1 and 4 |

Q.49) Consider the following statements:

- | | |
|----------------------|------------------------------------|
| 1) Endotoxemia | - Caused by Gram positive bacteria |
| 2) Pneumonia | - NSAIDS are indicated |
| 3) Panters | - HS recovered animals |
| 4) Blood transfusion | - Indicated in Neonatal diarrhoea |

Which of the above pairs are correctly matched?

- | | |
|------------|------------|
| A) 2 and 4 | B) 4 only |
| C) 3 and 4 | D) 1 and 4 |

Q.50) Read the following statements

- 1) Progeny testing is useful for sex limited traits
- 2) Polled condition in cattle, is an example for lack of dominance
- 3) Mutation produces new genes in the population
- 4) In tandem selection, more number of traits selected at one time

Which of the following statements is / are correct?

- | | |
|------------|------------|
| A) 1 and 3 | B) 3 and 2 |
| C) 1 and 4 | D) 2 and 4 |

Q.51) Arrange the different sub stages of first meiotic prophase in chronological order of their chromosome behavior and appearance.

- 1) Pachynema
- 2) Leptonema
- 3) Diakinesis
- 4) Zygonema
- 5) Diplonema

Arrange the sub stages in chronological order

- | | |
|------------------|------------------|
| A) 1, 2, 3, 4, 5 | B) 2, 4, 1, 5, 3 |
| C) 1, 3, 5, 2, 4 | D) 3, 5, 4, 2, 1 |

Q.52) Consider the following statements

- 1) For comparing variance, F test is used
- 2) Additive genetic variance is the result of interaction of genes
- 3) covariance of the parents is equal to inbreeding coefficient of the progeny
- 4) Breeding of two different breeds is crossbreeding

Which of the following statements is / are correct?

- | | |
|------------|------------|
| A) 1 and 3 | B) 3 and 2 |
| C) 3 and 4 | D) 1 and 4 |

Q.53) Consider the following pairs

- | | |
|-----------------|-----------------------------|
| i) Biuret | 1) Vegetable Protein source |
| ii) Broken rice | 2) Sweetening agent |
| iii) Guar meal | 3) Animal Protein source |
| iv) Molasses | 4) Energy source |
| | 5) NPN compound |

Which of the pairs given above is/are correctly matched ?

- | | |
|---------------------------|---------------------------|
| A) i-3, ii-5, iii-2, iv-5 | B) i-2, ii-1, iii-4, iv-3 |
| C) i-5, ii-4, iii-1, iv-2 | D) i-4, ii-3, iii-5, iv-1 |

Q.54) Fat is included in the diets of livestock during heat stress because

- 1) The heat of digestion of fat is less
- 2) The heat of nutrient metabolism is less
- 3) The calorific value of the fat is higher
- 4) Source of fat soluble vitamins

Which of the above statements is/are correct?

- | | |
|---------------|---------------|
| A) 3 and 4 | B) 1, 2 and 4 |
| C) 3, 1 and 4 | D) 1, 2 and 3 |

Q.55) Consider the following pairs of the bacteria and their substrates in silage

- | | |
|-----------------------------------|------------------|
| i) <i>Lactobacillus plantarum</i> | 1) Triglycerides |
| ii) <i>Lactobacillus brevis</i> | 2) Amino acids |
| iii) <i>Clostridium butyricum</i> | 3) Starch |
| iv) <i>Clostridium sporogenes</i> | 4) Hemicellulose |
| | 5) Lactic acid |

Which of the pairs given above is/are correctly matched ?

- | | |
|---------------------------|---------------------------|
| A) i-5, ii-3, iii-1, iv-4 | B) i-4, ii-5, iii-2, iv-1 |
| C) i-3, ii-4, iii-5, iv-2 | D) i-5, ii-4, iii-3, iv-1 |

Q.56) Arrange the following activities stepwise in formulation of ration for dairy cattle

- 1) Calculate nutrient requirements of animal according to its production
- 2) Choose available feed ingredients
- 3) Manipulate each ingredient to match the supply and requirement of nutrients
- 4) Know the nutrient content and inclusion levels of feed ingredients
- 5) Calculate the nutrients supplied by a set weight of feed ingredients

A) 1, 2, 4, 5, 3

B) 2, 4, 1, 3, 5

C) 1, 2, 5, 3, 4

D) 4, 2, 5, 1, 3

Q.57) Synchronate B is

- A) ear implant
- B) vaginal sponge
- C) vaginal device pass
- D) cervical device

Q.58) Consider the following statements with regard to the calculation of average yield per animal per day.

