

Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2017
Course Title: Communicative English (Theory)
Course Code: ENG-101
Full Marks: 35, Time: 2 Hours

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

Section-A

1. Correct the following sentences if they are incorrect. If the sentence is correct, just copy it. 5.0
- a) If you had better IELTS score, you could have studied abroad.
 - b) You had better have a haircut.
 - c) Nowadays most of the students used to cram before examination.
 - d) One of my friend said that he will help me if I need.
 - e) Some people say that the number of overseas students are going to increase soon.
2. Change the voice of the following sentences 5.0
- a) They elected me captain.
 - b) People say that man is mortal.
 - c) Language is used for different purposes by us.
 - d) Who is reading a book loudly?
 - e) Many have been killed by the accident.
3. 7.0
- Sadly, in the age of internet and Smartphone, people have almost quit the habit of reading whereas developing the reading habit is very important as reading can make an ordinary person a great person by making them knowledgeable, refining their thoughts, broadening their mind and being a pleasant company in their time of loneliness. Now, write a letter to the editor of an English daily encouraging people to develop the habit of reading books and journals.

Section-B

4. Complete the following sentence: 5.0
- a) Bangladesh is a developing country while
 - b) unless you have a healthy sleeping habit.
 - c) With a view to prospering in life,
 - d) let alone buying a costly car.
 - e) If we do not prevent environmental pollution,.....
5. Write a paragraph on the following: 5.0
- Abuse of Smartphone
6. Read the following passage and answer the questions that follow: 8.0
- a) **The vast expansion in international trade owes much to a revolution in the business of moving freight**
- A** International trade is growing at a startling pace. While the global economy has been expanding at a bit over 3% a year, the volume of trade has been rising at a compound annual rate of about twice that. Foreign products, from meat to machinery, play a more important role in almost every economy in the world, and foreign markets now tempt businesses that never much worried about sales beyond their nation's borders.
- B** What lies behind this explosion in international commerce? The general worldwide decline in trade barriers, such as customs duties and import quotas, is surely one explanation. The economic opening of countries that have traditionally been minor players is another. But one force behind the import-export boom has passed all but unnoticed: the rapidly falling cost of getting goods to market. Theoretically, in the world of trade, shipping costs do not matter. Goods, once they ~~have been made, are assumed to move instantly and at no cost from place to place.~~ The real world, however, is full of frictions. Cheap labour may make Chinese

clothing competitive in America, but if delays in shipment tie up working capital and cause winter coats to arrive in spring, trade may lose its advantages.

C At the turn of the 20th century, agriculture and manufacturing were the two most important sectors almost everywhere, accounting for about 70% of total output in Germany, Italy and France, and 40-50% in America, Britain and Japan. International commerce was therefore dominated by raw materials, such as wheat, wood and iron ore, or processed commodities, such as meat and steel. But these sorts of products are heavy and bulky and the cost of transporting them relatively high.

D Countries still trade disproportionately with their geographic neighbours. Over time, however, world output has shifted into goods whose worth is unrelated to their size and weight. Today, it is finished manufactured products that dominate the flow of trade, and, thanks to technological advances such as lightweight components, manufactured goods themselves have tended to become lighter and less bulky. As a result, less transportation is required for every dollar's worth of imports or exports.

E To see how this influences trade, consider the business of making disk drives for computers. Most of the world's disk-drive manufacturing is concentrated in South-east Asia. This is possible only because disk drives, while valuable, are small and light and so cost little to ship. Computer manufacturers in Japan or Texas will not face hugely bigger freight bills if they import drives from Singapore rather than purchasing them on the domestic market. Distance therefore poses no obstacle to the globalisation of the disk-drive industry.


F This is even more true of the fast-growing information industries. Films and compact discs cost little to transport, even by aeroplane. Computer software can be 'exported' without ever loading it onto a ship, simply by transmitting it over telephone lines from one country to another, so freight rates and cargo-handling schedules become insignificant factors in deciding where to make the product. Businesses can locate based on other considerations, such as the availability of labour, while worrying less about the cost of delivering their output.

