

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
MS in Parasitology
January - June Semester Final examination-2014
Course title - General Parasitology
Course code – GPR - 601
Full Marks - 40, Time - 2 hours

Answer any **FOUR** questions in the following

1. a) Define parasite. Briefly describe the different types host parasites association. 4.0
b) Describe briefly factors affecting the host specificity. 3.0
c) Define the following terms 0.5X6=3.0
i) Aberrant parasites ii) Pseudo parasites iii) Facultative parasites
iv) Coelozoic parasites v) Reservoir host vi) Paratenic host

2. a) Describe detail the Mutualism and Symbiosis. 4.0
b) Write short notes on 3X2=6.0
i) Diapause ii) Drug resistance

3. a) With example in each case briefly describe the factors and affects the densities and distribution of parasites. 5.0
b) With example in each case briefly describe the sources of infection and mode of transmission of parasites. 5.0

4. a) Define Self cure phenomenon and Spontaneous cure. Write in brief the economic importance of parasitic diseases in livestock in Bangladesh. 6.0
b) Write down the zoological nomenclature of a parasite. 4.0

5. a) Mention some recent inventions related to Veterinary General Parasitology. 5.0
b) What do you mean by premonition? Mention the difficulty in vaccine production against parasites. 5.0

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
January - June Semester Final Examination – 2014
MS in Parasitology
Course title - Helminthology
Course code – LPR - 601
Full Marks - 40, Time - 2 hours

Answer any **FIVE** questions in the following

1. a) Describe the general life cycle of trematodes with exception. 3.0
b) Describe the bionomics strongle larvae. Which stage of *Ostertagia* is harmful and why? 2.0
c) Write short note on arrested larval development. 3.0
2. a) What is snoring disease and swimmer itch? 2.0
b) How will you confirm snoring disease? 2.0
c) Describe the salient features of schistosomatidae and paramphistomatidae family and mention its genera with species. 4.0
3. a) How will you differentiate cyclophyllidea and pseudophyllidea? 3.0
b) Describe briefly the beef tape worm mentioning its biological features, life cycle and control measures. 5.0
4. a) Briefly describe the morphology, life cycle and control measures of *Toxocara canis* infection in dog. 5.0
c) Describe the life cycle of *Dirofilaria imitis* infection in dog. 3.0
5. a) List the blood parasites of cattle. 2.0
b) Describe the morphology and life cycle of barber's pole worm in nanny goat. 4.0
c) What is summer sore? How will you handle it? 2.0
6. a) Define zoonosis. List the nematodes of zoonotic importance. 2.0
b) Do you think vaccination is possible to prevent the nematode infection?-Justify 3.0
c) Sketch the life cycle of *Trichuris globulosa* in a Red Chittagong cow. 3.0

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
January - June Semester Final Examination - 2014
MS in Parasitology
Course title - Parasites of Zoo and Wild Animals
Course code ZWA - 601
Full Marks - 40, Time - 2 hours

Answer any **FOUR** questions in the following

1. a) Write down the common morphological features and ecology of zoo animal nematodal parasites. 5.0
b) What do you mean by emerging and re-emerging diseases of zoo animals? Write down the etiology, clinical signs and public health importance of sarcoptic mange infestation in monkey. 5.0
2. a) Describe the morphology and the general sketch life cycle pattern of *Fasciola gigantica* in captive deer. 5.0
b) Describe briefly the etiology, clinical findings, diagnosis and treatment of hook worm infection in black bear at Safari Park. 5.0
3. a) Enlisted the common parasites of elephant. Briefly describe the morphology, life cycle and control measures of common lice which our laboratory identified from Asian Elephant. 5.0
b) Define mange. Briefly describe morphology, life cycle and public health significance on demodicosis in Royal Bangal Tiger. 5.0
4. a) List the parasites of Pythons. Describe the morphology and life cycle one of them important parasites of pythons. 5.0
b) Listed parasites of wild birds. Describe the morphology and life cycle one of them important parasites of wild birds. 5.0
5. a) Defiene zoonosis. List the zoonotic parasites of primates. How will you protect the monkey from parasitic infestation in a Safari Parks Zoo. 5.0
b) Describe the etiology, clinical signs, postmortem lesions and treatment of coccidiosis in rabbit. 5.0

Chittagong Veterinary and Animal Sciences University

Faculty of Veterinary Science

Department of Pathology and Parasitology

MS in Parasitology (January-June semester) Final Exam'2014

Course Title: Immunoparasitology

Course Code: IPR-601

Total Marks: 40

(Figures in the right margin indicate full marks)

