

04

Chattogram Veterinary and Animal Sciences University

DVM 1st year 1st Semester Final Examination 2019

Subject: Histology and Embryology (Theory)

Course Title: HEM-101 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer any **five (5)** questions from each section. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Define cell. Draw and label an eukaryotic cell. 3
b) Describe the structures of endoplasmic reticulum. 2
c) List the inclusions of a cell. 2
2. a) What is gastrulation? How trilaminar germ disc is formed? 3
b) Define spermiogenesis. Describe the changes of spermiogenesis with a diagram. 4
3. a) Differentiate prokaryotic cell from eukaryotic cell with neat diagram. 3
b) Illustrate histology and function of the following organelles; ribosomes, mitochondria, Golgi apparatuses, nucleus 4
4. a) Classify the glands on the basis of morphologic characteristics. 4
b) Briefly describe the merocrine gland. 3
5. a) Classify connective tissue. 1
b) What are the differences among four basic tissues? 2
c) Describe the intramembranous ossification. 4
6. Explain the following terminology: fibroblast, fibrocyte, osteoblast, osteocyte, osteoclast, haversian canal, haversian system, chondrocyte, chondroblast, periosteum, sarcoplasm, nexus, glial cell, Schwann cell 7

SECTION B

7. a) Define epithelium. List characteristics of epithelium. 3
b) Classify detail histological features of simple and stratified epithelium with their location in body. 4
8. a) Mention the identifying characters of different members of leukocyte with neat diagram. 5
b) What do you mean by cell junction? Explain different types of cell junction in organism. 2
9. a) What do you mean by codon, gene, exon and intron? 2
b) Explain the prophase process of meiosis cell division. 5
10. a) Show the mechanism of contraction process of skeletal muscle. 5
b) Histologically differentiate different types of muscular tissue in a tabular form. 2
11. a) Draw and label a typical neuron. 3
b) Diagrammatically differentiate supporting cells of nervous system. 2
c) Classify the neuron. 2
12. a) What are the scopes of Embryology? 2
b) Enlist the derivatives of three germ layers 5

Chattogram Veterinary and Animal Sciences University

DVM 1st year 1st Semester Final Examination 2019

Subject: Basic and Circulatory Physiology (Theory)

Course Title: BCP-101 (T)

Full Marks: 35, Time: 2 Hours



(Figures in the right margin indicate full marks. Answer any **three (3)** questions from each section, where question number **5 is compulsory**. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) Enlist the organelles that involved in protein synthesis and packaging. 2
b) 'Cell is the structural and functional unit of life'—Justify this statement 2
c) Why lysozyme is called a suicidal bag? 2
2. a) Define membrane potential and action potential. 2
b) What are the different phases of action potential? Briefly explain the events occur in those phases. 2
c) How does Na⁺ and K⁺ pump maintain the cell volume? 2
3. a) State the transcellular fluid with their roles in the body. 2
b) Why electrolytes are so important for the body? 2
c) How do you differentiate serum from plasma? 2
4. a) State the physiological importance of osmosis. 2
b) Sketch the common pathway of blood coagulation. 2
c) What is the composition of synovial fluid and its importance? 2

SECTION B

5. a) What is cerebrospinal fluid? Sketch the course of CSF. 2
b) Discuss the functions of lymph as a body fluid. 2
c) Define edema. What are the factors responsible for edema formation? 1
6. a) Why mature RBC is considered as a cell, although it does not contain nucleus? 2
b) Draw and label the erythropoiesis process. 2
c) Enlist the roles of different leucocytes in the body defence system. 2
7. Differentiate between the following terms (any 3) 3×2
=6
a) Homeostasis and hemostasis
b) Active transport and passive transport
c) Hypotonic solution and hypertonic solution
d) Animal cell and plant cell
8. Write short note on the following topic (any 3) 3×2
=6
a) Bushman poison
b) Fetal circulation
c) Role of platelets
d) Conductive system of heart

Chattogram Veterinary and Animal Sciences University

DVM 1st year 1st Semester Final Examination 2019

Subject: Animal Science (Theory)

