# Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018 Course Title: Animal Nutrition (Theory)

Course Code: ANT-201(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.)

	*		
1.	a)	Define feed, nutrition, nutrient and TDN. Why minerals have been ignored from the equation of TDN?	4
14	b)	Briefly discuss the gradually expending fields of Animal nutrition.	1
	c)	Why Antoine Lavoisier is called the father of modern chemistry?	3
2.	a)	Define digestion. Describe the carbohydrate digestion in ruminants.	4
	b)	What are the different fractions of proximate analysis? Mention the partition of Van-	4
	- \	Soest method.	
	c)	What are the factors affect the nutrients concentration of feed?	4
3.	a)	Differentiate apparent and true digestibility.	
٥.	b)	List the methods of feed evaluation. Describe the Nylon bag technique of feed	4
	-,	evaluation.	1 4
	c)	Describe the factors affecting apparent digestibility of feed ingredients.	4
			·
4.	a)	Define fermentation. How VFAs are formed and utilized in Ruminants?	1
	b)	What are rumen movements? How regurgitation takes place in Ruminants?	4
Ţ.	c)	Briefly discuss the physiology and biochemistry of rumen under ideal condition.	4
			4
		SECTION-B	
	<b>8</b> 1 ⊟		
5	a)	Define balanced ration. Discuss the characteristics of a dairy ration.	3
	b)	What is CF, ADF, NDF, eNDF and peNDF? How dietary fibre regulate lipid profile of milk?	4
	c)	Is carbohydrate dietary essential for ruminants?	4
6	a)	Define and classify lipids. Write down the structure of at least two phospholipids and mention their functions.	4
¢.	b) '	Briefly discuss the procedure for ruminal and intestinal digestion of lipids.	4
	c)	How dietary lipids are transported to the target cells and adipose tissues?	4
×		• and adipose dissues?	4
7	a)	Illustrate the mechanisms for interconversions of carbohydrates, proteins and fats.	4
ų.	b)	Compare and contrast fat soluble and water soluble vitamins.	4
	c)	What are the consequences of supplementing lipids in ruminants diet?	4
	Í	ruminants diet?	4
8	Wri	te short notes (any three)	4×3=12
	a)	Livestock and global warming.	
	b)	Conjugated linoleic acid.	
×	c)	Urea molasses multinutrient block.	
	d)	Gross energy.	

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018

Course Title: Animal Genetics (Theory)
Course Code: AGN-201(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 is compulsory. Use separate answer script for each section.)

		711 (1) (1) (1) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	3
1.		Illustrate the term "heredity", "test cross" and allele.	4
	b)	Briefly describe the application of genetics in the field of animal agriculture.  What are the different types of gene actions existing in domestic animals?	4
	c)	what are the different types of gene actions existing in domestic annuals.	40 10
2.	a)	How independent assortment differ from linkage.	3
	,	Describe structural variation of chromosome.	5
	c)	Define gene mutation? How does mutation occur in animal?	4
	•)		or .
3.	a)	Define linkage? Classify linkage with example.	3
	b)	How will you estimate map distance and position of genes?	5
	c)	Differentiate between sex-linked trait and sex-limited trait.	4
18			
4.	a)	Why DNA is called genetic material? What are the characteristics of triplet codon?	4
	b)	"DNA replication is semi-conservative in nature". Justify it.	5
	c)	Explain penetrance and expressivity.	3
70	V)	Emplain penetrative and empressively.	
		SECTION B	
5	a)	Why did Mendel use garden pea as experimental material in his study?	3
	b)	Explain co-dominant gene action with example.	4
	c)	What are the conditions need to be fulfilled for law of segregation and law of	4
5*	v)	independent assortment?	
6	(a)	Briefly describe protein biosynthesis process in animal.	5
	b)	"Most mutations are neither harmful nor helpful". Justify it.	4
	c)	List the different genetic diseases of livestock.	3
\$1 (K)	,		
7	a)	Differentiate between X and Y chromosomes.	3
	•		5
	b)	State multiple allelism with example in animal. Illustrate sex determination process in Drosophila.	3
	c)	A women of Blood group "A" married a man of Blood group "o", there are three	4
		children in the family. They are A, O, and AB. Which child is definitely adopted?	·
8	W	rite short notes on (any four):	3×4=12
и ж		a) Epistasis	
		b) Polyploidy	
		c) Mutagens	
		d) Non-disjunction	
		e) Lethality	( **)

