### 2010

### M.Sc.

# 3rd Semester Examination

## BIO-MEDICAL LABORATORY SCIENCE & MANAGEMENT

PAPER-X (Unit-20)

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

### Module-I

1. Answer any five of the following:

- 1×5
- (a) What are different forms of *P. falciparum* found in peripheral blood?
- (b) What is the longevity of P. malarial in human host?
- (c) How would you differentiate T. solium eggs from H. nana eggs?
- (d) What do you mean by a filariform larva?
- (e) What is the habitat of Giurdia intestinalos?
- (f) Name one helminth that may cause cancer.
- (g) What is the largest intestinal protozoa?
- (h) Name one commensal intestinal protozoa.

2. What is the scientific name of pinworm? How is it transmitted? Draw the egg of pinworm.

1+5+2

Or

- (a) What is occult blood test? What is its significance?
- (b) What precautions one should follow in sending a faecal sample for laboratory testing. 2
- (c) Prepare a 'Report Form' to the used in a laboratory for stool sample examination.
- 3. What is the causative organism of Kala-azar? What is its vector? How would you diagnose a case of Kala-azar?

Or

Describe the morphology of Trichomonas vaginalis. Give its life cycle.

5+3

#### Module-II

- **4.** Answer any five of the following:
  - (a) Is endoplasmic reticulum present in a yeast cell?
  - (b) Name one inorganic chemical substance present in the cell wall of yeast?
  - (c) What reserve material a yeast can store?
  - (d) Is yeast a procarbotic cell or an encaryotic cell?
  - (e) Name a conidiospore bearing fungus.
  - (f) How a yeast multiplies?
  - (g) Name one fungus that can produce aflatoxin.
  - (h) Name one opportunistic fungus that can complicate AIDS.
- 5. What fungus causes histoplasmosis? In what environment the fungus multiplies? Which animals are naturally infected? How infection occurs? How human beings are infected? In parasitic stage which form of the fungus in present?

Or

Name one fungus responsible for bronchopulmonary aspergillosis. What clinical symptoms may be present? What investigations can be done?

1+2+4

1×5

6. What fungus causes crypatococeosis? What are the organs that may be invaded? Who are at special risk? How would you diagnose the infection?

1+2+1+3

Or

What are dermatophytes? What are causative organisms? Where from they originate? What are clinical forms?

1+1+1+4