- 1) No. of Days in milk
- 2) No. of days required for conception
- 3) Total lactation yield
- 4) No. of dry days

Choose the incorrect answer from the following

A) 1 and 3

B) 1 and 4

C) Only 2

D) 3 and 4

Q.59) Consider the following statements

- 1) Milk after parturition up to 10 days is called as colostrum
- 2) Summer sterility is common in buffaloes
- 3) First faeces of calf is known as meconium
- 4) Swaichal is famous gait of Ongole bullocks

Which of the following combination of statement is correct?

- | | |
|------------|---------------|
| A) 2 and 3 | B) 1, 2 and 4 |
| C) 3 only | D) 1 and 2 |

Q.60) Arrange the following in descending order of their contribution to the milk production during the year 2018-19

- 1) Crossbred cows
- 2) Goats
- 3) Buffaloes
- 4) Indigenous cattle

Choose the correct answer from the codes given below

- | | |
|---------------|---------------|
| A) 3, 2, 1, 4 | B) 3, 1, 4, 2 |
| C) 1, 3, 2, 4 | D) 2, 1, 3, 4 |

Q.61) Consider the following in terms of uses of off herd records

- 1) Efficiency of culling and selection for breeding purpose increases
- 2) Comparison of herd performance between/within breeds
- 3) Superior stock can be identified for extensive use in breeding programmes
- 4) Each animal in the herd is identified with respect to its production performance

Choose the correct answer from the codes given below

- | | |
|------------|------------|
| A) 1 and 4 | B) 2 and 3 |
| C) 3 and 4 | D) 1 and 2 |

Q.62) Consider the following statements with regard to flushing

- 1) It will increase the incidence of oestrus
- 2) It will increase the early embryonic mortality
- 3) It will increase the conception rate in female
- 4) It increases the chances of getting twins and triplets

Which of the above given statement(s) is/are incorrect?

- | | |
|---------------|------------|
| A) 1, 3 and 4 | B) 1 and 4 |
| C) 3 and 4 | D) Only 2 |

Q.63) Consider the following statements concerned with the Intercalving period

- 1) Service period plus gestation period
- 2) Dry period plus gestation period
- 3) Service period plus lactation period
- 4) Dry period plus service period

Based on those statements choose the correct answer

- | | |
|------|------|
| A) 2 | B) 1 |
| C) 3 | D) 4 |

Q.64) The mechanism involved in the distress caused due to CO_2 ()

- 1) The formation of carbonic acid on respiratory and ocular membrane
- 2) Feeling of breathlessness
- 3) Direct stimulation of ion channels within the amygdala associated fear responses
- 4) Direct action on voltage-sensitive sodium channels

- | | |
|--------------------------|----------------------------|
| A) Only 1 & 4 correct | B) 2 & 3 only correct |
| C) 1, 2 & 3 only correct | D) 1, 2, 3 & 4 are correct |

Q.65) Consider the following statements about Acepromazine and choose the correct ()

- 1) Doping to win
- 2) Used for calming and tranquilizing effect
- 3) Act as agonist on dopamine and serotonin receptors
- 4) 2-HEP and 2-HEPS are metabolites of Acepromazine

- A) 1 & 2 B) 3 & 4
C) 1 & 3 D) 2 & 4

Q.66) Consider the following pairs

- | | |
|--------------------------------|------------------------------|
| i) Glanders | 1) Virus neutralization test |
| ii) Dourine | 2) Coggins test |
| iii) Equine infectious anaemia | 3) Mallein test |
| iv) Equine viral arterities | 4) Complement Fixation test |

Which of the pairs given above is/are correctly matched?

- A) i-3, ii-1, iii-2, iv-4
B) i-3, ii-1, iii-4, iv-2
C) i-3, ii-4, iii-2, iv-1
D) i-3, ii-4, iii-1, iv-2

Q.67) Consider the following statements.

- 1) Equines should come from a country which is free from African horse sickness.
- 2) Equines should come from a country where contagious equine metritis has not been reported during the last five years.
- 3) Import of Thoroughbred horse will be allowed for breeding purpose only.

Which of the following statements is/are correct importation of horses to India

- A) 1 and 2 B) 2 and 3
C) 1 and 3 D) 1, 2 and 3

Q.68) Consider the following pairs

Constituent	Calories
i) Fat	9 Kcal
ii) Protein	4 Kcal
iii) Lactose	9 Kcal
iv) Fiber	3 Kcal

Which of the above pairs are correctly matched?

