Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination 2011
Subject Title: Rural Sociology (Theory)
Course Code: RSC-101
Full Marks –55; Time: 3.0 Hours

(Figures in the right margin indicate full marks. Answer any **THREE** questions from each section where question number **8** is compulsory. Use separate answer script for each section.)

SECTION-A

1. 'Veterinary Science and Rural Sociology are in separable. One is complementary for another'- illustrate.   9

2. Animal welfare is related with cultural religion and ethics-discuss   9

3. Define culture. Discuss the concept of cultural lag citing example from Bangladesh society.   9

4. Write short notes on(any two)   (4.5+4.5) = 9
   a) Pastoral Economy, b) Human Resource, c) Agricultural economy

SECTION-B

5. Do you think the domestication of animal and ownership of land are the two indexes of social status in rural Bangladesh? Give reasons infavour of your answer.   9

6. What is social change? Write the indicator of social change.   9

7. What is caste? Distinguish caste, status and class.   9

8. "Exposure of the contribution of female is much higher than male in the subsistence livestock farming sector in Bangladesh"–Justify the statement in the light of gender issue.   10

(Figures in the right margin indicate full marks. Answer **THREE** questions from each section of which question number **One** and **FIVE** are compulsory. Use separate answer scripts for each section.)

Section-A

1. a) Define following terms (any ten):   8
      i) Prolificacy, ii) Persistency, iii) Creep, iv) Weaning, v) Livestock, vii) Poult, viii) Steer, ix) Pullet, xi) Crone, x) Broodmare, xi) Heifer, xii) Piglet, xiii) Saggy.
    b) Mention the common vices of farm animals.   3

2. a) Write down the scope of animal science.   2
    b) State the latest population of cattle, buffalo, sheep, goat, chicken and duck in Bangladesh.   4
    c) Describe the contribution of livestock to Agricultural GDP. Explain how livestock GDP can be continuing for positive growth of the Agricultural GDP in Bangladesh Economy?   6

3. a) What do you mean by "cruelty to animals"?   2
    b) What are the different forms of cruelty to animals commonly found in Bangladesh?   4
    c) How "cruelty to animals" could be reduced through livestock extension in Bangladesh?   6

4. a) Why goat is known as "Poor man's cow"?   2
    b) Classify goat breeds according to location.   4
    c) Name two goat breeds which are famous for fiber production. Shortly describe about the goat breed 'Saanen' and 'Jamnapari'.   6

Section-B

5. a) What are the conditions for domestication of farm animals?   2
    b) Write down the name of meat and utility of different animal species.   4
    c) What do you mean by domestication? State the effects of domestication on human civilization.   5

6. a) Define 'ecology'. Shortly describe 'animal ecology' with it's methods of approach and related subjects study.   4
    b) What do you mean by "Psychology" and "Behaviour" of animal?   3
    c) Clarify different behaviours of farm animal.   5

7. a) Write down the importance of sheep rearing. Classify sheep based on type of wool production.   4
    b) Shortly describe about the origin and distribution of sheep.   3
    c) Give a description of one fine wool and one carpet wool producing sheep breed. 5

8. a) Define 'breed' and 'type' of cattle. Classify cattle according to purpose with examples.   4
    b) Shortly describe about different body condition scores of dairy cattle.   3
    c) Define farm management. Write down the qualification of a farm manager.   5

Chittagong Veterinary and Animal Sciences University

DVM 1st Year 1st Semester Final Examination 2011
Subject Title: Gross Anatomy-I (Theory)
Course Code: VGA-101
Full Marks –70; Time: 3.0 Hours

(Figures in the right margin indicate full marks. Answer any **FIVE** questions from each section. Use separate answer script for each section.)

SECTION-A

1. (a) Define Veterinary Anatomy.   2
   (b) Write down the scopes of Veterinary Anatomy in Veterinary Science.   2
   (c) Mention the divisions of Systemic Anatomy with example.   3

2. (a) Classify bones according to shape and function with example.   4
   (b) Mention the bony cavities found in the skull with their contents.   3

3. (a) Name the muscles that are involved in respiration and defecation.   4
   (b) Differentiate between tendon, ligament and aponeurosis.   3

4. (a) List the intrinsic and extrinsic muscles of the tongue. Write down the blood and nerve supply of the tongue.   4
   (b) Mention the foramina of diaphragm with their contents.   3

