

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

Booklet Serial No. **000477**

**Test Booklet Series**

**TEST BOOKLET  
VETERINARY ASSISTANT  
SURGEON - 2019  
Code No. 87**

**A**

**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**

**Test No. 87 - (A)**

**SEAL**



1. During lactation, milk production reaches to **peak at** (wks) in dairy bovines

- (A) 2-4
- (B) 4-6
- (C) 6-8
- (D) 8-10

2. The **oldest trap** of animal habitations is

- (A) Gully trap
- (B) Mason's trap
- (C) Bell trap
- (D) Buchan's trap

3. The **goat breeds** that produce longer and fine pashmina on sides and shoulders are

- 1) Gaddi
- 2) Chegu
- 3) Changthangi
- 4) Barbari

**Choose the Correct Answers:**

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

4. Which one of the following **pig breed** is being maintained under intensive system of rearing with standard breeding, feeding and management system, at National Research Centre on Pig, Guwahati.

- (A) Ghungroo
- (B) Duroc
- (C) LWY
- (D) Landrace

5. Consider the following with regards to **silent heat**:

- 1) It refers to normal follicular development and ovulation without the behavioural signs of oestrus.
- 2) Its frequency increases as lactation progresses
- 3) True silent heat may not be detected though rectal palpation of ovaries

**Which of the statements given above is/are correct?**

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

6. The **method of selection** used when inadequate information is available about the individual is

- (A) Performance testing
- (B) Progeny testing
- (C) Pedigree selection
- (D) Show ring testing



7. Match the following goat breeds with their **physical** character

<u>Breed</u>	<u>Character</u>
(a) Jamunapari	(1) Black & Pendulous ears
(b) Beetal	(2) Brown with light or dark brown patches
(c) Surti	(3) Roman nose
(d) Sirohi	(4) White in colour

Select the correct answer using the code below:

- (A) a-1, b-2, c-3, d-4  
(B) a-4, b-3, c-1, d-2  
(C) a-3, b-1, c-4, d-2  
(D) a-1, b-2, c-4, d-3

8. The best time to **breed** a dairy cow is

- (A) Towards end of the oestrus  
(B) After completion of the oestrus  
(C) At the beginning of the oestrus  
(D) Middle of the oestrus

9. Match the following **livestock & poultry** breeds with their recognized number as per National Bureau of Animal Genetic Resources (NBAGR), Karnal:

<u>Species</u>	<u>No of recognized breeds</u>
(a) Cattle	(1) 34
(b) Buffalo	(2) 43
(c) Goat	(3) 19
(d) Chicken	(4) 16

Select the correct answer using the code below:

- (A) a-1, b-2, c-3, d-4  
(B) a-2, b-3, c-4, d-1  
(C) a-2, b-4, c-1, d-3  
(D) a-1, b-2, c-4, d-3

10. Which one of the following pair is **incorrect**?

<u>Parameter</u>	<u>hormone</u>
(A) Leydig cell	Testosterone
(B) Ovulation	Luteinizing hormone
(C) Germ cells	Spermatozoa
(D) Follicular development	PgF <sub>2</sub>

11. Consider the following statements regarding **ration** formulation:

- Age, Pregnancy, milk production and physical activity must be considered when formulating ration
- It should contain all essential vitamins and minerals
- It should contain balance of protein, carbohydrates and fats

Which of the statements given above are correct?

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

12. The requirement of **air flow** for cow (cu.ft/hr)

- (A) 400  
(B) 5000  
(C) 4000  
(D) 500



13. Which one of the following statement is **incorrect** with regards to loose housing system?

- (A) Heat detection is easy
- (B) Cost of construction is high and expansion is possible
- (C) Animals get physical activity unlike in barn system
- (D) Separate milking parlour is not required

14. Arrange the following statements pertaining to Artificial insemination in **sequential order**

- 1) IVRI started producing AI born calves with the assistance from ICAR
- 2) Healthy calves were born at Palace dairy farm, Mysore
- 3) Under Key village scheme AI was used at a large scale throughout the country
- 4) Government of India opened four regional centers for implementation of AI

**Choose the correct answer:**

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

15. The amount required as **dry roughage** (with sufficient legumes) for a cross bred cow weighing 400 kg is

- (A) 10 kg
- (B) 6.5 kg
- (C) 3.5 kg
- (D) 4.9 Kg

16. Which of the following statement is correct regarding **triplecrossing** for the improvement of milk production in dairy cattle?