Answer any 4 (four) questions

- 1 (a). Briefly describe the basic structure of antibody. What are the differences between different antibody classes? 5.0
- (b). Explain the mechanism of presentation and processing of exogenous and endogenous antigens by body's immune system. 5.0
- 2(a). Define and classify resistance to parasite infection with example. 2.0
- (b). How the vertebrate host generally reacts against protozoan parasites. 3.0
- (c). Mention-briefly the evasion of immunity by Trypanosomes and *Leishmania* spp. 5.0
- 3 (a). What are the features of intestinal immune system? 3.0
- (b). Briefly mention the mechanism of protected immunity against GI nematodes. 5.0
- (c). How Schistosomes eggs modulate host immune system. 2.0
- 4 (a). Define and classify hypersensitivity reaction. 4.0
- (b). Briefly describe the conditions below 6.0
- (i) Erythroblastosis fetalis (ii) Farmer's lung
5. Write short notes on (2.5x4) 10
- (i) Cytokines (ii) MHC (iii) Immune response against filarial worm (iv) anti-parasitic vaccine development.

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Science
Department of Pathology and Parasitology
MS in Parasitology (January-June semester) Final Exam'2014
Course Title: Avian parasitology
Course Code: APR-601
Total Marks: 40

(Figures in the right margin indicate full marks)

Answer any 4 (four) questions

- 1 (a). Enlist important nematodes of poultry with their host, predilection site and geographical distribution. 4.0
- (b). Describe briefly the economic importance, epidemiological features and control measures against *Ascaridia galli* infection in chickens. 6.0
- 2 (a). What is 'gape worm' make justification of such naming. 4.0
- (b). Mention the morphological features, life cycle and diagnosis of 'gape worm' infection in poultry. 6.0
- 3 (a). Which tape worm species is considered as the most pathogenic tapeworm of chicken and why? 4.0
- (b). Sketch the life cycle and mention the diagnosis of this parasitic infection. 6.0
- 4 (a). Write down the important morphological features of poultry trematodes. 4.0
- (b). Mention the life cycle, pathogenic effects, treatment and control measures of one important trematode of duck. 6.0
5. Write short notes on (2.5x4) 10
- (i) Hair worm (ii) Gullet worm (iii) Nodular tapeworm (iv) Eye worm .

Chittagong Veterinary and Animal Sciences University
Department of Pathology and Parasitology
Master of Science in Parasitology
January - June Semester Final Examination' 2014
Course title: Vector Biology and Tropical Diseases
Course code: VTD-601, Total marks: 40, Time: Two hours

Answer the following questions-
(Each question carries ten marks for correct answers)

1. Write down five tropical parasitic diseases occurred in large animals in Bangladesh, and mention the major pathogenic effects of each in the animals.
2. Write down the basic differences between cyclo-propagative and cyclo-developmental transmissions. Give an example for each type of aforementioned transmissions, and briefly discuss the transmissions in respective cases.
3. Write down five vector borne parasitic diseases occurred in small animals in temperate areas, and mention the major pathogenic effects of each in the animals.
4. Briefly describe the bionomics of one organism from each of diptera and acarina order.

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
MS in Pathology
January-June Semester Final Examination 2014
Course title: Pathology of Bacterial and Viral diseases
Course code: BVD-601
Full marks: 40, Time: 2 hours

[Figures in the right margin indicate full marks. Answer any 5 (five) questions from the following]

1. a. Summarize Koch's postulates of bacterial infections with some exceptions. Write down the pathophysiological actions of endotoxins. 4
b. Write down with diagram the role of PA in anthrax intoxication in host cells. Write down the postmortem pathology of anthrax. 4
2. a. What do you mean by "miliary TB" and "pearly disease"? 4
b. Write down the pathogenesis and pathology of bovine bacillary hemoglobinuria. 4
3. a. Write down the pathology of strangles with its sequelae. 3
b. Write down the pathogenesis and pathology of brucellosis. 5
4. a. Write in brief about cellular injury produced by viruses. 4
b. How mucosal disease develops in a calf? 4
5. a. Write down the pathological lesions produced in case of pox and papillomatosis. 5
b. Write down the transmission and pathology of scrapie in sheep. 3
6. a. Write down the species affected, transmission, pathogenesis and pathology of rotavirus infection. 5
b. Write in brief about the pathogenesis of rabies. 3