5. (a) Draw and label a compound stomach of ox.   2
   (b) Briefly describe the fore stomach of ox.   5

6. (a) Sequentially list the segments of digestive tract of chicken.   2
   (b) Describe the right lung of goat with neat diagram.   5

SECTION-B

7. (a) Define a typical vertebra.   2
   (b) Why atlas and axis are called atypical vertebra?   2
   (c) Mention the vertebral formula of ox, dog and chicken.   3

8. (a) Draw and label a typical synovial joint.   3
   (b) Name the ligaments of stiffle joint.   2
   (c) Write a short note on ligamentum nuchae.   2

9. (a) Define Synsarcosis.   1
   (b) How the Synsarcosis is formed?   3
   (c) Mention the boundary of the muscular canal with its contents.   3

10. (a) Write down the boundary of the jugular farrow with its contents.   4
    (b) List the contents of abdominal and pelvic cavities.   3

11. (a) Mention the course of oesophagus of goat.   2
    (b) Mention the salivary glands of cattle with their locations and opening sites.   5

12. (a) Define vertebral column and vertebral canal.   3
    (b) Mention the contents of vertebral canal.   1
    (c) Draw and label the visceral surface of liver of goat.   3

(Figures in the right margin indicate full marks. Answer any **Five** questions from each section. Use separate answer script for each section.)

Section-A

1. (a) Define cell, organelles and non organelles.   3
   (b) Draw and label an animal cell.   4

2. (a) Mention basic tissues with their examples.   3
   (b) Write down the characteristics of epithelial tissue.   4

3. (a) Define synapse.   1
   (b) Draw and label different type of neurons.   6

4. (a) Why hyaline cartilage looks like glassy in appearance?   2
   (b) Differentiate connective tissue fibers with their staining properties.   5

5. (a) What is fertilization?   1
   (b) Write down the phases of fertilization with diagrams.   4
   (c) Draw and label a blastocyst.   2

6. (a) Mention the microscopic structure of skeletal muscle cell.   3
   (b) What is sarcomere?   1
   (c) Make differences between smooth muscle cell and cardiac muscle cell.   3

Section-B

7. Differentiate following terms:
   (a) Prokaryote and Eukaryote.   2
   (b) Stratified squamous epithelium and Transitional epithelium.   3
   (c) Exocrine gland and Endocrine gland.   2

8. (a) Write down the major derivatives of ectoderm, lateral mesoderm and endoderm.   3
   (b) Describe the early formation of neurolation.   4

9. (a) Draw and label the osteon.   2
   (b) What are the type of leukocytes? Write down the characteristics of those cells with figures.   5

10. (a) What do you mean by cytoskeleton?   2
    (b) Mention the function of steriocilia, cilia and microvilli.   3
    (c) What is the chemical composition of cell membrane?   2

11. (a) What do you mean by neuroglia? List the glial cells.   2
    (b) Which supportive cells are responsible for formation of blood –brain barrier in nervous system?   3
    (c) Write down a short note on nerve trunk.   2

12. (a) What are the compositions of connective tissue?   3
    (b) Mention the cells of connective tissue.   2
    (c) Write down the functions of fibroblast.   2

(Figures in the right margin indicate full marks. Answer all the questions from both sections. Use separate answer script for each section.)

SECTION-A

1. **Use the right form of verbs in the following sentences:**   5
    a) I could no more have trusted him away than if he (be)
    b) He (be) at the orphanage since he was four.
    c) She proceeded as through I (not speak).
    d) I got the work (do).
    e) I (be) you, I would not have done this.

2. **Complete the following sentences as directed:**   5
    a) I feel _____ crying.
    b) _____ he is a scholar is known to all.
    c) I can not help _____ hard.
    d) Pen _____ the line.
    e) He got _____ to drinking tea.

3. **Find out determiner, modifier, head word, participle phrase, prepositional phrase and**   5
    infinitive phrase in the following sentence:
    The angry soldier, holding his gun, tried to defend his area from the invasion of the enemies.

4. **Correct the following sentences:**   10
    a) Fifty miles are a long distance.
    b) Ill news run fast.
    c) Her beauty charm all.
    d) Be true to your words.
    e) He as well as his brothers have done it.
    f) Either of the two boys are guilty.
    g) I, you and he is do blame.
    h) I had need the book before I burn it.
    i) Even though I didn't understand, I keep smiling.
    j) You seem to have miss the train.