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018 Course Title: Environmental Hygiene and Bio-security (Theory)

Course Code: EHB 201(T) Full Marks: 35; Time: 2 Hours

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

### SECTION-A Define health and hygiene. a) 2.0 Write down the different steps that are needed for sanitary improvement of soil of b) farm yards. Differentiate between relative humidity and absolute humidity. a) 2.0 Briefly describe the suspended impurities of air. b) 2.0 How will you control the air borne disease of sheep farm that is located in industrial c) area of Chittagong? Differentiate between isolation and quarantine. Write down importance of quarantine 3.0 a) shed for a dairy farm. Write down the factors that are related to control and eradication campaign. 3.0 4. What is antiseptic? Enlist five (5) commercial name of antiseptic with its active 3.0 ingredient. Write down the procedures of fumigation technique. b) 3.0 **SECTION B** Describe water impurities. a) 3.0 Discuss about sampling and examination procedure of water. 3.0 6 Mention hygienic qualities of pure water and soil. What precautions are needed to follow during transporting of a dead animal? Illustrate 3.0 b) feature of Bio-safety level-2 lab. 3.0 What is furnigation? What are the objectives of furnigation? How-will you perform fumigation in a farm? b) What do you mean by biosecurity? Explai. What is acid rain? Write down the ecological impact of acid. Define ventilation. Write down the air space requirement of cow, buck and duck. 3.0 3.0

biosecuity programme in a dainy farm 600 2+4=6

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018 Course Title: General Pathology-I (Theory)

Course Code: GPT-201(T)
Full Marks: 70; Time: 3 Hours

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

1	a)	What do you mean by	2	
1.	a)	(i) health and senses (ii) pathogenesis		
		(iii) autopsy (iv) pathognomonic lesion		
	b)	Define cell death and somatic death.	2	
	c)	Differentiate between apoptosis and accidental cell death in a tabular form.	3	9
	a)	Enumerate the schematic diagram of bile pigment formation.	4	
	b)	How the Van den Bergh test can categorize three types of jaundice?	3	
			4	
i (6	a)	Define and classify amyloidosis. Write down the pathogenesis of secondary amyloidosis.	4	
	b)	Give the microscopic features of amyloidosis in liver, kidney and spleen.	3	
	a)	Define and classify pathologic calcification. Write down the microscopic lesions of dystrophic	2	
	<b>b</b> )	calcification. Write down the causes of metastatic calcification.	3	
	b)	85	1	
	c)	When calcification could be harmful to the individual?		
	a)	What type of gangrene will be found in visceral organs? Write down its gross and microscopic	5	
		lesions. Mention the significance of gangrene.	2	
	b)	Write down the gross and microscopic lesions of infarcts?	2	
	a)	List the microscopic lesions of neoplasia.	3	
		Enlist the causes of neoplasia.	2	
	b)	How does malignant neoplasms spread into host body?	2	
		SECTION B		×.
7.		Briefly describe the gross and microscopic changes found in dead cells and tissues.	7	
	. ×		2	
	a)	Mention the factors affecting rigormortis and algormortis.	2	
	b)	Write down the gross lesions of post mortem autolysis.	2	
	c)	Differentiate postmortem autolysis from necrosis in a tabular form.	3	
		D. C	3	
•	a)	Define and classify atrophy.  How radiation can induce neoplasm?  •	2	
	b) c)	Enlist ten developmental anomalies found in man and animals.	2	
			_	
10.	a)	Write down the gross and microscopic lesions of caseation and Zenker's necrosis.	5	
	b)	Enlist the possible outcomes of necrosis.	2	
1.	a)	Write down the pathogenesis of hemolytic and toxic jaundice.	4	
	b)	Mention the pathologic deposition of melanin pigment. How you will differentiate	3	
	U	melanophages from melanoblasts?	3	
12.	a)	Show the mechanism of photosensitizational dermatitis in a sketch form.	2	
12.	a) b)		1	
12.	b)		2 1 4	

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018 Course Title: Platyhelminthes and Malacology (Theory) Course Code: PLM-201(T)

Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer Five (5) questions from each section.)

