

Chattogram Veterinary and Animal Sciences University
DVM 1st year 1st Semester Final Examination-2023
Subject: Basic and Circulatory Physiology (Theory)
Course Title: 0912-BCP-101 (T)
Full Marks: 35, Time: 2 Hours

(Figures in the right margin indicate full marks. Answer 3 (THREE) questions from each section where 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) | Define Physiology and Veterinary Physiology. | 1 |
| | b) | Draw a typical animal cell and mark the membranous organelle (s) with their function (s). | 2 |
| | c) | Explain the importance of Basic and Circulatory Physiology in the field of Veterinary Science. | 2 |
| 2. | a) | Mention the role of plasma proteins in the living organism. | 2 |
| | b) | Define CSF. State the physiological importance of CSF. | 0.5+1.5 |
| | c) | Classify solutions on the basis of osmotic pressure with example. | 2 |
| 3. | a) | List down the physiological phenomenon of living organism with example. | 2 |
| | b) | Compare between active transport vs passive transport and osmosis vs diffusion in a tabular form. | 2 |
| | c) | “Na-K pump is important for maintaining cell volume”-justify this statement. | 2 |
| 4. | a) | Sketch the common pathway of blood coagulation. | 2 |
| | b) | Define erythropoiesis. “Liver and kidney play an important role in erythropoiesis”- discuss this statement. | 0.5+1.5 |
| | c) | Explain the effect of calcium and sodium on cardiac function. | 2 |

SECTION-B

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|----|----|--|---------|
| 5. | a) | Describe the special conductive tissues of heart with their location. | 2 |
| | b) | Do you think myogenic theory of heart beat is more acceptable? If yes, what is your explanation? | 2 |
| | c) | Define blood pressure. List the factors that are responsible for the alteration of blood pressure. | 2 |
| 6. | a) | Enumerate the exceptional features of fetal circulation. | 2 |
| | b) | Differentiate lymphocyte and monocyte based on their morphological characteristics. | 2 |
| | c) | Why hemoglobin is important for maintaining good oxygen flow to the body? | 2 |
| 7. | a) | Define lymph and enumerate the composition of lymph. | 0.5+1.5 |
| | b) | Briefly state the mechanism of lymph formation. | 2 |
| | c) | Distinguish between extracellular and intracellular fluid. | 2 |
| 8. | a) | Define emulsoids, suspensoids, crystalloids and colloids. | 2 |
| | b) | Briefly describe the mechanism of endocytosis and exocytosis. | 2 |
| | c) | Draw the phases of action potential with explanation. | 2 |

Chattogram Veterinary and Animal Sciences University

DVM 1st Year 1st Semester Final Examination 2023

Course Title: Histology and Embryology-I (Theory)

Course Code: 0912-HEM-101 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer five (5) questions from each section. Use separate answer script for each section. Fractions of the question are encouraged to answer together)

SECTION-A

1. a) List the basic differences between cytology and histology. 1
b) Enlist the different steps of tissue processing to prepare permanent histological slide. 2
c) Draw and label a mitochondrion and list the components of cytoskeleton. 4
2. a) Write down the functions of ribosome and Golgi apparatus. 2
b) Illustrate the histology of pseudostratified columnar epithelium with diagram. 3
c) Classify the gland on the basis of mode of secretion. 2
3. Draw and label the free cells of loose connective tissue. 7
4. a) Compare the histology of different types of cartilages with figures and examples. 5
b) Briefly describe the osteon with figure. 2
5. Briefly describe the mechanism of the skeletal muscle contraction with appropriate figures. 7
6. a) Describe the cleavage and the morula with figures. 4
b) Enlist the derivatives of different germ layers. 3

SECTION-B

7. a) Draw and label a typical neuron. 2
b) Enlist the neuroglial cells. 1
c) Describe the astyocyte and oligodendrocytes with diagram. 4
8. a) Draw and label the longitudinal and cross sections of all types of muscle fibres. 3
b) List the histological features of the fixed cells of connective tissue with figures. 4
9. a) List the differences between epithelial and connective tissue. 3
b) Write down the components of connective tissue. 1
c) Describe the connective tissue fibres. 3
10. a) Define ganglia and nuclei in nervous system. 2
b) How could you differentiate a cell body of neuron from surrounding supporting cells under microscope? 2
c) Briefly describe the different cell junctions. Describe any one of these. 3
11. a) Characterize the different features of white blood cells with figures. 5
b) Write a short note on embryoblast. 2
12. a) Define fertilization. 1
b) Briefly describe the phases of fertilization process with figures 6