G In many countries deregulation has helped to drive the process along. But, behind the scenes, a series of technological innovations known broadly as *containerisation* and *inter-modal transportation* has led to swift productivity improvements in cargo-handling. Forty years ago, the process of exporting or importing involved a great many stages of handling, which risked portions of the shipment being damaged or stolen along the way. The invention of the container crane made it possible to load and unload containers without capsizing the ship and the adoption of standard container sizes allowed almost any box to be transported on any ship. By 1967, dual-purpose ships, carrying loose cargo in the hold¹ and containers on the deck, were giving way to all-container vessels that moved thousands of boxes at a time.

H The shipping container transformed ocean shipping into a highly efficient, intensely competitive business. But getting the cargo to and from the dock was a different story. National governments, by and large, kept a much firmer hand on truck and railroad tariffs than on charges for ocean freight. This started changing, however, in the mid-1970s, when America began to deregulate its transportation industry. First airlines, then road hauliers and railways, were freed from restrictions on what they could carry, where they could haul it and what price they could charge. Big productivity gains resulted. Between 1985 and 1996, for example, America's freight railways dramatically reduced their employment, trackage, and their fleets of locomotives - while increasing the amount of cargo they hauled. Europe's railways have also shown marked, albeit smaller, productivity improvements.

I In America the period of huge productivity gains in transportation may be

¹ hold: ship's storage area below deck


Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2017
Course Title: Rural Sociology & Anthropology (Theory)
Course Code: RSA -101 (T)
Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any four (4) questions from each section where Question no. one and six are compulsory. Use separate answer script for each section.)

Section-A

1. a) Define Rural Sociology. 3
b) Discuss the relationship between rural sociology and veterinary sciences. 5
2. a) Discuss the psychology of behavior. 4
b) State the factors of human development. 5
3. a) What is cultural lag? 2
b) Write down the characteristics of culture. 3
c) 'Animal welfare is related to culture, religion and ethics'-Discuss. 4
4. a) What are the types of sociological methodology? 3
b) Write the objectives of social survey. 2
c) What are the various types of social survey? 4
5. a) Define the concept food chain. 2
b) Show that population in Bangladesh has crossed the limit of critical level of food chain. 3
c) What are green house effect? How does it affect within the organic and inorganic world? 4

Section-B

6. a) Define Anthropology. 2
b) Briefly discuss classification of Anthropological sciences. 3
c) List down major institutions of a society. 3
7. a) Explain the difference between social development and social progress. 3
b) Enumerate the various factors which cause social change. 3
c) Geographical factors influence our social life, explain the statement in the context of Bangladesh. 3
8. a) Define social control. 2
b) Write the types of social control. 3
c) What is public opinion? How role played by the various agencies in raising public opinion? 4
9. (a) Find out the differences between institution and organization. 4
b) Evaluate the role of family in context of Bangladesh. 5
10. Write short notes:- (any three) 3×3=9
(a) Propaganda (b) Biodiversity (c) Social stratification (d) Socialization

Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2017
Course Title: Histology & Embryology I (Theory)
Course Code: HEM 101
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any five (5) questions from each section where question no. 11 is compulsory. Use separate answer script for each section.)

Section-A

1. a) Why the histology is needed for the student of veterinary science. 3
b) Outline the principles of hematoxylin and eosin staining for the study of histology. 4
2. a) Differentiate mitotic cell division from meiotic cell division. 3
b) Describe the molecular structure of a typical cell membrane with diagram(s). 4
3. a) Enumerate the cellular organelles and mention the names of organelles sequentially those are involved with protein synthesis of a cell. 3
b) Draw and label a mitochondrion and rough endoplasmic reticulum. 4
4. Classify the lining epithelial tissue with net diagrams and examples. 7
5. a) Classify connective tissue proper and draw and label the histology of a loose connective tissue with examples. 4
b) Histologically distinguish among different types of cartilages with figures. 3
6. a) Describe the histology of a Haversian system. 3
b) List the histological differences of connective tissue fibers in a tabular form. 3
c) Write down the basic difference between the epithelial tissue and connective tissue. 1