- (A) Three breeds are crossed without rotation
- (B) Crossbreds have 4/7 of inheritance in immediate sire
- (C) 3/7 of inheritance from the breed of maternal grand sire
- (D) 2/7 of heredity of pure breed

17. **Match** the following fodder/feed ingredients with probable **toxic substances**

**Fodder/feed ingredients**

**Toxic substances**

- |                      |                       |
|----------------------|-----------------------|
| (a) Groundnut cake   | (1) Mimosine          |
| (b) Cotton seed cake | (2) Trypsin inhibitor |
| (c) Gaur meal        | (3) Gossipol          |
| (d) Subabul          | (4) Aflatoxin         |

Select the correct answer using the code below:

- (A) a-4, b-3, c-2, d-1
- (B) a-2, b-3, c-4, d-1
- (C) a-1, b-3, c-2, d-4
- (D) a-4, b-1, c-2, d-3



18. Which of the following statements are true:

- 1) Maximum diameter of chromosome was observed in anaphase
- 2) The chromosome pairing occurs between homologous chromosomes
- 3) The centromere divide chromosome into two equal halves
- 4) Each chromosome has definite place in interphase

Choose the correct answer:

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

19. Match the **lactation cycle** with its suitable relationship given below

**Lactation cycle      Relationship**

- |                     |   |
|---------------------|---|
| (a) Early lactation | (1) Live weight constant                      |
| (b) Mid lactation   | (2) Body reserves regained for next lactation |
| (c) Late lactation  | (3) Body reserves used for milk production    |
| (d) Dry period      | (4) Rumen rehabilitation                      |

Select the correct answer using the code below:

- (A) a 2: b 1: c 4: d 3
- (B) a 2: b 1: c 3: d 4
- (C) a 4: b 1: c 2: d 3
- (D) a 3: b 1: c 2: d 4

20. Match the following Species of animals with their **Chromosomes (2n)**

**Species                      Chromosomes (2n)**

- |                            |        |
|----------------------------|--------|
| (a) Domestic cattle        | (1) 60 |
| (b) Domestic river buffalo | (2) 54 |
| (c) Domestic sheep         | (3) 38 |
| (d) Domestic swine         | (4) 50 |

Select the correct answer using the code below:

- (A) a-2; b-3; c-1; d-4
- (B) a-2; b-4; c-3; d-1
- (C) a-1; b-4; c-2; d-3
- (D) a-1; b-3; c-2; d-4

21. Consider the following statements and find the **correct one/s**

- 1) *Bostaurus* cattle are referred as Zebu cattle
- 2) Mandya is a Mutton breed of sheep of Karnataka
- 3) Clean milk production improves keeping quality of milk
- 4) *Bosindicus* cattle are tick resistant

Choose the correct answer:

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



22. Consider the following statements pertaining to functions of common extenders of semen:

- 1) Egg yolk milk will maintain osmotic tension and electrolyte balance
- 2) Glucose provides energy to the sperm cells
- 3) Buffers maintain neutral pH and osmotic pressure
- 4) Glycerol enhances keeping quality of sperm cells

**Choose the correct answer:**

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

23. Match the following:

Organ	Function
(a) Fallopian tube	(1) Site of semen deposition
(b) Uterine body	(2) Zygote formation
(c) Cervix	(3) Conceptus development
(d) Infundibulum	(4) Ova pick up