Chattogram Veterinary and Animal Sciences University

DVM 1st Year 1st Semester Final Examination 2023

Course Title: Gross Anatomy-I (Theory)

Course Code: 0912-GRA-101 (T)

Full Marks: 70, Time: 3 Hours

(Figures in the right margin indicate full marks. Answer five (5) questions from each section. Use separate answer script for each section. Fractions of the question are encouraged to answer together)

SECTION-A

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|----|----|--|---|
| 1. | a) | Define the following terms: median plane, sagittal plane, splanchnology and aesthesiology. | 4 |
| | b) | Ventral and distal are the same thing or not. Justify your answer. | 2 |
| | c) | Write the vertebral formula of cattle. | 1 |
| 2. | a) | Sketch out the arrangement of carpal bones of a cow. | 3 |
| | b) | Enlist the contents of thoracic and abdominal cavities. | 4 |
| 3. | a) | Write the anatomical description of the largest bone of cattle with diagram. | 4 |
| | b) | Compare the metacarpal with metatarsal bone of cattle. | 3 |
| 4. | a) | Summarize the anatomical characteristics of C ₆ vertebra of a cow. | 4 |
| | b) | Draw and label the dorsum of tongue of an ox. | 3 |
| 5. | a) | Write the dental formula of an ox. | 1 |
| | b) | Enlist the accessory digestive organs. Why they are called so? | 2 |
| | c) | Mention the major salivary glands of cattle with the location of opening of their ducts. | 4 |
| 6. | a) | Enlist the muscles and cartilages of larynx. | 3 |
| | b) | Write a short note on mediastinum. | 2 |
| | c) | Write the anatomical position of liver in an ox. | 2 |

SECTION-B

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|-----|----|---|---|
| 7. | a) | Illustrate the anatomy of the scapula of an ox. | 4 |
| | b) | Assemble the paired and unpaired bones of skull of cattle. | 3 |
| 8. | | Summarize the classification of the fibrous joint with example. | 7 |
| 9. | a) | Describe the anatomy of hip joint of a cow. | 3 |
| | b) | Briefly describe the supra spinous ligament of cattle. | 2 |
| | c) | Write down the joints of forelimb of an ox. | 2 |
| 10. | a) | Sketch out the origin, insertion and fibre direction of muscles of paralumbar fossa of cattle. | 3 |
| | b) | Illustrate the anatomical features of inner surfaces of different compartments of a compound stomach. | 4 |
| 11. | a) | Briefly describe the ligaments of stifle joint of an ox. | 3 |
| | b) | Write short note on inguinal canal and linea alba. | 4 |
| 12. | a) | Assemble the organs of respiratory system in a goat. | 3 |
| | b) | What do you mean by the bronchial tree? | 2 |
| | c) | Write down the attachments of liver in a cow. | 2 |

Chattogram Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2023
Course Title: Animal Science (Theory)
Course Code: 0811-ANS-101 (T)
Full Marks: 70, Time: 3 Hours

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

SECTION-A

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|----|----|---|-----|
| 1. | a) | Show the position of cattle in the zoological scheme with short explanation. | 3 |
| | b) | Mention the characteristics of Bovidae and Equidae family. | 4 |
| | c) | Differentiate roughage from concentrate. Classify feedstuffs with example. | 1+3 |
| 2. | a) | Enlist five famous breeds of horse, buffalo, beef cattle, draught cattle, pig, goat, dog and cat. | 4 |
| | b) | Why is Guernsey milk considered as "Golden milk"? Describe cattle breed- "Holstein Friesian". | 1+3 |
| | c) | Mention the specific body areas of "Red Chattogram Cattle" which are reddish in colour. | 4 |
| 3. | a) | Write down the benefits of housing in livestock production. | 4 |
| | b) | What is breed? Differentiate <i>Bos taurus</i> from <i>Bos indicus</i> . | 1+3 |
| | c) | Briefly describe the role of livestock in serving human. | 4 |
| 4. | a) | Why did domestication of animals take place? Explain migration process of domesticated animals. | 2+2 |
| | b) | Elaborate the conditions for domestication of animals with examples. | 4 |
| | c) | Summarize the approximate dates and locations of the first domesticated animals. | 4 |

