1.F,S, EXAM-(M) 2018 FSI-P-AHVS

ANIMAL HUSBANDRY AND VETERINARY SCIENCE Paper - I
Time Allowed: Three Hours Maximum Marks : 200

Question Paper Specific Instructions
Please read each of the following instructions carefully before attempting questions:
There are EIGHT questions in all, out of which FIVE are to be attempted.
Questions no. I and 5 are compulsory. Out of the remaining SIX questions, THREE are to be attempted selecting at least ONE question from each of the two Sections A and B. Attempts of questions shall be counted in sequential order. Unless struck off attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.'
All questions carry equal marks. The number of marks carried by a question/part is indicated against it.
Answers must be written in ENGLISH only.
Neat sketches may be drawn, wherever required.

SECTION A

Ql. Write short notes on the following: 8x5=40
Resemblance between relatives 8
Hormonal control of mammary gland development 8
Starch equivalent 8
Biological value 8
Herd recording 8
ESIIP-AHVS 1

Q2. (a) What do you mean by feeding experiments ? How can digestibility of maize fodder be determined in bullocks? 3+12=15

An adult sheep ate 2 kg berseem hay containing 90% dry matter and
12% crude protein and excreted 3 kg faeces containing 30% dry matter
and 1.5% crude protein. Calculate the digestibility coefficient of dry
matter and crude protein of berseem hay. 15

Write the deficiency symptoms of Vitamin E in poultry. 10

Q3. (a) What is grading-up ? Explain the advantages and limitations of
grading-up in cattle. 20

(b) Explain, Mendel's law of independent assortment with the help of a -
checker board. 20

Q4. (a) Explain pre-natal and post-natal growth. How is the body weight gain estimated from body measurements ? Enumerate the factors affecting
the growth of animals. 10+10+5=25

(b) Discuss the functions of stomach and liver in ruminants. 15

FSI-P-ANVS 2

SECTION B

Q5. Differentiate between the following: 8x5=40
Qualitative and Quantitative characters 8
Crude protein and True protein 8
Group feeding and Individual feeding 8
Outcrossing and Top crossing 8
Flushing and Fattening 8

Q6. (a) Enumerate the factors affecting the efficiency of a dairy cow. What is personnel management ? Write the functions of management. 10+5+5=20

(b) Work out a cropping scheme and determine the land requirement for ensuring the supply of green fodder round the year for a herd of 50 cows
and their followers. 20

Q7. (a) Discuss the feeding schedule for a buffalo calf from birth to 3 months
age. 15

Write the interrelationships between minerals and vitamins. 15

What is calorie : protein ratio ? Write the energy and protein
requirements of broilers as per BIS. 10

Q8. (a) What is heterosis ? Explain the genetic basis of heterosis. 15

Calculate the heterotic effect in F1 and F2progenies considering the
milk yield in 300 days of Sahiwal and Holstein-Friesian cows as
1600 kg and 5600 kg, respectively, and of their F1 crossbreeds as
3900 kg 10

What do you mean by cross-breeding ? Discuss the various types of cross-breeding. Write the merits and demerits of cross-breeding. 3+6+6=15

FSI-P-AHVS 3