**Select the correct answer using the code below:**

- (A) a-4; b-3; c-2; d-1
- (B) a-2; b-4; c-3; d-1
- (C) c-1; b-3; a-2; d-4
- (D) a-1; b-3; c-2; d-4

24. The number of **maternity pens** required to that of breedable stock in a dairy farm is

- (A) About 1% of number
- (B) About 5% of number
- (C) About 10% of number
- (D) About 15% of number

25. Which of the following statement is incorrect for high yielding indigenous cows :

- 1) More susceptible to mastitis
- 2) Should be milked at 10hrs interval
- 3) Reaches peak yield 60-75 days
- 4) Milk contains low fat %

**Choose the correct answer:**

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

26. Strong **alkalis** are used to

- (A) Dissolve protein
- (B) Saponify fat
- (C) Welting soil
- (D) None of the above



27. Generally chlorine solution at 15 - 20° C contains **available** chlorine as
- Detergents
  - Cleaners
  - Sanitization
  - Inhibitors
28. Which of the following chemical is used to **preserve** the milk samples
- Calcium Chloride
  - Sodium Chloride
  - Ferric Chloride
  - Mercuric Chloride
29. **How many** parts by weight of 30 % fat cream and 4 % fat milk must be mixed to testing 5 % fat ?
- 2 parts of 30 % Fat cream and 15 parts of 4 % Fat milk must be mixed
  - 3 parts of 30 % Fat cream and 18 parts of 4 % Fat milk must be mixed
  - 1 part of 30 % Fat cream and 25 parts of 4 % Fat milk must be mixed
  - 1 part of 30 % Fat cream and 20 parts of 4 % Fat milk must be mixed
30. A dairy animal administrated with Antibiotic, the milk of the treated animal should **not be used** for at least :
- 24 hrs.
  - 36 hrs.
  - 48 hrs
  - 72 hrs.
31. The **first enzyme** discovered in milk having technological significance is:
- Peroxidase
  - Lysozyme
  - Lacto peroxidase
  - Oxidase
32. The most striking **difference** between normal milk and colostrom is
- Water and Fat content
  - Casein and Ash content
  - Globulin content
  - Albumin and globulin content
33. The average **specific gravity** of skimmed milk is
- 1.035 to 1.037
  - 1.028 to 1.030
  - 1.030 to 1.032
  - 1.032 to 1.034
34. The average requirement of **water / litre of milk** handled in a dairy plant is
- 1 to 2 litres
  - 3 to 5 litres
  - 7 to 10 litres
  - 11 to 15 litres



35. Which of the following statement is **incorrect** regarding Homogenization?
- It improves whitening power
  - It reduce the curd tension
  - It subdivide the fat globules
  - It improves the creamline
36. Which **organism** is transmitted indirectly, through contaminated water especially in brackish coastal waters?
- Vibrio cholera*
  - Salmonella typhi*
  - Shigella* spp
  - Pseudomonas* spp.
37. When an organism adversely affects the **environment of another organism** it is said to be
- Mutualism
  - Antagonistic
  - Symbiotic
  - Neutralism
38. The **probiotic organism** from following group do not have GRAS status
- Bifidobacteria*
  - Lactobacilli*
  - Lactococci*
  - Enterobacteria*
39. A **coiled tube** connected to each testis that is responsible for maturation, storage, and transport of sperm cells is
- Spermatic cord
  - Tunica dorts
  - Epididymis
  - External cremaster
40. Adulteration of milk with **Starch** can be detected by
- Resorcinol solution
  - Rosalic test
  - TCA solution
  - Iodine Solution
41. **Match** the List-I with List-II pertaining to **washing of cans**
- | List- I(operation)      | List- II(temperature)   |
|-------------------------|-------------------------|
| (a) Pre-rinse           | (1) 65 - 80 °C          |
| (b) Alkali Rinse        | (2) 90 -100 °C          |
| (c) Hot water Rinse     | (3) 90 – 105 °C         |
| (d) Steam Sterilization | (4) Ambient temperature |
| (e) Hot water Drying    | (5) 80 - 90 °C          |
- Select the correct answer using the code below:**
- d1 : e2 : b3 : a4 : c5
  - b1 : d2 : e3 : c4 : a5
  - d1 : a2 : e3 : b4 : c5
  - b1 : a2 : c3 : d4 : e5



