পশ্চিমবঙ্গ প্রাণী ও মৎস্য বিজ্ঞান বিশ্ববিদ্যালয়

WEST BENGAL UNIVERSITY OF ANIMAL AND FISHERY SCIENCES



কলকাতা KOLKATA 2022



B.V.Sc. & A.H. First Professional Regular Annual Examination

Subject – Livestock Production Management

(Paper-I)

Theory Examination (External)

Full marks: 100

Time: 03 hours

Registration No.- of

Roll No. - V/20 /

Signature of the Invigilator

Candidates are required to check the continuity of the question paper before start answering. Answer the question in the space provided. The invigilator if required will supply extra sheets. Special credit will be given for answer that are brief and to the point. Marks will be deducted for spelling mistakes, untidiness and poor handwriting.

Marks obtained

Signature of the examiner

1st Professional B.V.Sc. & A.H. Annual Composite Examination, 2022

Full marks: 100

Class: B.V.Se. & A.H. Subject: Livestock Production Management Paper-I Course No.: Unit-1, 2, 3, 4 and 5 Time: 3 hours

Note: 1) All questions of Section 'A' are compulsory. 2) Draw a well labeled diagram wherever necessary.

| Q.1. F | <u>Section-'A' (Objective type questions)</u> ill in the blanks with most suitable words | (0.5 x 20 = 10) |
|--------|---|-------------------|
| i. | Haryana is the best cattle breed in India. | |
| ii. | Castrated adult male cattle are called as | |
| iii. | Adult male goat is called as | |
| iv. | Gujarat is the home tract of breed of buffalo. | |
| v. | The famous milk producing buffalo breed is found in Punjab. | |
| vi. | is the Jersey of the goat breed because high percentage of fat. | |
| vii. | Indian non-descript cattle are popularly known as | |
| viii. | The newborn cattle are called | |
| ix. | is the popular method of identification of large animal. | |
| x. | The gestation period of buffalo is days whereas cows are | days. |
| xi. | The gestation period of goat is days and act of parturition is called as | |
| xii. | is the smallest andis the largest exotic cattle breed. | |
| xiii. | Female bovine before its first calving is known as | |
| xiv. | Livestock transported by plane, ship, railway, and | |
| xv. | breed of cattle originated in the Gir forest of south Kathiawar Gujarat. | |
| xvi. | Mohair produced by breed of goat. | |
| xvii. | Pashmina produced by breed of goat of Himalayan region. | |
| xviii. | is the castrated male cattle. | |
| xix. | Gestation period of buffaloes are days. | |
| xx. | The meat of cattle is known as | |
| Q. 2) | Choose the most appropriate answer from the options given below ($$) (0.5 | $5 \ge 20 = 10$ |
| i. | King of fodder crop is | |
| | a. Lucerne b. Oat c. Berseem d. Maize | |
| ii. | Queen of fodder crop is | |
| | a. Lucerne b. Oat c. Berseem d. Maize | |

| iii. | Quantity of colostrum to be fed to a new born calf is a. 1/15 th of body weight b) 1/10 th of body weight c | c) 1-8 th of body | weight d) 1/5 th of body weight |
|-------|--|---------------------------------|--|
| iv. | Black Gold of India is a. Buffalo b) Cattle | c) Goat | d) Sheep |
| v. | The total livestock population in India as 20 th Livestock a. 535.82 million b) 530 million c) | c Census is) 540 million | d) 525.50 million |
| vi. | Cattle population of India as per 20 th Livestock Census, 20 a. 190.1 million b) 192.52 million c) 1 | 019 is 195.2 million | d) None of the above |
| vii. | Bullock working capacity is about a. 1 H.P b) 0.75 H.P c) | 0.5 H.P | d) 0.25 H.P |
| viii. | The average speed of a pair of bullock pulling a cart is aro a. 4-5 km/hr b) 8 km/hr c) 10 km/hr | ound d) 2-3 l | km/hr |
| ix. | The work of a tractor can be replaced by a. 10 Bullocks b) 20 bullocks c) 15 bullock | ts d) 30 bulloo | cks |
| x. | Total number of Buffalo breeds in India as per BRC, ICAF a. 15 b) 13 c) | R-NBAGR`202) 19 | 21 is d) 20 |
| xi. | Meat of Sheep is known as a. Mutton b) Chevon c) Beef | d) Cara-beef | |
| xii. | "All beings are fond of themselves, they like pleasure, the want to live long. To all life is dear; hence their life should a. Mahavira b) Lord Buddha c) Ashoka | | ' Who have quoted this: |
| xiii. | "The Greatness of a Nation and its moral progress can be a. Mahavira b) Lord Buddha c) Ashoka | e judged by the c) Mahatma (| |
| xiv. | Fourth "R" mentioned in CPCSEA is a. Replacement b) Reduction c) Refinement | d) Rehabilita | tion |
| xv. | 15. Panther belong to which family a. <i>Canidae</i> b. <i>Felidae</i> | c. Cervidae | d. Suidae |
| xvi. | Kaziranga National Park is famous for a <i>Rhinoceros sondaicus</i> b. <i>Rhinoceros unicornis</i> o | c. Didermocerı | us sinus d. Diceros bicornis |
| xvii. | CZA is the highly empowered statutory body established a. 1992 b) 1993 c) 197 | | d) 1973 |