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
MS January-June Semester Final Examination 2014
MS in Pathology
Course title: Reproductive Pathology
Course code: RPT-601
Full marks: 40, Time: 2 hours

(Figures in the right margin indicate full marks. Answer any 5 questions from the following)

- | | | |
|----|---|---|
| 1. | a. Define intersex. | 1 |
| | b. Write a short note on freemartinism. | 4 |
| | c. What do you mean by true hermaphrodite? | 3 |
| 2. | a. List different types of ovarian cysts. | 3 |
| | b. Describe two common ovarian cysts encountered in cows. | 5 |
| 3. | a. Write a short note on progesterone mediated endometrial hyperplasia. | 3 |
| | b. Write down the etiology of endometritis. | 3 |
| | c. List the pathological conditions encountered in gravid uterus. | 2 |
| 4. | a. Describe 4 developmental anomalies of penis and prepuce. | 4 |
| | b. Define the following terms: spermatic granuloma, oligospermic, spermatocele, ulcerative posthitis. | 4 |
| 5. | a. Briefly describe the pathogenesis of brucellosis in pregnant cows. | 5 |
| | b. List the pathology of listerial abortion. | 3 |
| 6. | a. Write down the pathogenesis and pathology of trichomonial abortion. | 8 |

Chittagong Veterinary and Animal Sciences University
Faculty of Veterinary Medicine
MS January-June Semester Final Examination 2014
MS in Pathology
Course title: Pathology of Metabolic Diseases
Course code: MPT-601
Full marks: 40, Time: 2 hours

(Figures in the right margin indicate full marks. Answer any 5 questions from the following)

1. a. What happens when a parturient cow is suffered with calcium deficiency? 8
2. a. Differentiate metabolic diseases from nutritional deficiency diseases? 3
b. Write down the etiology and pathogenesis of hypomagnesaemia. 5
3. a. Why horses are prone to azoturia than cattle? 2
b. Describe the events responsible for death from azoturia in horses. 6
4. a. Write down the etiology of post parturient hemoglobinuria along with its pathogenesis? 5
b. Describe the pathology of white muscle disease. 3
5. a. Write down the consequences of impaired CHO and volatile fatty acid metabolism in cows. 8
6. a. Describe the pathology of white muscle disease. 4
b. Describe the pathology of azoturia. 4

Chittagong Veterinary and Animal Sciences University

Department of Pathology and Parasitology

M. S. in Pathology

Jan- June Semester Final Exam. 2014

Sub: Pathology of Parasitic Diseases (Theory)