42. Match the following products with suitable category

Category	Products
(a) Fat Rich Dairy Products	(1) Cream, Butter, Ghee
(b) Indigenous milk products	(2) Curd, Yoghurt, Kefir
(c) Icecream products	(3) Kulfi, Malai ka Baraf
(d) Fermented milk products	(4) Whey beverage, Lactose, Caseinates
(e) By-products	(5) Burfi, Peda, Gulabjamun

Select the correct answer using the code below

- (A) a1 : b5 : c3 : d1 : e4  
 (B) a1 : e2 : c3 : b4 : d5  
 (C) b1 : a2 : e3 : d4 : c5  
 (D) a1 : b2 : c3 : d4 : e5

43. In HTST pasteurization, arrange the suitable sequence of operations

- 1) Homogenization
- 2) Regeneration-II
- 3) Filtration
- 4) Cooling
- 5) Regeneration-I

Which of the following sequence is correct?

- (A) 1 : 5 : 3 : 2 : 4  
 (B) 2 : 4 : 5 : 3 : 1  
 (C) 5 : 3 : 2 : 1 : 4  
 (D) 3 : 2 : 1 : 4 : 5

44. Match the fat % of milk with type of milk

Type of milk	Fat percentage (%)
(a) Toned Milk	(1) 0.5
(b) DTM	(2) 3.0
(c) Standardized Milk	(3) 6.0
(d) Full fat milk	(4) 1.5
(e) Skim milk	(5) 4.5

Select the correct answer using the code below:

- (A) a 4 : c 2 : b 3 : e 1 : d 5  
 (B) b 4 : d 3 : e 1 : c 5 : a 2  
 (C) a 5 : b 2 : c 3 : e 4 : d 1  
 (D) b 1 : e 3 : d 2 : c 4 : a 5

45. Match the following temperature with suitable operation in a dairy plant

Operation	Temperature
(a) Chilling of Milk	(1) 19–22°C
(b) Air Conditioning	(2) Less than 5°C
(c) Ice cream Manufacture	(3) –6 to –7°C
(d) HTST Pasteurization	(4) 75–80°C
(e) Batch Pasteurization	(5) 63–66°C

Select the correct answer using the code below:

- (A) a1 : c2 : b3 : e4 : d5  
 (B) b1 : d2 : e3 : c4 : a5  
 (C) c1 : b2 : c3 : d4 : e5  
 (D) b1 : a2 : c3 : d4 : e5



46. Read the following statements:

- 1) WHO estimated the plague outbreak cost as a sum of \$ 2 billion and an exodus of 0.5 million people from Surat in 1994
- 2) A cow is in heat on an average for 12-24 hours and ovulation occurs 10-12 hours after the end of estrus
- 3) An inbred strain is produced by 5-10 consecutive matings of different breeds
- 4) Vitamin 'C' is an essential component of Guinea pig diet

Choose the correct answer:

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

47. An example of natural meat **proteolytic enzyme** is

- (A) Papain
- (B) Cathepsins
- (C) Bromolin
- (D) Ficin

48. Which of the following statements are **correct**

- 1) Fresh meat should be wrapped in transparent film with a low oxygen transmission rate and low moisture vapour transmission rate
- 2) In active packaging method, oxygen scavengers are employed to reduce the amount of oxygen in a package.
- 3) For packaging fresh meat a packaging film with an OTR value of 50 are more suitable
- 4) To prevent the freeze burn meat should be freezed slowly in moisture permeable packaging material

Choose the correct answer:

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

49. The act of killing in **Jewish method** of slaughter is referred as

- (A) Shechita
- (B) Shochet
- (C) Kosher
- (D) Terepha



50. The required **artificial light** for meat inspection area is
- (A) 110 Lux
  - (B) 220 Lux
  - (C) 540 Lux
  - (D) 700 Lux
51. Impairment of renal tubular **bicarbonate reabsorption** may result in
- (A) Respiratory acidosis
  - (B) Respiratory alkalosis
  - (C) Metabolic acidosis
  - (D) Metabolic alkalosis
52. Organisms belonging to the genus *Mycoplasma* are **resistant** to the action of
- (A) Tetracyclin
  - (B) Erythromycin
  - (C) Sulphonamides
  - (D) Penicillin
53. The vaccine which has the **risk** of residual virulence is
- (A) Live virus vaccine
  - (B) Peptide vaccine
  - (C) Recombinant vaccine
  - (D) Subunit vaccine
54. The **substance** present in placenta which acts as growth factor for *Brucella* is
- (A) Brucellin
  - (B) Erythritol
  - (C) Bacterin
  - (D) Ergosterol
55. Three day sickness is a **synonym** for
- (A) Bovine ephemeral fever
  - (B) Vesicular stomatitis
  - (C) Ulcerative stomatitis
  - (D) PI-3 virus infection
56. Which of the following test is most **sensitive**
- (A) ELISA
  - (B) IFAT
  - (C) PCR
  - (D) Western blot
57. Thiacetarsamide sodium is used to treat the following **parasitic infection**
- (A) Heart worm in dogs
  - (B) Lung worm in sheep
  - (C) Liver fluke in cattle
  - (D) Lung fluke in dogs



58. Consider the following statements:

- 1) Cold shortening occurs when muscle is chilled before the pH declines below 6.0
- 2) Benzopyrines are the carcinogenic substances found in meat products prepared with liquid smoke
- 3) Meat derived from edible visceral organs is termed as variety meat
- 4) Salts are added in cured meat to increase the yield

Which of the above statements is/are correct

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

59. Pharmaceutical product obtained from lung is

- (A) Myosin
- (B) Pepsin
- (C) Trypsin
- (D) Heparin

60. Polyneuritis in chick occurs due to the deficiency of

- (A) Riboflavin
- (B) Pantothenic acid
- (C) Vitamin E
- (D) Thiamine

61. Tissue **transferred** between genetically different members of the same species is called

- (A) Autograft
- (B) Isograft
- (C) Allograft
- (D) Xenograft

62. Which of the following pairs are **correctly matched**?

- 1) ORF - Pox viridae
- 2) Slow virus - Equine Infectious Anaemia
- 3) Rocky mountain - *Rickettsia rickettsii* spotted fever
- 4) Gas gangrene - *Pseudomonas mallei*

Choose the correct answer:

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



63. Fish are temporarily immobilized by **treating** water with

- (A) Tylosin tartrate
- (B) Thiabendazole
- (C) Tricainemethanesulfonate
- (D) Triclabendazole

64. Read the following statements and find the **correct** ones

- 1) FDA is concerned with approval of new drugs in veterinary medicine
- 2) Mercury is an example of biomagnification
- 3) Organophosphates produce residues in livestock products
- 4) FARAD is a data bank of poisons

**Choose the correct answer:**

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

65. International quarantine **period** for cattle is

- (A) 9 days
- (B) 15 days
- (C) 35 days
- (D) 90 days

66. Consider the following statements and indicate which is incorrect:

- 1) *Colon* is important in absorption of Water & Ions
- 2) *Coprophagia* is necessary for dogs
- 3) *Carcinoma* is a form of benign tumor
- 4) *Calcitonin* regulates phosphorus levels in blood

**Choose the correct answer:**

- (A) 1 alone
- (B) 1 and 3
- (C) 2 and 4
- (D) 2 alone

67. **TORCH** test identifies

- (A) Toxoplasmosis, Rabies, Cytomegalovirus, herpes simplex and HIV
- (B) Toxocariosis, Rubella, Cat scratch disease, Histoplasmosis and HIV
- (C) Toxoplasmosis, Rubella, Cytomegalovirus, Herpes simplex and HIV
- (D) Toxocariosis, Rabies, Cat scratch disease and herpes simplex, and HIV.