Course Title: ANS-101 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer **three (3)** questions from each section, of which **question number 1 and 5** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) What do you mean by 'Livestock' and 'Animal Science'? Write down the importance of livestock in Bangladesh. 3.0
b) Mention the differential points between *Bos taurus* and *Bos indicus*. 3.0
c) Write down the zoological classification of common farm animals available in Bangladesh. 5.0
2. a) Clarify the breed. Briefly discuss the 'Holstein Friesian', 'Brown Swiss' and 'Ayrshire' breeds of cattle. 4.0
b) List the most famous seven (7) beef breeds of the world. Discuss the 'Beef master', 'Brahman' and 'Short horn' breeds of cattle. 4.0
c) Name at least seven (7) draft cattle breeds available in Bangladesh. Discuss the 'Gir', 'Kankrej' and 'Hallikar' breeds of cattle. 4.0
3. a) Define 'Farm', 'Manager' and 'Farm Management'. 3.0
b) What are the qualities of a good farm manager should have? 4.0
c) Discuss the origin, domestication and distribution of important farm animals. 5.0
4. a) What are the common vices of farm animals? Explain shortly. 3.0
b) Write down the constraints of sheep production in Bangladesh. 4.0
c) 'Black Bengal Goat- a promising goat genetic resource in Bangladesh' -Explain. Give a detail description of 'Jamnapari goat'. 5.0

SECTION B

5. Elaborate the following terms (any eleven): 11.0
 - i) Cryptorchid
 - ii) Dry off
 - iii) Gimmer
 - iv) Hinny
 - v) Free martin
 - vi) Steer
 - vii) Veal
 - viii) Wether
 - ix) Mule
 - x) Roughage
 - xi) Gelding
 - xii) Puberty
 - xiii) Flock
 - xiv) Poultry
6. a) Classify the housing system for dairy cattle. What factors should you consider most important for selecting site for a commercial dairy farm? 3.0
b) Draw and label a double row face out system stanchion barn for 100-cattle dairy farm. 4.0
c) What sort of housing system are the best for growing heifer? Compare and contrast loose housing system with stanchion barn. 5.0
7. a) Which breeds of goat are most suitable for commercial dairy goat farming? Discuss the 'Saanen' and 'Toggenburg' breeds of goat. 4.0
b) What are the prospect and potentials of goat farming in Bangladesh? 4.0
c) List the slaughter house by-products and mention their practical utilities. 4.0
8. Write short notes on (any four) 12.0
 - i) Greenhouse effects.
 - ii) Constraints of livestock production.
 - iii) Total digestible nutrients (TDN).
 - iv) Role of livestock on national economy.
 - v) Swamp buffalo vs river buffalo.

(Figures in the right margin indicate full marks. Answer any **four (4)** questions from each section, of which **question number 1 and 7** are compulsory. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. a) What do you mean by Social Stratification? 2
b) What are the types of social stratification? 3
c) Narrate the factors of human development. 3
2. a) What do you mean by Institution? 2
b) Give the characteristics of institution. 3
c) Differentiate between society and community. 4
3. a) What is social change? 2
b) Discuss the factors responsible for social change in Bangladesh. 7
4. a) Define rural sociology. 2
b) Write down the advantages of society 3
c) Distinguish between Rural Sociology and Anthropology. 4
5. a) What do you mean by mean social control? 2
b) Write the types of social control. 3
c) What is public opinion? What roles are played by the various agencies in raising public opinion? 4
6. a) Define the concept of food chain. 2
b) Show that population in Bangladesh has crossed the limit of critical level of food chain 7

SECTION B

7. a) What do you mean by Anthropology? What are the kinds of Anthropology? 2+2
=4
b) What are the types of kinship? 4
8. a) What are the types of sociological methodology? 3
b) Write down the objectives of social survey. 3
c) What are the various types of social survey? 3
9. a) Discuss the characteristics of culture. 4
b) Discuss the concept of cultural lag citing with example in context of Bangladesh. 5
10. a) Discuss the common social problems in Bangladesh. 4
b) Give some suggestion for juvenile delinquency in slum area. 5
11. Write short notes (any three) 3×3
=9
a) Social structure
b) Personality
c) Social value
d) Social group
12. a) How does a veterinary student contribute to the development of Bangladesh? 4
b) What kind of changes are taking place in veterinary discipline due to the introduction of modern techniques? 5

(Figures in the right margin indicate full marks. Answer All the questions. Use separate answer script for each section. Fractions of the questions must be answered together)

SECTION-A

1. Correct the following sentences. If they are correct, just copy it. 5
 - a) You should not pride on your health.
 - b) He died of the country.
 - c) It was long since I see her last.
 - d) Do you know where does he live?
 - e) He succeeded in life due to hard labour.