5. You just have had your cell phone stolen in the Sanmar Shopping Mall. Stating this concern,   10
    write a letter to the Assistant Super of Police of your nearly community.

SECTION B

6. Write a brief story on your life at CVASU campus.   5

7. Write a paragraph on any one of the following: 10
    i. Eve teasing
    ii. The person you dislike most

8. **Make precise of the following passage:**   10
    All higher animals express their pleasure when they are actually pleased. Man also express
    pleasure, when he has to, but sometimes when he is not actually pleased. In Japan for example,
    people hard to smile before king and wives hard to keep smiling before family members. In
    Korea, people had not just smiling, but they had to tremble visibly before the emperor to
    express esteem. In England a well trained butler never smiles before his employers. In China,
    people at least required to eat making sound showing that they are contented. It reveals that,
    man sometimes is manipulated by situation.

9. **Amplify anyone of the following ideas:**   10
    i. The more the merrier
    ii. Nearest to the church, farthest from God
    iii. A faint heart never wins a fair lady.

(Figures in the right margin indicate full marks. Answer any **THREE** questions from each section. Use separate answer script for each section. Question 1 is compulsory)

SECTION-A

1.   a) Define population, experimental unit, variable and sample with example one for each.   **3**
     b) What are the important measurements of scale?·   **1**
     c) Identify the experimental unit, variable, types of variables and other measurement of scales of the following: **6**
        i.   Breeds of chickens
        ii. Size of a cow
        iii. Age of a dog
        iv. Body temperature of a goat

2.   a) What are the important measures of location? Define mode and median.   **3**
     b) Show that, for two non-zero positive observation values, A.M$\geq$G.M$\geq$H.M   **4**
        Where, A.M.= ~~Harmonic~~ Mean, G.M = Geometric Mean, H.M= ~~Harmonic~~ Mean
        When they are equal? >Arithmetic
     c) Define co-efficient of variation. Why does coefficient of variation sometimes better than standard deviation?   **2**

3.   a) Define sample space, event, simple event and compo~~nent~~ _und_ event with example.   **4**
     b) What are the different approaches of defining probability?   **2**
     c) Suppose, P [A]=0.8, P[B] =0.9, P[AB] =0.75.
        Compute- i) P [$\bar{B}$], ii. P [$\bar{A}B$], iii. ~~PUB~~ _P (AUB)_ and iv. P [A|B]. Are A and B independent?   **3**

4.   a) Define normal distribution. What is a standard normal variate? Write down the form of standard normal variate and show the position of the mean, median and mode of the distribution.   **3**
     b) Suppose the weights of chickens of a poultry farm follows normal distribution with mean weight 2.5 kg and standard deviation 0.9 kg. A chicken is selected at random from this farm. What is the probability that its weight is
        i.   more than 2.75 kg
        ii. less than 2.5 kg
        iii. between 2.6 kg to 2.75 kg   **3**
     c) State some important properties of normal distribution.   **3**

SECTION-B

5.   a) What do you mean by dispersion? Briefly discuss the absolute measures of dispersion.   **4**
     b) Prove that, standard deviation is the least possible root mean square deviation.   **3**
     c) Suppose that, the weight of chickens at the age of 20 days has mean weight 2 kg with standard deviation 0.9 kg and mode 2.3 kg. Find the skew ness of the weight and comment.   **2**

6.   a) Define random variable. What is the mathematical expectation and variance of a random variable?   **4**
     b) The following probability function of the birthday cakes per day demanded by the customers is as follows:

Number of Cakes demanded (X)	3	4	5	6	7	8
P(X)	0.08	0.22	0.35	0.20	0.10	0.03

Find the expected number of birthday cakes demanded per day by the customers. Also find the standard deviation of the birthday cakes per day.   3+2=   **5**

7.   a) Define Poisson distribution. How will you derive Poisson distribution from binomial distribution?   **3**
     b) Prove that, mean and variance of a Poisson distribution are equal.   **4**
     c) Write the chief characteristics of normal distribution and normal probability curve.   **2**

8.   a) Write short notes(any three)   3x3=   **9**
        i.   Raw moment and corrected moment
        ii. Skewness and Kurtosis
        iii. Bar-diagram and Histogram
        iv. Correlation co-efficient and Co-efficient of determination