68. Select the gold standard tests to diagnose the following infections

**Disease Diagnostic test**

- |                  |        |
|------------------|--------|
| 1) Rabies        | -FAT   |
| 2) Leptospirosis | -MAT   |
| 3) Brucellosis   | -STAT  |
| 4) FMD           | -ELISA |

**Choose the correct answer:**

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

69. Which of the following combinations of disease and occupational hazards are correct

**Disease Occupation**

- |                  |                      |
|------------------|----------------------|
| 1) Nocardiosis   | -Brick manufacturers |
| 2) Chlamydiosis  | -Aviary workers      |
| 3) Anthrax       | -Aviation employees  |
| 4) Actinomycosis | -Nursing             |

**Choose the correct answer:**

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

70. The following chemical is used to euthanize dogs

- (A) Zinc Sulphate  
(B) Magnesium Sulphate  
(C) Ammonium Sulphate  
(D) Sodium Chloride

71. Phrenic artery supplies blood to

- (A) Liver  
(B) Stomach  
(C) Kidney  
(D) Diaphragm

72. From dorsal to ventral, pelvic structures of females are arranged in the order of

- (A) Vagina, rectum, urethra  
(B) Rectum, urethra, vagina  
(C) Rectum, vagina, urethra  
(D) Urethra, rectum, vagina

73. Continuous use of purebred sire on non-descript female is

- (A) Cross breeding  
(B) Top crossing  
(C) Inter se mating  
(D) Grading up



74. Which vitamin is maximum in meat

- (A) Vit.B1
- (B) Vit.B2
- (C) Vit.B12
- (D) Vit.A

75. Choose the correct post prophylactic vaccination schedule of rabies

- (A) 0,3,7,14,21 days
- (B) 0,2,7,14,21 days
- (C) 0,3,7,20,21 days
- (D) 0,7,14,21,38 days

76. Fried egg colonies are seen in

- (A) Anaplasma
- (B) Mycoplasma
- (C) Rickettsia
- (D) Chlamydia

77. Solidifying temperature of Agar medium is

- (A) 45°C
- (B) 45°F
- (C) 98°C
- (D) 55°C

78. Which one of the following is considered as preneoplastic stage

- (A) Anaplasia
- (B) Metaplasia
- (C) Hyperplasia
- (D) Dysplasia

79. Herniation of spinal cord is called as

- (A) Enterocoele
- (B) Rachaeocoele
- (C) Brachieocoele
- (D) Metrocoele

80. Complete absence of melanin pigment is called as

- (A) Albinism
- (B) Acanthosis nigricans
- (C) Vitiligo
- (D) Amelanosis

81. The antidote for HCN poisoning in cattle is

- (A) Atropine SO<sub>4</sub>
- (B) Sodium thiosulphate
- (C) PAM
- (D) Normal saline



82. Which of the following is appropriate with reference to making routine observations and continuous collection of data on a disease:
- Surveillance
  - Census
  - Survey
  - Monitoring
83. Frequent urination is called as
- Pollakiuria
  - Pyuria
  - Proteinuria
  - Haemoglobinuria
84. Newly recognized chicken breed **UTTARA** hails from the state of
- Jharkhand
  - Chhattisgarh
  - Uttarakhand
  - Telangana
85. T' shaped uterus is present in which animal
- Cow
  - Bitch
  - Mare
  - Ewe
86. The **site** of fertilization in fowl is
- Infundibulum
  - Isthmus
  - Magnum
  - Cloaca
87. Which semen has least forms of abnormal sperms
- Stallion
  - Dog
  - Buck
  - Ram
88. Catgut is prepared from submucosal layer of the intestine of
- Rabbit
  - Cat
  - Sheep
  - Cattle
89. Arthritis is seen in Haemorrhagic Septicemia in which of the following species
- Cattle
  - Sheep
  - Horse
  - Pig