Course code- PPT-602

Total Marks- 40, Time- 2 hours

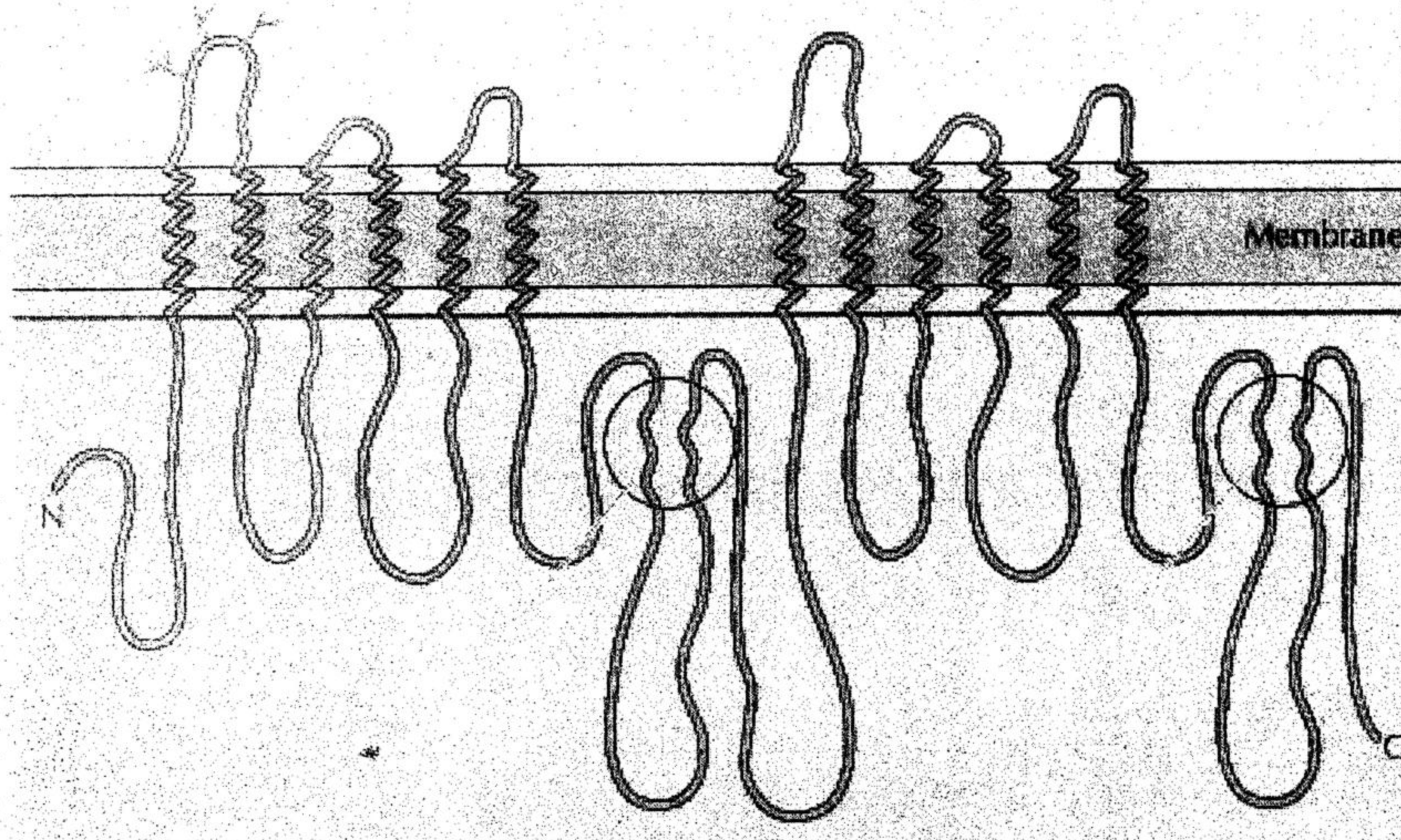
MS in Pathology

Figures in the right margin indicate full marks. Answer any FIVE of the following questions.

1. (a) Mention five veterinary important ticks found in Bangladesh. Describe the economic importance of ticks. 4.0
(b) Write a short note on tick paralysis. 4.0
2. (a) Write down the etiology, epidemiology, pathogenesis, pathology and pathologic significance of toxoplasmosis in cat. 6.0
(b) How breeding rest play role to control trichomoniasis in cow? 2.0
3. (a) Define and classify myiasis. Describe the pathologic significance of myiasis. 5.0
(b) Write down the pathogenesis and pathology of canine demodocosis. 3.0
4. (a) 'Cestodes are more harmful to their intermediate hosts' - justify it. 3.0
(b) Why the adult cestodes are usually found in anterior part of intestine? 1.0
(c) Write a short note on nasal schistosomiasis. 4.0
5. Describe the difference in the mechanism of the followings:
 - (i) Edema produced by fascioliasis and haemonchosis.
 - (ii) Anemia produced by babesiosis and anaplasmosis.
6. Describe the gross and microscopic lesions of the following: (any two) 8.0
 - (i) Verminous pneumonia in cow.
 - (ii) Fascioliasis in sheep.
 - (iii) Nodular worm diseases in calf.

c) Mark the basic structural unit of following ABC transporter

2



2.a) Discuss the member of protein filaments responsible for cytoskeleton protein. How does they regulate formation of cyto skeleton?

3 + 2

b) Define the structure of microtubules. How can you purify tubulin from bovine brain?