- A) i & ii B) ii & iii
C) iii & iv D) i & iv

Q.69) Consider the following statements

- 1) BHT is an antioxidant
- 2) Caustic soda is a cleansing agent
- 3) Whey is rich in fat
- 4) CMC is an ice cream stabilizer

Which of the following statement(s) is/are false?

- | | |
|------------|------------|
| A) 1 and 2 | B) 2 and 4 |
| C) Only 3 | D) Only 4 |

Q.70) Immune suppression is caused by the following infectious and non infectious conditions

- 1) Marek's
- 2) New castle disease
- 3) Infectious bursal disease
- 4) Fowl pox
- 5) Mycoplasma
- 6) Mycotoxins
- 7) Chicken infectious anaemia
- 8) Avian leucosis

- | | |
|--------------------------|-------------------------------------|
| A) All are true except 4 | B) All are false except 3, 5, and 6 |
| C) All are true | D) All are false |

Q.71) Consider the following statements:

- 1) Lysol and cresol (2-3% solution in hot water) can act as effective disinfectants for wide range of microorganisms; however, they are not effective against spores.
- 2) Caustic soda (2% solution) is effective disinfectant for farm buildings and animal houses.
- 3) Caustic soda (5% solution) can be successfully used for destruction of anthrax spores.
- 4) Quick lime or Calcium oxide can be used as a disinfectant and deodorant and can be sprinkled on manure or animal discharges present on floors.

Which of the above statements are correct?

- | | |
|---------------|------------------|
| A) 1, 2 and 3 | B) 1, 2 and 4 |
| C) 2, 3 and 4 | D) 1, 2, 3 and 4 |

Q.72) Consider the following pairs:

- | | |
|---|-----------------------------------|
| i) <i>Clostridium welchii</i> present
and Coliform organisms | Recent water contamination absent |
| ii) Coliform organisms | Ferment lactose at 37°C |
| iii) Faecal streptococci | Gram negative |
| iv) Iron bacteria | Crenothrix |

Which of the pairs mentioned above are correctly matched?

- | | |
|--------------|-----------------|
| A) i and iv | B) ii and iii |
| C) ii and iv | D) i, ii and iv |

Q.73) Consider the following pairs for the effects on human health:

Impurity in water	Consequences if exceeds permissible limits
1) Nitrates	Methemoglobinemia
2) Fluorides	Mottled teeth
3) Lead	Giddiness and blindness
4) Mercury	Minamata Disease

Which of the pairs mentioned above is/are correctly matched?

- | | |
|---------------|------------------|
| A) 1 and 2 | B) 1 and 4 |
| C) 1, 2 and 3 | D) 1, 2, 3 and 4 |

Q.74) Water is turbid:

- 1) It is due to presence of mineral or organic matter.
- 2) It indicates degree of pollution.
- 3) It interferes with disinfection process
- 4) It is not considered good for drinking purposes

Which of the above statements are true?

- | | |
|---------------|------------------|
| A) 1 and 2 | B) 2 and 4 |
| C) 1, 2 and 4 | D) 1, 2, 3 and 4 |

Q.75) Consider the following statements:

- 1) Ingestion of water contaminated with eggs of *Echinococcus granulosus* can cause hydatidosis in humans.
- 2) Anthrax cannot be spread by air borne route.
- 3) Droplet transmission of *Mycobacterium bovis* can cause tuberculosis in humans.
- 4) Inhalation of spores of *Bacillus anthracis* from contaminated soils or animal by-product can cause disease in humans.

Which of the above mentioned statements are correct?

- | | |
|---------------|---------------|
| A) 3 and 4 | B) 1 and 2 |
| C) 1, 2 and 3 | D) 1, 3 and 4 |

Q.76) Affect of pasteurization of colostrum at 60° C (140° F) for 60 min is

- | | |
|-----------------------------------|----------------------------------|
| A) Reduce IgG conc | B) Will not affect colostral IgG |
| C) Will not affect bacterial load | D) Reduce fluid content |

Q.77) What percentage of growth was recorded in the recently concluded Livestock Census in India as compared to the year 2012?

- | | |
|---------|---------|
| A) 3.63 | B) 4.63 |
| C) 5.63 | D) 6.63 |

Q.78) National Sports Day in India is celebrated on which date?