90. Which of the following disease is not a Zoonotic disease  
 (A) Anthrax  
 (B) Tetanus  
 (C) Tuberculosis  
 (D) Brucellosis
91. Match the following:
- | Type of microscope | Used for observing                 |
|--------------------|------------------------------------|
| (a) Bright field   | (1) FISH Slide                     |
| (b) Electron       | (2) Unstained Leptospira organisms |
| (c) Dark field     | (3) Embryo                         |
| (d) Fluorescent    | (4) Virus                          |
| (e) Inverted       | (5) Cell division                  |
- Choose the correct answer:**  
 (A) a5 : c2 : b1 : e3 : d4  
 (B) b1 : d2 : e3 : c4 : a5  
 (C) b4 : a5 : c2 : d1 : e3  
 (D) a1 : b4 : c3 : d2 : e5
92. Consider the following statements:  
 1) Ig M immunoglobulin having four constant heavy chains.  
 2) Ig M provides passive immunity to calves fed with colostrums.  
 3) Ig G are created and released from plasma B cells  
 4) Ig A protects body from external infections
- Choose the correct answer:**  
 (A) 1, 2 & 3  
 (B) 2 & 3  
 (C) 1, 2 & 4  
 (D) 2, 3, & 4
93. Type of postmortem examination required for veterolegal cases is  
 (A) Cosmetic  
 (B) Complete  
 (C) Incomplete  
 (D) Superficial
94. Transitional cell tumours are related to which of the following plant poisoning  
 (A) Spinach  
 (B) Cotton  
 (C) Sorghum  
 (D) Brackenfern
95. Under which section of Indian Penal Code is Bestiality a punishable offence:  
 (A) 420  
 (B) 422  
 (C) 370  
 (D) 377
96. Acute form of glanders is seen in  
 1) Carnivores  
 2) Mules  
 3) Horses  
 4) Donkeys
- Choose the correct answer:**  
 (A) 1 alone  
 (B) 1 and 3  
 (C) 3 alone  
 (D) 2 and 4



97. Which of the following is a most commonly used cryoprotectant for freezing mammalian cell lines?

- (A) DMSO
- (B) Glycerine
- (C) Calcium chloride
- (D) Potassium chloride

98. Match the following

- |                               |  |
|-------------------------------|--|
| (a) Restriction endonucleases | (1) Small DNA segments used in DNA finger prints |
| (b) Ligases                   | (2) Molecular scissors                           |
| (c) Probe                     | (3) Vector                                       |
| (d) Cosmid                    | (4) Molecular stitchers                          |

Choose the correct answer:

- (A) a,2; b,4; c,1; d,3
- (B) a,1; b,2; c,3; d,4
- (C) a,3; b,4; c,1; d,2
- (D) a,2; b,1; c,4; d,3

99. Colon is important in absorption of

- (A) Simple sugars
- (B) Peptides & Amino acids
- (C) Cholesterol & Fatty acids
- (D) Water & Ions

100. Losses of nutrients which occur in hay making in rainy season are called as

- (A) Leaching
- (B) Bleaching
- (C) Shattering
- (D) Fermentation

101. Total number of National Parks in J&K?

- (A) 3
- (B) 4
- (C) 5
- (D) 7

102. Which Ministry bans the cattle slaughter across India?

- (A) Ministry of Environment
- (B) Ministry of Civil Aviation
- (C) Ministry of Human Resource Development
- (D) Ministry of agriculture and Farmer welfare



103. Which Committee has been constituted by the Union Government to monitor the regional air connectivity scheme "UDAN"?

