

2013

M.Sc.

3rd Semester Examination

BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-302 (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 do you mean by intermediate host?
 - (b) What is the length of each division of stage micrometer?
 - (c) What are the components of lugol iodine solution?
 - (d) What are the preconditions those should be applied on the patient for accurate analysis of the stool sample.
 - (e) Write any two features of scolex of *T. solium*.
 - (f) Name two drugs used to treat helminths infection.

(Turn Over)

- (g) Write the name of two protozoa parasites in human.
- (h) Name the causative agent for Kala-azar.
2. (a) Write the procedure for the measurement of diameter of protozoa's egg.
- (b) State the procedure for the detection of parasite in stool by lugol's iodine reagent.
- 4+4

Or

- (a) Describe the morphological features of *G. histolytica*.
- (b) Classify helminths.
- (c) State the mode of *Ascaris* infection and briefly describe its various forms.
- 3+2+(1+2)
3. (a) Write the principle of occult blood test.
- (b) State the procedure for detection of hidden blood in stool.
- (c) Write the symptoms of filariasis.
- 2+3+2

Or

- (a) Describe the life cycle of any type of malarial parasite.
- (b) Describe the microscopic observational features to identify any two malarial parasites.
- 4+3

Module—II

4. Answer any five questions of the following : 1×5
- (a) Write any two characteristic features of fungus.
 - (b) Which is the major cell wall component of fungi.
 - (c) Name one dimorphic fungi.
 - (d) Name a solid media used for fungal culture.
 - (e) What is the primary entry point into the body for pathogenic fungi?
 - (f) What are opportunistic fungi?
 - (g) Name two antifungal antibiotics.
 - (h) Which antibiotic is generally used for preparation of culture media for fungi?
5. (a) Briefly state the composition of any two culture media for diagnosis of fungal infection. Mention the target organism for each medium.
- (b) How will you collect samples to study fungal infection on skin?

(3+3)+2

Or

- (a) Name any three anti fungal agents and mention their mode of action.
- (b) Give two examples of moulds.

6+2

6. (a) How fungal infection can be diagnosed in the laboratory. Mention the name of different methods and describe any one in detail.
- (b) What are the causative agents for black and white piedra.

(2+3)+2

Or

- (a) Write short notes on mycotic Keratitis and Tinea nigra.
- (d) What are the general consequences of mycotic infections in human.

(2+2)+3