SECTION-B

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|----|---|---|-----|
| 5. | Define following terms (any eleven): | 11 | |
| | i) Heifer ii) Crone iii) Bellowing iv) Free-martin v) Neigh vi) Whelping vii) Prolificacy viii) Gilt ix) Gimmer x) Cryptorchid xi) Cow xii) Saggy and xiii) Hinny | | |
| 6. | a) | Draw and label a double row face-in stanchion barn system. | 4 |
| | b) | What factors should you consider most important for selecting site for a commercial dairy farm? | 4 |
| | c) | What are the duties and responsibilities of a livestock farm manager? What are the criteria of a farm manager should have? Explain. | 2+2 |
| 7. | a) | According to type of wool, mention the different categories of sheep breed with one example in each. | 4 |
| | b) | Describe the sheep breed "Merino". | 4 |
| | c) | Briefly describe the "German Shepherd" and "Labrador Retriever" breeds of dog. | 2+2 |
| 8. | Write short notes (any three) on the followings: | 3x4= 12 | |
| | a) | Ruminants vs non-ruminants. | |
| | b) | Buffalo as a triple purpose animal. | |
| | c) | Constraints of livestock development in Bangladesh. | |
| | d) | Black bengal goat. | |

Chattogram Veterinary and Animal Sciences University
DVM 1st year 1st Semester Final Examination-2023
Course Title: Rural Sociology and Anthropology (Theory)
Course Code:0314-RSA-101 (T)
Full Marks: 70, Time: 3 Hours

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

SECTION-A

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|----|----|---|-------|
| 1. | a) | Why is rural sociology important to us? | 3 |
| | b) | Mention the advantages and objectives of sociology. | 2+3=5 |
| 2. | a) | List the objectives of social survey. | 3 |
| | b) | Describe the various types of social survey. | 6 |
| 3. | a) | What is social stratification? | 3 |
| | b) | Illustrate major types of stratification in human society with example. | 6 |
| 4. | a) | “Language is a key element of culture”-explain it. | 3 |
| | b) | Classify societies based on their economic and technological development. | 6 |
| 5. | a) | What do you mean by culture? | 3 |
| | b) | Explain the concept of ‘Culture of Poverty’ with example. | 6 |
| 6. | a) | Define the concept change, progress and development. | 3 |
| | b) | Describe the impacts of modernity in human society. | 6 |

SECTION-B

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|-----|--|---|---------|
| 7. | a) | Define Anthropology. | 3 |
| | b) | Discuss the classification of kinship. | 5 |
| 8. | a) | Define social change. Mention the factors of social change. | 1+2=3 |
| | b) | Express the environmental causes of social change. | 6 |
| 9. | a) | Define rural community. | 3 |
| | b) | Enumerate the main differences between rural and urban communities. | 6 |
| 10. | a) | How are social activities related to environmental pollution? | 3 |
| | b) | Analyze the factors of human development. | 6 |
| 11. | a) | Explain participant observation. | 3 |
| | b) | Mention the differences between anthropology and sociology. | 6 |
| 12. | Write short notes (any two) on the followings: | | 4.5x2=9 |
| | i) | Social organization | |
| | ii) | Attitude and belief | |
| | iii) | Personality | |

Chattogram Veterinary and Animal Sciences University
DVM 1st Year 1st Semester Final Examination-2023
Course Title: Communicative English (Theory)
Course Code: 0231-ENG-101 (T)
Full Marks: 35, Time: 2 Hours

(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. Use the right form of verbs in the following sentences: 5
 - a) Every pale tomato slice, wilted pickle, and brown lettuce leaf (cost) an extra 25 cents at the superstore.
 - b) My dog Daisy, together with all her puppies, (like) to play with money.
 - c) He has come last night.
 - d) Had I been you, I would not do it.
 - e) The man resigned from the post.

2. Complete the following sentences: 5
 - a) If I were you, _____.
 - b) _____ unless we take initiative to reduce environmental pollution.
 - c) The question is hard enough _____.
 - d) I got used to _____.
 - e) I would help him _____.

3. Write a letter to the editor of a newspaper highlighting increasing technological addiction among the youth. 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) "Follow my example," said she, jumping into a cab. (Change the speech.)
 - d) I know her father's name. (Make it compound).
 - e) He ran at top speed. He got out of breath. (Join the sentences.)

5. Write a paragraph on any one of the following (150 words): 5
 - a) Honesty
 - b) Your favorite teacher

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

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. _____

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 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