| | , | | | | | |
|--------|---|------------------------------|--------------------------------|---------------------|--------------------|---------|
| xviii. | The headquarter of India | in board of wildlif | e (IBWI) is located in | | | |
| xix. | a. chemiai | b) Mumbai | c) Kolkatta | d) Delhi | | |
| | The headquarter of FAC a. Rome |) is located in b) Geneva | | , | | |
| | | | c) New York | d) London | | |
| XX. | The headquarter of WH a. Rome | | | | | |
| | a. Kome | b) Geneva | c) New York | d) London | | |
| Q. 3) | State whether the followi | ng statements are | e True or False | | $(0.5 \ge 20 = 1)$ | 0) |
| i. | Act of mating in cattle is | s known as couplin | ıg. | | (|) |
| ii. | Female animals that have not bred is known as Brood mare. | | | | (|) |
| iii. | Kangaroo falls under sul | o-order Rodentia. | | | (|) |
| iv. | Urea has 46% Nitrogen. | | | | (|) |
| v. | A thick and muscular ne | ck indicates heavy | v speed while a slender and si | newy neck denotes | draught capaci | , tv |
| | | | | , | (|) |
| vi. | Crossbred bullocks can | tolerate excessiv | ve heat hence they are bett | ter draught anima | l compared to | local |
| | bullocks. | | | C C | (|) |
| vii. | Chromosome number of | | | | (| Ś |
| viii. | The size rather than the age of a dairy heifer at breeding time is important. | | | (|) | |
| ix. | Exotic and crossed heifers attain age of breeding later than indigenous one. | | | (|) | |
| х. | Buffaloes are believed to have been domesticated around 5000 years ago in the Indus Valley. () | | | | | |
| xi. | First food animal to be d | omesticated by ma | an is Goat. | | (|) |
| xii. | Surti Buffalo has sickle | shaped horn. | | | (|) |
| xiii. | Concentrate feed contain more than 18% of crude fibres. | | | | (|) |
| xiv. | Labour cost is a type of variable inputs cost of a dairy farm. | | | (|) | |
| XV. | The Animal Welfare Bo | ard of India was e | established in 1962 under Se | ction 4 of the Pre- | vention of Crue | lty to |
| | Animals Act, 1960. | | | | (|) |
| xvi. | Well-known humanitaria | an Smt. Rukmini | Devi Arundale was instrume | ental in setting up | the Animal W | elfare |
| | Board of India and was i | ts first chairman. | | | (|) |
| xvii. | Rhinoceros belongs to P | erissodactyla order | r. | | (|) |
| xviii. | NRC on Yak is located in Punjab. | | | | (|) |
| xix. | NRC on Mithun is locate | ed in Guwahati. | | | (|) |
| XX. | NBAGR is located at Ka | rnal, Haryana. | | | (|) |
| | | | | | | |

| Sl. No. | Column A | Answer from column B | | Column B |
|------------|---|----------------------|----|------------|
| i. | Milch breed of cattle | | a. | Amritmahal |
| ii. | Drought purpose breed of cattle | | b. | Sahiwal |
| iii. | Number of goat breeds in India | | c. | Hariana |
| iv. | Dual purpose breed of cattle | | d. | Lucerne |
| v. | Green Gold | | e. | Haryana |
| vi. | Number of Cattle breed in India | | f. | 50 |
| vii. | Wild life Protection Act | | g. | 1960 |
| viii. | Prevention of cruelty to animals Act | | h. | 34 |
| ix. | Animal welfare Board of India | | i. | 1992 |
| x. | Project elephant | | j. | 1972 |

Q. 4) A. Select the correct answer for Column A from Column B and write in the space provided $(0.5 \times 10 \approx 5)$

B. Select the correct answer for Column A from Column B and write in the space provided (0.5 x 1=5)

| Sl. No. | Column A | Answer from column B | | Column B |
|---------|--------------|----------------------|----|-------------------------|
| i. | Acacia leaf | | a) | 54 chromosomes |
| ii. | Subabul | | b) | 60 chromosomes |
| iii. | Sheep | | c) | Murrah |
| iv. | Goat | | d) | Kangayum |
| ٧. | Mysore breed | | e) | Mimosines |
| vi. | Toggenburg | | f) | Cyanoglucosides |
| vii. | Sambar | | g) | Rusa unicoplor |
| viii. | Nilgai | | h) | Switzerland |
| ix. | Corriedale | | i) | Baselaphus tragocamelus |
| х. | Delhi breed | | j) | New Zealand |

Section-'B' (Descriptive answer type questions)

Q.5. Write short note (any four)

- i. SWOT analysis of Indian Dairy Industry
- ii. Pulsation rate and pulsation ratio
- iii. Transition period in Dairy cow
- iv. Transportation of farm animals
- v. Project tiger
- vi. Project Elephant
- vii. Role of Veterinarians in animal welfare.
- viii. Animal Welfare Board of India (AWBI)

 $(4x \ 3 = 12)$

| Q. 6. Descriptive type question (any four) | (12 x 4 = 48) | | | | |
|--|----------------|--|--|--|--|
| Q.A. i) Write the basic principles of Livestock Production Management. | 06 | | | | |
| ii) Write the basic principles of animal housing. | 06 | | | | |
| Q.B. i) What is the importance of green fodder preservation? | 06 | | | | |
| ii) What are the different types of milking practices (methods) in India? | 06 | | | | |
| Q.C. i) Mention the common six types of barriers that are generally used in case of zoo animal | ls. 06 | | | | |
| ii) Explain briefly about the restraining methods that are used in wild or Zoo animal hand | | | | | |
| Q.D. i) Write the common offences against welfare of animals. | 06 | | | | |
| ii) Discuss animal welfare concept in commercial livestock production | 06 | | | | |
| Q. E. What are the different types of animal housing system practiced in India? Write the merits and demerits of a loose | | | | | |
| housing system. | (12 marks) | | | | |
| Q. F. What do you mean by silage? What is the importance of silage? Write the method of silage preparation. | | | | | |
| | (12 marks) | | | | |

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