Section-B

7. a) What do you mean by mesothelium and endothelium? 2
b) Differentiate between stratified epithelium and transitional epithelium. 2
c) Define glandular epithelium and classify it according to the type of secretion. 3
8. a) Enumerate the cell junctions and briefly describe about tight and gap junctions. 4
b) Write down the histological differences of muscular tissue in a tabular form. 3
9. a) Draw and label a typical mammalian neuron. 3
b) Classify neuron on the basis of morphology. 3
c) What are histological compositions of a nerve? 1
10. a) Show the developmental process of leucocytes in sketch. 4
b) How do you differentiate leucocytes under light microscope? 3
11. a) Mention the scope of embryology and how embryology is related with histology. 2
b) Describe briefly how to form three germ layers from inner cell mass. 3
c) List the derivatives of ectoderm and mesoderm. 2
12. Write on short notes (any two): (3.5 X 2) = 7
a) Muscle contraction
b) Fertilization
c) Neuroglial cells
d) Cleavage

Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2017
Course Title: Basic and Circulatory Physiology (Theory)
Course Code: BCP-101
Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer any three (3) questions from each section of which **question 1** is compulsory Use separate answer script for each section. Split answer is discouraged)

t

Section-A

1. a) What are the physiological phenomena of a living organism? 1
b) How the molecules can pass through a cell membrane? Write down the salient characteristic of a mammalian cell membrane. 2
c) List the proteins present in the cell membrane and write down their functions. 2
2. a) Classify blood vessels with example. What is the name of largest aorta and the largest vein? 2
b) State the route of systemic circulation. 2
c) Where does the conduction of heart start? List the name of special conductive tissues of heart. 2
3. a) Write down the components of blood vascular system. Why blood is called transport media? 2
b) Write down the special features of different leukocytes. 2
c) List the steps of hemoglobin synthesis. What are the derivatives of hemoglobin? 2
4. a) Write down the primary factors of blood coagulation. What is the common pathway of blood coagulation? 2
b) Name four anticoagulants used commonly. Why there is no blood clot inside the vessels. 2
c) What is the normal clotting time in a healthy animal? Enlist the factors that increased clotting time in cow. 2

Section-B

5. a) What are the transport mechanisms across the mammalian cell membrane? 2
b) Differentiate simple diffusion from facilitated diffusion. Do you find a typical example of active transport with its significance in animal's body. 2
c) What is action potential? Briefly describe the successive stages of action potential in a diagram. 2
6. a) What are the fluid compartments in the body? 1
b) How lymph is formed? Briefly describe. 3
c) List the transcellular fluids. Write down the formation and course of cerebrospinal fluid. 2
7. a) Mention the cells of defense mechanism with their role in that process. 2
b) Differentiate the followings: 2
 i) Colloid and crystalloid
 ii) Diffusion and osmosis
c) What is cardiac output? Mention the factors alter the cardiac output. 2
8. Write notes on three 3×2=6
 a) Blood Vessels
 b) Haemagglutination
 c) RE system
 d) Phagocytosis

(Figures in the right margin indicate full marks. Answer any five (5) questions from each section. Use separate answer script for each section.)

Section-A

1. a) Define anatomy and veterinary anatomy. 2
b) Define following terms: sagittal section, frontal plan, cranial and lateral. 3
c) Give the vertebral formula of cattle and goat. 2
2. a) Draw and label a typical vertebra. 3
b) Briefly describe anatomy of the sternum of an ox. 3
c) Give an account of carpal bones of a goat. 1
3. a) Enlist the names of organs of digestive system of a goat. 2
b) Briefly describe anatomy of the liver of a cattle. 5
4. a) Mention different parts of bronchial tree. Briefly describe anatomy of the right lung of a goat. 5
b) Enlist the openings of a pharynx. 2
5. a) Mention the shape and location of rumen, reticulum, omasum and abomasum of a cattle. 2
b) Briefly describe the anatomy of the tongue of a cattle. 3
c) Briefly describe the anatomy of the pancreas of a goat. 2
6. Enlist the muscles of respiration and describe the anatomy of principal muscles of respiration. 7