- | | |
|-----------------------------|-------------------------------|
| A) 29 th August | B) 29 th September |
| C) 29 th October | D) 29 th February |

Q.79) Where are the Kalaroos caves

- | | |
|--------------|-------------|
| A) Ganderbal | B) Pulwama |
| C) Kupwara | D) Srinagar |

Q.80) The state bird of erstwhile state of Jammu and Kashmir is ?

- | | |
|-----------------------|-----------------------|
| A) Black winged crane | B) Brown necked crane |
| C) Black necked crane | D) Black legged crane |

Q.81) Natural rubber is a polymer of

- A) Isoprene
- B) Vinyl acetate
- C) Propene
- D) Latex

Q.82) "Sheikh Chilli KaMaqbara" is situated in which state?

- A) Haryana
- B) Punjab
- C) Rajasthan
- D) Uttar Pradesh

Q.83) Who is the first Lieutenant Governor of Union Territory of Laddakh?

- A) Manoj Sinha
- B) G.C. Murmu
- C) Radha Krishna Mathur
- D) Sreenivas Kumar Sinha

Q.84) Skin of rabbit is called as

- A) Pelt
- B) Fur
- C) Fryer
- D) Fibre

Q.85) Use of polished rice in human diet causes which of the following disease

- A) Beriberi
- B) Night blindness
- C) Goitre
- D) Colour Blindness

Q.86) Professionally Dr. P.J. Kurian was

- A) Veterinarian
- B) Medical Practitioner
- C) Dairy Technologist
- D) Engineer

Q.87) The first woman Chief Minister of India was

- A) SuchetaKriplani
- B) Sarojini Naidu
- C) J. Jayalalitha
- D) Uma Bharti

Q.88) Which one of the following pair is not correct-

- A) Pencillin – Alexander Flemming B) Blood Group – K. Landsteiner
- C) Antiseptic – Robert Koch D) Vaccine – Edward Jenner

Q.89) First union territory of India to run 100% on solar energy is

- A) Andaman Nicobar B) Diu
- C) Puducherry D) Chandigarh

Q.90) Foundation day of Indian Council of Agricultural Research is celebrated every year on

- A) 1st Nov B) 16th July
- C) 18th April D) 30th April

Q.91) The earth rotates from

- A) West to East B) East to West
- C) North to South D) South to North

Q.92) Yousuf Shah Chak, the last Muslim ruler of Kashmir valley, who was exiled to Bihar by Mughal Emperor Akbar was buried in

- A) Patlipura B) Munger
- C) Rajgir D) Biswak, Nalanda

Q.93) Which of the following species was first domesticated by human beings?

- A) Cattle B) Sheep
- C) Dog D) Goat

Q.94) National Research Centre on Meat is situated in?

- A) Kolkata B) Chennai
- C) Hyderabad D) Thiruvananthapuram

Q.95) Fastest mode of transfer of heat is

- A) Convection
- B) Radiation
- C) Evaporation
- D) Conduction

Q.96) The dose (per kg body weight) of the whole blood to be given intravenously, that can save a calf that appears to be in shock associated with neonatal diarrhoea is

- A) 20-30 ml
- B) 5-10 ml
- C) 10-20 ml
- D) Not advised

Q.97) One of the following disease is characterised by septicaemia and sudden death accompanied by the exudation of tarry coloured blood from the body orifices of carcass

- A) John's disease
- B) Malignant carbuncle
- C) PPR
- D) Swine fever

Q.98) Which of the following is a soil borne infection

- A) FMD
- B) RP
- C) PPR
- D) BQ

Q.99) Which of the following is an acute, highly contagious disease of goats and sheep caused by Morbilli virus

- A) Anthrax
- B) PPR
- C) Swine Fever
- D) Rinderpest

Q.100) Which of the following causes hyper secretion of fluid and electrolytes into small intestine without causing significant morphological damage or invading tissue

- A) Salmonella sps
- B) B. coli
- C) E. coli
- D) Morbilli virus

Q.101) Consider the following pairs:

- | | |
|---------------------|--|
| i) B Blood group | 1) No anti A and Anti B antibodies in plasma |
| ii) A Blood group | 2) Anti B antibodies in plasma |
| iii) AB Blood group | 3) Anti A and Anti B antibodies in plasma |
| iv) O Blood group | 4) Anti A antibodies in plasma |

Which of the above pairs are correctly matched?