1.	a) b)	Define parasite and host. Classify parasites into different categories with example. Write down the general injurious effects of parasite on their hosts.	3
2.	a)	How does the goat get liver fluke infection and parasite itself harbour in its predilection site.	3
	b)	Write down the name genera and cercariae of the members of following families.  (i) Dicrocoeliidae (ii) Paramphistomatidae (iv) Fasciolidae	1×4=4
3.	a) b)	Name the blood flukes of veterinary importance prevalent in Bangladesh.  Describe the life cycle, clinical findings and pathological complications produced by Schistosoma nasalis in its host.	1 4
	c)	Mention how Schistosomiasis can be efficiently diagnosed, treated and controlled from a cattle farm.	2
4.	a)	Distinguish the following terms with example (Any five).  (i) Parasitosis and Parasitiasis  (ii) Paratenic host and transport host  (iii) Erratic and coelozoic parasite  (iv) Vector and carrier  (v) Reservoir host and transport host	5
		(vi) Symbiosis and commensalism	
	b)	"The larval cestodes are more pathogenic than those of adults"- Explain.	. 2
5.	a)	Mention the smallest and longest pathogenic cestode of dog.	2
	b)	Differentiate between Davainea Proglottina and Raillietina tetragona.	2
	c)	Illustrate the morphological differences between Moniezia expansa and Moniezia benedeni.	3
6.	a)	In a tabular form write down the similarilies and dissimilarities between trematode and	4
	b)	cestode.  Discuss why taeniasis is regarded as a problem of developing country; not of developed countries.	3
		SECTION-B	19
.7.	a)	What is platyhelminthes? Illustrate the various developmental stages of a digenetic	4
	b)	trematode.  Mention the sources and route of parasitic infection with example.	3
8.	a)	Describe the general morphological features of a typical cestode with diagram.	3
	b)	How will you differentiate between Pseudophyllidean and Cyclophyllidean cestodes?	4
9.	(a)	How an egg of tape worm released from gravid proglottid?	3
ε	b)	Illustrate the morphology and life cycle of Prosthogonimus ovatus.	
10.	a)	Mention the general morphology of a typical snail.	2.
	b)	Write down the importance of snail in veterinary parasitology.	3
	c)	Name four snails with the name of parasitic infection that may be transmitted by them.	2
			2
11.	a)	Describe the life cycle, Pathogenic significance and control measures of <i>Echinococcus</i> granulosus infection in its final host and intermediate host.	4
	.p)	Define and classify immunity. How the parasitic immunity is break down.	3
12.	Wri	te short notes on any two of the following:  (i) Swimmer's itch  (ii) Hymenolepis nana  (iii) Hydatid cysts  (iv) Chinese liver fluke	3.5×2=7

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1st Semester Final Examination 2018 Course Title: General Microbiology

Course Code: GMC-201(T)
Full Marks: 70; Time: 3 Hours

(Figures in the right margin indicate full marks. Answer 3 (three) questions from each section where Question no. 1 and 5 are compulsory. Use separate answer script for each section.)

1.	a)	Enumerate the branches of bacteriology.	4.0 3.0
£	b) c)	What is the core message in miasmatic theory of disease? Write down the contributions of Robert Koch and Louis Pasteur towards the development of Microbiology.	
2.	a)	What are key nutrients of bacteria?	2.0
	b)	Why do bacteria need nutrients?	6.0
24	c)	What is the role of terminal hydrogen acceptor in the metabolism of bacteria?	4.0
3.	a)	Describe the procedure where dry heat is used for sterilization.	3.0
	b)	Briefly describe the mode of action i) Ethyl alcohol ii) Formaldehyde and halogens in killing of microorganisms	4.0
	c)	You have been using a disinfectant over a period of 6 months in your Veterinary hospital. Now you want to verify its potency. How can it be done?	5.0
4	a)	Differentiate point mutation and deletion mutation.	3.0
	b)	Can the rate of mutation in bacteria be increased artificially?	4.0
	c)	Sketch the basic steps used in recombinant DNA technology.	5.0
		SECTION B	
5	a)	The chemical composition of Gram positive and Gram negative are not the same- Justify the statement.	4.0
	b)	Classify bacteria on the basis of flageliar distribution. Do you think that flagellated bacteria are more invasive?	3 0
	c)	What makes a bacterial endospore more resistant to harsh environmental conditions and chemical treatment?	4.0
6	a)	Describe the influence of temperature in the growth of bacteria.	4.0
	b)	How can you obtain a pure culture?	4.0
8	c)	Describe the roles of macrophages in protecting animal body from microbial invasions.	4.0
7	a)	What are anaphylotoxin? How do they form in an animal body?	3.0
	b)	Describe the characteristic of exotoxin produced by bacteria.	5.0
	c)	Give some examples of tissue degrading enzyme produced by bacteria.	4.0
8	a)	How does bacterial DNA replicate?	4.0
	b)	Describe the conjugation process seen in bacteria.	4.0
	c)		

## Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1<sup>st</sup> Semester Final Examination-2017 Course Title: Animal Nutrition (Theory)

Course Code: ANT-201 (T) Full Marks: 70; Time: 3 Hours



(Figures in the right margin indicate full marks. Answer three questions from each section of which question number 1 and 5 are compulsory. Use separate answer script for each section.)

### Section-A

1.	a)	Define nutrients and nutrition. How could you explain that water is the most vital of all nutrients?	5.0
	b) c)	What are the important adaptations of desert animals to survive with scarce of water? Is carbohydrate a dietary essential for ruminants?	3.0 3.0
2.	a)	Distinguish between RDP and UDP. Why UDP in the diet is especially important for high yielding lactating cow?	4.0
	b)	Show the biological partitioning of feed energy with schematic diagram.	4.0
	c)	What are the factors affecting the digestibility in ruminants?	4.0
3.	a)	What do you mean by feeding standard? Briefly, discuss the most suitable feeding standards for Bangladesh.	4.0
	b)	Classify animal feeds with examples.	4.0
		How ruminant is a contributor for global warning? Why methane formation is an inevitable process in rumen fermentation?	4.0
4.	a)	Explain the variations in the mode of nutrients utilization and nutrient requirements by cattle and horse due to their anatomical dissimilarities of the gut.	4.0
	b)	Discuss the absorption process of lipid from intestine of horse.	4.0
	c)	What is CLA? Why CLA could be found mostly in the products derived from ruminants.	4.0
		Section-B	
5.	a)	Differentiate exopeptidase from endo peptidase with examples.	4.0
	b)	Discuss the digestion process of crude protein present in mustard oil cake in the ruminant gut.	4.0
	c)	State the steps to be followed for ration formulation for a lactating cow.	3.0
6.	a)	Differentiate apparent and true digestibility. List the agro-industrial by-products that are used as livestock feed.	4.0
	b)	Which method of <i>in-vivo</i> digestion trial you will adapt to evaluate the digestibility of maize? Describe an <i>in-vivo</i> digestion trial where the amount of feed consumed and amount of feces output is not required to calculate the digestibility.	4.0
	c)	What is urea-molasses straw (UMS)? Briefly explain the uniqueness of feeding UMS compared to other urea feeding method.	4.0
7.	a)	"The diets of ruminants predominantly contain unsaturated fatty acids but the body fats are mostly saturated", how will you explain the biological fact that is happens in the rumen?	4.0
	b)	Explain when and why lipid supplementation may reduce digestibility of crude fiber. Write down the guideline for supplementing lipids in ruminant diet.	4.0
	c)	Define anti-nutritional factors in feed stuffs. Classify them according to their effects on different nutrients.	4.0
8.	W	rite short notes on (any three):  i) Rumen environment	3×4=12
		ii) Biological value of protein	,

iii) Recycled nitrogen

iv) Ca-P- Vit. D interaction

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1<sup>st</sup> Semester Final Examination-2017

Course Title: Neuro-Endocrine and Reproductive Physiology (Theory)

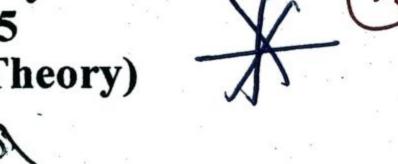
Course Code: NRP-201 (T) Full Marks: 35; Time: 2 Hours

(Figures in the right margin indicate full marks. Answer any 3 (three) questions from each section. of which question No. 1 is compulsory. Use separate answer script for each section.)