Section-B

7. a) Define and classify the joint. 2
b) Describe a synovial joint with a net diagram. 3
c) Enlist the joints of the fore limb and hind limb of a cattle. 2
8. a) Define linea alba and prepubic tendon. 2
b) Define flank and mention the name of muscles in flank region with their fiber direction. 5
9. a) What do you mean by inguinal canal? Mention the structures passing through the inguinal canal. 4
b) Describe the anatomy of the parotid salivary gland with its duct opening. 3
10. a) Describe the anatomy of trachea of a goat with a net diagram and showing the relation with oesophagus. 4
b) Briefly describe anatomy of small intestine of an ox. 3
11. a) Write the formation of thoracic inlet and mention the structures passing through it. 3
b) Enlist the organs located in thoracic cavity. 2
c) What do you mean pleural cavity? 2
12. Write short notes: (any two) (3.5 X 2) = 7
a) Mediastinum
b) Peritoneum
c) Prepubic tendon

almost over, but in most countries the process still has far to go. State ownership of railways and airlines, regulation of freight rates and toleration of anti-competitive practices, such as cargo-handling monopolies, all keep the cost of shipping unnecessarily high and deter international trade. Bringing these barriers down would help the world's economies grow even closer.

Questions i—iv

The above Reading Passage has six paragraphs, **A-I**.
Which paragraph contains the following information?

Write the correct letter **A-I** beside questions **i—iv** on your answer script:

- i.** a suggestion for improving trade in the future
- ii.** the effects of the introduction of electronic delivery
- iii.** the similar cost involved in transporting a product from abroad or from a local supplier
- iv.** the weakening relationship between the value of goods and the cost of their delivery

Questions v—viii

Do the following statements agree with the information given in the Reading Passage?

Beside questions v—viii on your answer script, write:

TRUE if the statement agrees with the information
FALSE if the statement contradicts the information
NOT GIVEN if there is no information on this

- v.** International trade is increasing at a greater rate than the world economy.
- vi.** Japan imports more meat and steel than France.
- vii.** Most countries continue to prefer to trade with nearby nations.
- viii.** Small computer components are manufactured in Germany.

Chittagong Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2017
Course Title: Animal Science (Theory)
Course Code: ASM-101
Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any three (5) questions from each section where question no. 1 & 5 are compulsory. Use separate answer script for each section)

Section-A

1. a) Elaborate the following terms: 4.0
(i) Mule (ii) Free martin (iii) Ration
(iv) Stable (v) Heifer (vi) Sire
(vii) Mare (viii) Mare (ix) Lamb
- b) Show the latest livestock and poultry population statistics and their contribution to GDP in Bangladesh. 3.0
- c) Describe the physical characteristics and production traits of Black Bengal goat. 4.0
2. a) Differentiate breed from type. Classify cattle breeds with example. 4.0
b) Briefly discuss three important cattle breeds. 4.0
c) Differentiate *bos taurus* from *bos indicus*. 4.0
3. a) Draw and label a double row face out system stanchion barn with measurements. 4.0
b) What are the different types of house usually found in an ideal sheep farm? 4.0
c) Discuss the criteria for selection of site for an ideal dairy farm. 4.0
4. a) Briefly discuss the daily routine for management works in a dairy farm. 4.0
b) What are duties and responsibilities of a livestock farm manager? 4.0
c) Briefly discuss different body condition scores in a dairy herd. 4.0

Section-B

5. a) Show the zoological classification of horse and dog. 3.0
b) Mention the characteristics of different families of farm animals. 4.0
c) Classify feedstuff with example. Differentiate roughage from concentrate. 4.0
6. a) Write down the importance of sheep and goat. Classify goat according to example. 4.0
b) Compare different body parts of cattle and horse. 4.0
c) Describe Saanen, Alpine and Beetal breeds of goat. 4.0
7. a) What are the common vices of farm animals? How should you overcome them? 4.0
b) Classify dog breeds. Briefly discuss the German Shepherd and Labrador Retriever breeds of dog. 4.0
c) Briefly discuss the American Landrace, Yorkshire and Poland China breeds of swine. 4.0
8. a) Write short notes (Any three) on: 3x4= 12.0
(i) Greenhouse effects on livestock production
(ii) Origin, domestication and distribution of farm animals
(iii) Red Chittagong cattle
(iv) Loose housing system