- A) i-2, ii-4, iii-1 iv-3
- B) i-1, ii-3, iii-2, iv-4
- C) i-4, ii-2, iii-1, iv-3
- D) i-3, ii-1, iii-4, iv-2

Q.102) Consider the following pairs:

Rail Tunnel		State/UT
i) Borra Tunnel	-	Andhra Pradesh
ii) Karwar Tunnel	-	Goa
iii) Sangaldan Tunnel	-	Jammu and Kashmir
iv) Zhobo Tunnel	-	West bengal

Which of the above pairs are correctly matched ?

- | | |
|------------|---------------|
| A) i & ii | B) i, ii & iv |
| C) ii & iv | D) i & iii |

Q.103) Match the livestock and poultry breed as per the recognition by the National Bureau of Animal Genetic resources (Jan, 2020)

Species	No.of recognized breeds
i) Cattle	1) 7
ii) Sheep	2) 03
iii) Horses & Ponies	3) 50
iv) Ducks & Geese	4) 44

Select the correct answer using the code below

- | | |
|------------------------------|------------------------------|
| A) i-2, ii- 3 , iii-1, iv -4 | B) i-3, ii- 4 , iii-1, iv -2 |
| C) i-1, ii- 3 , iii-2, iv -4 | D) i-2, ii- 4 , iii-1, iv -3 |

Q.104) Match the following goat breeds with their place of origin

Breed	Place of origin
i) Black Bengal	1) Gujarat
ii) Barbari	2) Rajasthan
iii) Surti	3) U.P.
iv) Sirohi	4) West Bengal

Select the correct answer using the code below

- | | |
|------------------------------|-----------------------------|
| A) i- 2, ii- 3, iii-1, iv -4 | B) i-3, ii- 4, iii-1, iv -2 |
| C) i- 4, ii- 3, iii-1, iv -2 | D) i-2, ii- 4, iii-1, iv -3 |

Q.105) Match the following bacteriological standards of raw milk for indication of clean milk production.

SPC/ml	Grade
i) Not exceeding 200, 000	1) Fair
ii) Between 200, 000 to 1,000, 000	2) Poor
iii) Between 1000, 000 to 5,000, 000	3) Good
iv) Over 5,000, 000	4) Very good

Select the correct answer using the code below

- | | |
|----------------------------|---------------------------|
| A) i-4, ii -3, iii-1, iv-2 | B) i-2, ii-1, iii-4, iv-3 |
| C) i-4, ii -2, iii-3, iv-2 | D) i-3, ii-2, iii-3, iv-4 |

Q.106) Match the Newcastle Disease Virus Serotypes with their symptoms

<u>Serotype</u>	<u>Symptoms</u>
i) Lentogenic	1) Beaudetts form
ii) Viscerotropicvelogenic	2) Doyle's form
iii) Mesogenic	3) Hitcher's form
iv) Velogenic neurotropic	4) Beach's form
A) i-3, ii-2, iii-1, iv-4	B) i-2, ii-4, iii-3, iv-1
C) i-1, ii-3, iii-4, iv-2	D) i-4, ii-1, iii-2, iv-3

Q.107) Match the followings:

Milk fat consists of	Percentage Fatty acids
i) 7	1) Medium chain fatty acids
ii) 15-20	2) Short chain fatty acids
iii) 73-78	3) Long chain fatty acids
iv) 32	4) Mono saturated fatty acids
A) i-1 ii-2 iii-3 iv-4	B) i-2 ii-1 iii-3 iv-4
C) i-4 ii-3 iii-2 iv-1	D) i-3 ii-4 iii-1 iv-2

Q.108) Match the followings :

Total solids

- i) 15
- ii) 10.5
- iii) 11.5
- iv) 13

Types of milk

- 1) double toned
- 2) full cream milk
- 3) toned milk
- 4) standardized milk

A) i-1 ii-2 iii-3 iv-4

B) i-2 ii-1 iii-3 iv-4

C) i-4 ii-3 iii-2 iv-1

D) i-3 ii-4 iii-1 iv-2

Q.109) Match the followings:

Value

- i) 1.76
- ii) 33.7
- iii) 26.7
- iv) 42.3

Cow ghee constant

- 1) Iodine value
- 2) Polenske value
- 3) Butyrefractometer reading
- 4) Reichert Meissl value

A) i-1 ii-2 iii-3 iv-4

B) i-2 ii-1 iii-1 iv-4

C) i-2 ii-1 iii-4 iv-3

D) i-3 ii-4 iii-1 iv-2

Q.110) Mode of Milk transportation in India

Mode

- i) Head load
- ii) Tonga
- iii) Bicycle
- iv) Railway

Optimum load (Kg)