			may to a financial
1.	a)	Enlist the pituitary normones of afficitor food with their chemical material and principal	2.0
	b)	functions.  What are the hormones secreted from gonad? List the length of estrus cycle, estrus period and gestation period of cow, due, mare and queen.	2.0
	c)	Why aldosterone is called life saving hormone?	1.0
2	. a)	List the name of neurohormones. "Hypothalamus is called neuroendocrine gland"- explain.	2.0
	b)	How do neurons communicate? Write down the special reactives of actions in the special reactives of actions of actions in the special reactives of actions of actions in the special reactives of actions in the special reactives of actions in the special reactives of actions in the s	2.0
•	c)	Define reflex arc. Write down the possible combination of reflex arc.	2.0
3	. a)	Write down the different methods of pregnancy test in animal.	2.0
	b)	How is parturition initiated? Describe the different stages of parturition.	2.0
e 6	c)	List the time of descent of testes in different species. What are the differences of reproductive system in bull, stallion, buck and boar?	2.0
1		Classify animals on the basis of olfaction. How is animal able to maintain equilibrium?	2.0
4	. a b	xxx : 1 1 C 1 ftt- Harris tacta gianal nace to the brain?	2.0
5*	c	viv. 1 the composition of westibular apparatus. Discuss about the "stereochemical	2.0
		SECTION-B	
	5.	a) What is the relationship between parathormone and calcitonin? Describe the role of PTH on blood Ca <sup>++</sup> level.	2.0
	:	b) List the hormones of kidney. Briefly describe the mechanism of water reabsorption by ADH.	2.0
		c) What are the differences between melanin and melatonin? Discuss the role of pineal gland on reproduction.	2.0
	6.	a) Write down the physiological role of accessory sex organs of bull.	2.0
6		b) What are the pituitary gonadotrophins? What are the differences between HCG and PMSG?	2.0
		c) List the hormones responsible for mammary gland development. How is milk ejection occurred in mare?	2.0
	7.	a) List the name of cranial nerves that are functionally sensory. How is neurotransmitter released from nerve endings?	2.0
÷	**************************************	b) List the cells of CNS. Write down the classification of autonomic nervous system according to function and location.	2.0
		c) Draw and label a typical neuron. Define synapse and receptor.	2.0
	8.	a) Sketch the mechanism of action of steroid hormone.	2.0
		b) What are the sources of P <sub>4</sub> and OE <sub>2</sub> ? Write down the function of any one of them.	2.0
		c) List the name of fatty acid derivative hormone. What are the functions of testosterone and sertoli cells?	2.0

# Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1<sup>st</sup> Semester Final Examination-2015 Course Title: Zoo, Wild and Lab Animal Management (Theory)

Course Code: ZAM-201 (Theory) Full Marks: 35; Time: 2 Hours



(Figures in the right margin indicate full marks. Answer any three questions from each section where question no. 5 is compulsory. Fractions of a question must be answered together. Use separate answer script for each section.)

#### Section-A

,	1.	a)	Elaborate following terms (Any six): Wildlife, Captive breeding, Reintroduction, Extinction, Ecological succession, In situ breeding, Wildlife sanctuary and Botanical garden.	6.0
	2.	a) b)	Write down the taxonomies of rabbit and guineapig.  Mention the birth weight, adult weight, gestation period, litter size, feed intake and life span of rabbit.	2.0 4.0
	3.	b)	Differentiate Zoo from Safari park. Categorize animals according to their food habits. Write down the general management procedure of wildlife.	2.0 2.0 2.0
70	4.	b)	Explain the importance of wildlife conservation. Briefly discuss the causes of wildlife extinction and explain their remedies.  What are the possible dietary problems of captive animals?  What facilities should you consider for establishing a modern zoo?	2.0 2.0 2.0
			Section-B	
	5		Briefly discuss the main diagnostic characteristics of the class Amphibia, Reptilia and Mammalia.  Draw the structure of the national categories adopted by IUCN. A leopard has the following characteristics:  - Extent of occurrence is <4500 square kilometer.  - Population is highly reduced in the last 20 years.  - Habitat is highly fragmented.  - Habitat condition is highly degraded.  - Habitat is under 5% of the protected areas.  - Human impact is highly negative.  - Very low intrinsic capacity to adapt.  Is the leopard threatened? If yes, under which national categories?	
	6		Define IUCN. Mention four animals which are red listed from IUCN. Briefly discuss the procedure you should consider for supplying foods for zoo animals.	3.0 3.0
	7	a) b)	Briefly discuss the management procedure of a juvenile crocodile.  Give a balanced diet for a hippopotamus and a lion.	3.0 3.0
	8		Briefly discuss the incubation behavior of a python.  Explain the mating behavior of tiger.  Differentiate monkeys from apes.	3.0 2.0 1.0

## Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1<sup>st</sup> Semester Final Examination-2015

Course Title: General Microbiology (Theory) Course Code: GMC-201 (T)

Full Marks: 70; Time: 3 Hours



(Figures in the right margin indicate full marks. Answer any three questions from each section of which question number 1 and 6 are compulsory. Fractions of the questions must be answered together. Use separate answer script for each section.)

### Section-A

	1.	b)	What is DNA? Describe linear DNA replication process in bacteria.  What do you mean by genetic code and non-sense code?  Describe the translocation process in protein synthesis.	5 2 4
100	2.	b)	What is toxoid? Discuss its preparation process.  Differentiate among toxin, endotoxin and mycotoxin.  Define virulence and pathogenicity.	6 3 3
	3.	a) b) c)	What do you mean by bacterial genetic recombination?  How many types of genetic recombination do occur in bacteria? What are they?  Describe bacterial transformation.	3 6
	4	a) b) c) d)	Write notes on the following: Nosocomial infection Bacteriological media Prokaryotes and eukaryotes Dimorphic fungi	X4=12
			Section-B	
	5.	a) b	What is "Miasmatic theory of disease"? Write down the contribution of Robert Koch towards	3 5
	*	c	the development of microbiology.  List major characteristics of prokaryotic protists.	3
•	6.	ł	How do Gram (+) bacteria differ from Gram (-) bacteria  What are the chemical compositions of bacterial cytoplasmic membrane, outer membrane, capsule, flagella, pili and endospore.  How does an endospore germinate to a vegetative cell?	4
	7.		<ul> <li>What is synchronous growth of bacteria? Describe the roles of oxygen on the growth of bacteria</li> <li>Sketch the relationship between bacterial nutrition and metabolism.</li> </ul>	3
	8		c) Where and how moist heat is used for sterilization?  a) Classify fungi on the basis of sexual reproduction?	3
	0	•	b) List differentiating features of fungi from bacteria c) Describe different virulence factors of bacteria	3 6

### Chittagong Veterinary and Animal Sciences University DVM 2<sup>nd</sup> Year 1<sup>st</sup> Semester Final Examination-2015 Course Title: Environmental Hygiene and Biosecurity (Theory)

Course Code: EHB-201 (T) Full Marks: 35; Time: 2 Hours



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

### Section-A

			4
1.	a)	Define environmental hygiene and health.	2
	b)	Write down the importance of environmental hygiene.	. 2
	c)	State scopes of environmental hygiene.	1
			1
2.	a)	What is auto purification of soil?	1
	b)	Mention five common soil-borne and five water borne diseases along with their causal agents.	1
17	c)	Briefly describe sanitary improvement of soil in a farmyard.	2
	,	in a fairingard.	. 3
3.	a)	What is relative humidity and fog?	
	,		1
	c)	How will you control air-borne infection?	2
	c)	Mention different types of ventilation along with figures.	3
4	a)	What are the properties of hygienically pure water?	
	b)	Mention the common dissolved impurities of water.	1
	c)	Write down the processes of water purification.	3
		are processes of water purification.	2
		Section-B	
72		Section-D	
•	7		G.
5	2)	D.C. 1.	
٥.	a)	Define bio-security and biosafety.	2
	b)	Briefly describe general biosecurity procedures practiced in an animal farm.	4
	8		5 <b>.</b> 00
6.	a)	Briefly describe methods commonly used for disposal of animal carcass in Bangladesh.	2
	b)	Write down the objectives of disposal of animal waste.	2
		1	3
7.	a)	What is isolation and quarantine?	
	b)	What hygienic measures should be taken for prevention of infectious disease?	1
	c)	What are influences of climate on animal health?	3
		mate are influences of chiliate on animal health?	2
8.		Write short notes on any three (2) - Cut - Cut - :	
		Write short notes on any three (3) of the following	2X3
	i)	Spring and well	=6
	ii)	Biosafety risks	
	iii)	Radiation injury	
	iv)	Collection and storage of liquid manure	
			8