2. Complete the following sentences. 5
 - a) If I were you, _____.
 - b) _____ unless we take initiative to reduce environmental pollution.
 - c) It is said that _____.
 - d) _____ let alone driving a car.
 - e) Since I could not give him what he wanted, _____.

3. Nowadays people do not have healthy lifestyles, and so they suffer from different physical and mental problem. Suppose you would like to encourage people to have a healthy lifestyle. Now, write a letter to the editor of an English daily in this regard. 7

SECTION B

4. Change the following sentences as directed. 5
 - a) All his friends looked down at him. (Change voice.)
 - b) Rome was not built in a day. (Change voice.)
 - c) The teacher said, "If you want to learn English, you will have to read English more." (Change speech.)
 - d) We eat. Our intention is to live. (Join the sentences.)
 - e) He ran at top speed. He got out of breath. (Join the sentences.)

5. Write a paragraph of about 150 words on "The library and its uses". 5

6. Read the passage carefully and answer the questions that follow. 8

Pharmaceuticals is one of the most profitable industries in North America. But do the drugs industry's sales and marketing strategies go too far?

- A. A few months ago Kim Schaefer, sales representative of a minor global pharmaceutical company, walked into a medical center in New York to bring information and free samples of her company's latest products. That day she was lucky- a doctor was available to see her. 'The last rep offered me a trip to Florida. What do you have?' the physician asked. He was only half joking.

- B. What was on offer that day was a pair of tickets for a New York musical. But on any given day what Schaefer can offer is typical for today's drugs rep -a car trunk full of promotional gifts and gadgets, a budget that could buy lunches and dinners for a small county hundreds of free drug samples and the freedom to give a physician \$200 to prescribe her new product to the next six patients who fit the drug's profile. And she also has a few \$ 1,000 honoraria to offer in exchange for doctors' attendance at her company's next educational lecture.

- C. Selling Pharmaceuticals is a daily exercise in ethical judgment. Salespeople like Schaefer walk the line between the common practice of buying a prospect's time with a free meal, and bribing doctors to prescribe their drugs. They work in an industry highly criticized for its sales and marketing practices, but find themselves in the middle of the age-old chicken-or-egg question - businesses won't use strategies that don't work, so are

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DVM 1st year 1st Semester Final Examination 2019

Subject: Gross Anatomy (Theory)

Course Title: GRA-101 (T)

Full Marks: 70, Time: 3 Hours

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SECTION-A

1. a) Define topographic anatomy and special anatomy. 1
b) Describe the characteristics of atlas of ox 3
c) Describe the structure of a typical vertebra 3
2. a) Briefly describe the anatomy of stifle joint of a cattle. 5
b) Draw and label a typical synovial joint. 2
3. a) Briefly describe the anatomy of tongue of ox. 3
b) What do you mean by compound stomach? Describe the anatomy of rumen of goat? 4
4. a) What do you mean by fascia? 1
b) Enlist the muscle of respiration. 1
c) Describe the anatomy of the principal muscle of respiration. 5
5. a) Enlist the organs of respiratory system of ox. 1
b) Briefly describe the anatomy of right lung of goat. 4
c) Which organ is common for respiratory and digestive tract? Mention its openings. 2
6. a) Write down different parts of colon of cattle. 1
b) Briefly describe the anatomy of salivary glands of goat with opening area of their respective duct. 6

