

2008**M.Sc.****4th Semester Examination****BIO-MEDICAL LAB. SCIENCE & MANAGEMENT****PAPER—XIII (Unit - 25)***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.**Answer all questions.***Module — I**

1. Answer any *five* of the following : 5×1
- (a) What is Urinary hemosiderin ?
 - (b) What is indicated by brownish black urine ?
 - (c) What do you mean by Suprapubic-aspiration specimen ?
 - (d) Write the name of very common tests for urinary porphobilinogen and ketone bodies.
 - (e) What is the shape of triple phosphate crystal ?
 - (f) What is nocturia ?

(Turn Over)

- (g) What is the principle of urinometer method of specific gravity measurement ?
- (h) Write the name gram positive and gram negative bacteria found in urine.
2. (a) Write the full form of CPG preservative and why it would be given importance as the preservative of future.
- (b) Describe few preservatives mentioning its uses for 24-hr. urine specimen.
- (c) How do you precondition the patient before 24-hr. urine collection ? (1+2)+3+2

Or

- (a) Traditional methods are unable to detect all urinary ketone bodies' component. — Justify. How do you solve the problem ?
- (b) Mention the clinical significance of Bence-Jones proteins.
- (c) Enumerate the principle of BJP detection using colloidal silver staining. (2+3)+1+2
3. (a) Describe briefly the principle and process of detection of microalbuminuria using monoclonal antibody.
- (b) Prepare a model case report of patient suffering from UTI in detail. (1+3)+3

Or

- (a) Briefly discuss the method of urinary arsenic speciation by HGAFS technique through a schematic diagram.
- (b) Draw the microscopic shape of cellular cast and hyaline cast. 5+2

Module — II

4. Answer any *five* of the following : 5×1
- (a) What is Giardiasis ?
 - (b) What is azoospermia ?
 - (c) 'A normal CSF typically shows a cobweb coagulum.'— State whether it is true or false.
 - (d) Write the name of different types of Serous fluids.
 - (e) What is mucin clot test ?
 - (f) What do you mean by transudates ?
 - (g) Bacterial commensals of alimentary tract if detected in stool are pathogenic for many disease. — True or False.
 - (h) The wet slide preparation is the simplest & most widely used method for diagnosis of intestinal parasites in tropical countries. — State whether it is true or false.
5. (a) Describe the CSF picture in different types of meningitis.
- (b) What is Pandy test? Mention the principle and protocol of the test briefly. 3+(1+4)

Or

- (a) What are the microscopic features of pleural fluid ?
- (b) Differentiate transudates and exudates.
- (c) What is Eosinophilic pleural effusions ? 3+4+1

6. (a) What is the chemical composition of sputum ?
(b) Discuss the Gram's staining method for sputum.
(c) What is leukocytic pattern of normal and abnormal sputum ? 2+3+2

Or

- (a) How do you collect stool specimen ?
(b) What precaution should you taken after collection ?
(c) 'A skin exudate specimen sent from a syphilis patient'—how do you examine this specimen in the laboratory ?

$2\frac{1}{2}+2+2\frac{1}{2}$