- (A) VL Mathew Committee
- (B) Nivya Murthy Committee
- (C) RN Choubey Committee
- (D) Deepak Sajwan Committee

104. Union Ministry of Environment, Forests and Climate Change (MoEFCC) in association with the United Nations Development Programme (UNDP) launched the SECURE Himalaya Project to ensure Conservation of Locally and Globally significant Biodiversity, Land and Forest resources in High Himalayan Ecosystem. This is spread over which of the following four States ?

- (A) Uttaranchal, Jammu and Kashmir, Bihar and Sikkim
- (B) Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Arunachal Pradesh
- (C) Punjab, Jammu and Kashmir, Uttarakhand and Sikkim
- (D) Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Sikkim

105. Who is the Chairperson of the SKIMS (Sher-i-Kashmir Institute of Medical Sciences) governing body that performs the role of the Cabinet for the Semi-Autonomous Super-Specialty Hospital and the Deemed University.

- (A) Chief Minister of state
- (B) Governor of state
- (C) Director SKIMS
- (D) None of the above

106. Shri Jawaharlal Kaul was awarded with Padma Shri, one of the highest civilian honours of India, during the year 2016 for meritorious work in the fields of

- (A) Art & Education -Journalism
- (B) Literature & Social work - Journalism
- (C) Literature & Education -art
- (D) Literature & Education -Journalism

107. Which of the following National Parks of India are declared as World Heritage by UNESCO?

- (1) Keoladeo National Park
- (2) Sundarbans National Park
- (3) Kaziranga National Park
- (4) Ranthambore National Park

**Select the correct answer using the code given below.**

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



108. Accumulation of which one of the following in the muscles of sprinters leads to cramp?
- (A) Lactic Acid
  - (B) Ethanol
  - (C) Pyruvic Acid
  - (D) Glucose
109. According to the Election Commission of India, in order to be recognized as a 'National Party', a political party must be treated as a recognized political party in how many States?
- (A) At least two States
  - (B) At least three States
  - (C) At least four States
  - (D) At least five States
110. The Ministry of Communication has recently launched a Pan India scholarship programme for school children called 'DeenDayal SPARSH Yojana'. The objective of the scheme is to increase the reach of
- (A) sports
  - (B) philately
  - (C) music
  - (D) web designing
111. In November 2017, an Indian short film **The School Bag** won the Best Short Film Award at the South Asian Film Festival (SAFFM) held at Montreal. Who among the following is the director of the film.
- (A) Anurag Kashyap
  - (B) Dheeraj Jindal
  - (C) Sujoy Ghosh
  - (D) Samvida Nanda
112. The headquarter of Animal Welfare Board in India is located in
- (A) Ballabgarh
  - (B) New Delhi
  - (C) Mumbai
  - (D) Chennai
113. Livestock census was started in which year in the country
- (A) 1919
  - (B) 1948
  - (C) 1950
  - (D) 1961
114. The Father of animal breeding is
- (A) Gregor John Mendel
  - (B) T.H. Morgan
  - (C) Robert Bakewell
  - (D) Watson Crick



115. What is the theme of tableau shown by ICAR on Republic Day on Rajpath this year (2019)

- (A) Conservation of indigenous breed
- (B) Post harvest processing
- (C) Animal product processing
- (D) Bee Keeping

116. What is the J&K state breeding policy for sheep and goat

- (A) Selective Breeding
- (B) Cross breeding
- (C) Line Breeding
- (D) Upgrading

117. The first successful cloning of livestock was done in 1996 with

- (A) cattle
- (B) sheep
- (C) swine
- (D) goats

118. The best quality wool in India is produced from

- (A) Merino Sheep
- (B) Changtangi Goat
- (C) Kashmir Sheep
- (D) Angora Rabbit

119. How many breeding farms for various species of animals and poultry are there in the J&K State?

- (A) 50
- (B) 24
- (C) 34
- (D) 44

120. Which disease of animal/ poultry is covered under the World Development Aided Programme running in the state

- (A) Coccidiosis
- (B) Tuberculosis
- (C) Black quarter
- (D) Avian Influenza