- 1) 15-25
- 2) 250-300
- 3) 40 or more
- 4) 11 tonnes

A) i-1 ii-2 iii-3 iv-4

B) i-2 ii-1 iii-3 iv-4

C) i-2 ii-3 iii-2 iv-1

D) i-3 ii-4 iii-1 iv-2

Q.111) Match the followings with respect to Milk Procurement

Season	Month
i) Flush	1) November to February
ii) Transitory to lean	2) March and April
iii) Lean	3) May to August
iv) Transitory to Flush	4) September and October
A) i-1 ii-2 iii-3 iv-4	B) i-2 ii-1 iii-3 iv-4
C) i-2 ii-3 iii-2 iv-1	D) i-3 ii-4 iii-1 iv-2

Q.112) Match the followings:

Bacteria	Disease
i) Shigelladysenteriae	1) Gas gangrene
ii) Staph. Aureus	2) Summer Diarrhea
iii) Cl. Botulinum	3) Shigellosis
iv) E. coli	4) Food poisoning
A) i-1 ii-2 iii-3 iv-4	B) i-2 ii-1 iii-3 iv-4
C) i-1 ii-3 iii-2 iv-1	D) i-3 ii-4 iii-1 iv-2

Q.113) Match the followings:

Source	Disease
i) Infection of milk directly from cow	1) Malta fever
ii) Infection from man to cow and then to milk	2) Diphtheria
iii) Direct contamination of milk by human being	3) Gastroenteritis
iv) Indirect contamination of milk by human being	4) Typhoid fever
A) i-1 ii-2 iii-3 iv-4	B) i-2 ii-1 iii-3 iv-4
C) i-1 ii-3 iii-2 iv-1	D) i-3 ii-4 iii-1 iv-2

Q.114) Match the following pairs:

i) Yellow colour	1) <i>Pseudomonas fluorescens</i>
ii) Blue colour	2) <i>Pseudomonas synxantha</i>
iii) Red colour	3) <i>Pseudomonas syncyanea</i>
iv) Green colour	4) <i>Rhodotorulaglutinis</i>

Answers

A) i-2, ii-1, iii-3, iv-4	B) i-3, ii-2, iii-1, iv-4
C) i-2, ii-1, iii-4, iv-1	D) i-3, ii-2, iii-3, iv-1

Q.115) Match the following pairs:

Name of the pathogen

Test

i) *Streptococcus pyogenes*

1) Widal test

ii) *Salmonella typhi*

2) Eijkman test

iii) *Staph aureus*

3) Dick test

iv) *E.Coli*

4) Thermonuclease test

A) i-3, ii-1, iii-2, iv-4

B) i-3, ii-1, iii-4, iv-2

C) i-3, ii-4, iii-2, iv-1

D) i-3, ii-1, iii-2, iv-4

Q.116) Find out the correctly matched pair/pairs

Dairy Detergents

Chemical name

i) Alkalis

Teepol

ii) Acid

Sodium silicate

iii) wetting agents

Acinol N

iv) Chelating Agents

Tetraphosphate

A) i & ii

B) i

C) ii

D) iii & iv

Q.117) Arrange the following steps in the order for production of Recombined milk

i) Receiving water and heat to 38-49°C

ii) Addition of skim milk powder and butter oil

iii) Pasteurization

iv) Homogenization & Cooling

A) iii, iv, i, ii

B) i, ii, iii, iv

C) i, iii, ii, iv

D) ii, i, iv, iii

Q.118) Arrange the sequence from highest to lowest grade of milk used for manufacturing of specific milk products

- i) Evaporated milk & sterilized milk
- ii) Fermented milk
- iii) Paneer
- iv) Casein

A) iii, iv, i, ii

B) i, ii, iv, iii

C) i, ii, iii, iv

D) ii, i, iv, iii

Q.119) Find out the correctly matched pair/pairs

Process	Temperature/Time
i) HTST	72deg C/15 sec
ii) LILT	63deg C/30 minutes
iii) Sterilization	90deg C/15 Sec
iv) UHT	100-118deg C/1-2 hrs

A) i & ii

B) iv

C) iii

D) iii & iv

Q.120) Consider the following statements

- i) Cold enrichment
- ii) Abortions in cattle
- iii) Food poisoning in man
- iv) Thermophilic organism

Which of the following statements is/are correct in case of *Listeria*

A) i, ii and iii

B) ii, iii and iv

C) i, iii and iv

D) i, ii and iv