SECTION B

7. a) Enlist the muscle of mastication and the muscle of abdomen. 3
b) Give the origin, insertion, blood and nerve supply of any two muscles of the neck of goat. 4
8. a) Mention the bony boundary of thoracic inlet. 1
b) Mention the location of sesamoid bones in the forelimb of cattle. 2
c) Describe the anatomy of proximal extremity of femur of ox. 4
9. a) What do you mean by abdominal tunic? 1
b) What is mediastinum? What are the parts of mediastinum? Mention the contents of different parts of it. 3
c) Write a short note on pleura. 3
10. a) Give the vertebral formulae of horse and chicken. 2
b) Write down two general differences in each case between thoracic and lumbar vertebra in ox. 2
c) Briefly describe the anatomy of scapula of ox. 3
11. a) Mention the modification of peritoneum. 2
b) How line alba is formed? 2
c) Describe the anatomy of duodenum of goat. 3
12. a) Enlist five foramina of the skull with their contents in goats. 2
b) Briefly describe nuchal ligament of cattle. 2
c) Write a short note on sternum of cattle. 3

doctors to blame for the escalating extravagance of pharmaceutical marketing? Or is it the industry's responsibility to decide the boundaries?

- D.** The explosion in the sheer number of salespeople in the Reid- and the amount of funding used to promote their causes- forces close examination of the pressures, influences and relationships between drug reps and doctors. Salespeople provide much-needed information and education to physicians. In many cases the glossy brochures, article reprints and prescriptions they deliver are primary sources of drug education for healthcare givers. With the huge investment the industry has placed in face-to-face selling, sales people have essentially become specialists in one drug or group of drugs - a tremendous advantage in getting the attention of busy doctors in need of quick information.
- E.** But the sales push rarely stops in the office. The flashy brochures and pamphlets left by the sales reps are often followed up with meals at expensive restaurants, meetings in warm and sunny places, and an inundation of promotional gadgets. Rarely do patients watch a doctor write with a pen that isn't emblazoned with a drug's name, or see a nurse use a tablet not bearing a pharmaceutical company's logo. Millions of dollars are spent by pharmaceutical companies on promotional products like coffee mugs, shirts, umbrellas, and golf balls. Money well spent? It's hard to tell. I've been the recipient of golf balls from one company and I use them, but it doesn't make me prescribe their medicine,' says one doctor.' I tend to think I'm not influenced by what they give me.'
- F.** Free samples of new and expensive drugs might be the single most effective way of getting doctors and patients to become loyal to a product. Salespeople hand out hundreds of dollars' worth of samples each week-\$7.2 billion worth of them in one year. Though few comprehensive studies have been conducted, one by the University of Washington investigated how drug sample availability affected what physicians prescribe. A total of 131 doctors self-reported their prescribing patterns-the conclusion was that the availability of samples led them to dispense and prescribe drugs that differed from their preferred drug choice.
- G.** The bottom line is that pharmaceutical companies as a whole invest more in marketing than they do in research and development. And patients are the ones who pay-in the form of sky-rocketing prescription prices for every pen that's handed out, every free theatre ticket, and every steak dinner eaten. In the end, the fact remains that pharmaceutical companies have every right to make a profit and will continue to find new ways to increase sales. But as the medical world continues to grapple with what's acceptable and what's not, it is clear that companies must continue to be heavily scrutinized for their sales and marketing strategies.

Do the following statements agree with the views of the writer in Reading Passage?
In the answer sheet, write:

YES if the statement agrees with the views of the writer
NO if the statement contradicts the views of the writer
NOT GIVEN if it is impossible to say what the writer thinks

- a) Sales representatives like Kim Schaefer work to a very limited budget.
- b) Kim Schaefer's marketing technique may be open to criticism on moral grounds.
- c) The information provided by drug companies is of little use to doctors.
- d) Evidence of drug promotion is clearly visible in the healthcare environment.
- e) The drug companies may give free drug samples to patients without doctors' prescriptions.
- f) It is legitimate for drug companies to make money.

Match the following headings (i and ii) with the right paragraphs (A—G) and write beside question numbers *g* and *h*.

- i Not all doctors are persuaded
- ii The positive side of drugs promotion
- g) _____
- h) _____

Chattogram Veterinary and Animal Sciences University

DVM 1st year 1st Semester Final Examination 2019

Subject: Communicative English (Theory)

Course Title: ENG-101 (T)

Full Marks: 35, Time: 2 Hours

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SECTION B

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