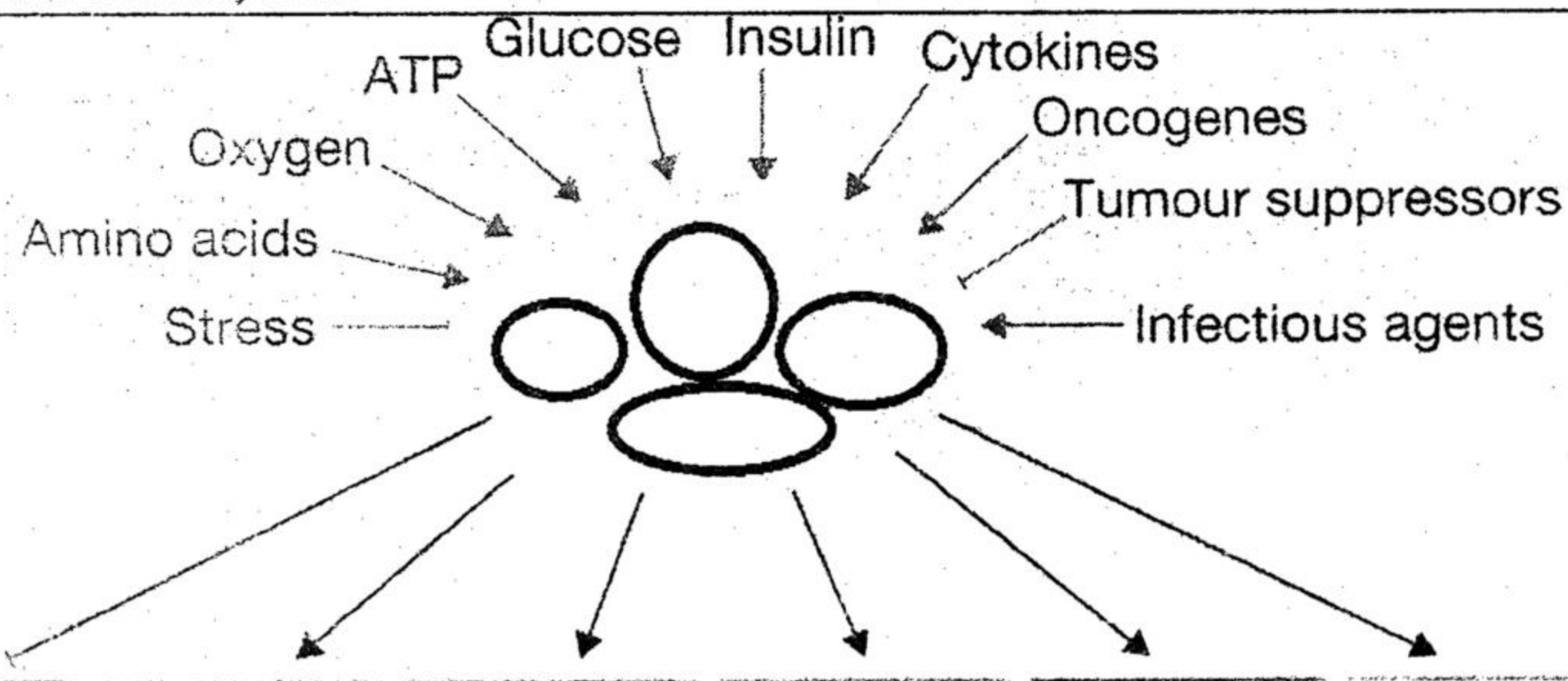
2 + 3

3. Clear the status of cell during following phase of cell cycle. Correlate the function of CDKs during the phases. Go, G1, M, S, G2, M.

10

4. a). Select appropriate molecule in following figure and mention the appropriate functions.

10



5. a). Does autophagy follow the rule of PCD? Differentiate between macro and micro autophagy.

2 + 3

b). Discuss the role of following protein in apoptosis

5

	i). Apaf1, ii), Caspase 3, iii). Caspase 9, iv) Cytochrome c v) PARP	
6.a).	Write down the morphological patterns of necrosis.	4
b).	Differentiate between Karyolysis, Pyknosis, and Karyorrhexis	6

Chittagong Veterinary and Animal Sciences University
MS in Poultry Science final Examination
Semester: January–June 2014
Subject: Poultry Farm Planning and Management -Theory
Course Title: PPM-602; Total marks: 40; Time: 2 hours

Answer any five questions of the following where question no. 5 is compulsory; Each question has equal marks, Figures in the right margin indicate full marks

- 1) What is plan, program, and organization? Discuss the general principles of farm planning 8
- 2) State the managerial roles of a poultry farm to maintain profitable production, and give a plan for maintaining strict bio-security and sanitary measurements 8
- 3) What is farm & farming system? Discuss the different factors that affect farm planning and design 8
- 4) Discuss the system properties and criteria for measurement of performance of ideal farming 8
- 5) Give an advisory plan or suggestions to a farmer who wants to produce twenty thousand day-old chicks from a breeder flock 8
- 6) Discuss market identification, benefits, and limitation of poultry farming shortly 8
- 7) Narrate the strategies or plans with which you can reduce the environmental pollution that is retrieved from poultry enterprises briefly 8
- 8) Give the schematic view with numerical calculation (**cost: benefit analysis**) for the argument that quail rearing is more profitable than chicken 8