

M. Sc.

2018

4th Semester Examination

BIO-MEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-401

Subject Code—22

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 Q. No.1 and any three from the rest.

1. Answer all the questions : 10×1

Choose the right one :

(a) Random collection of urine specimen is not preferable because

(i) Random concentration of sample takes place because of no water intake

(Turn Over)

- (ii) Potential furdilution of the specimen takes place due to the immediate consumption of fluid.
 - (iii) Polyuria
 - (iv) Anuria
- (b) 4 subject is in trouble is urinating when other people are around is called :
- (i) Shy bladder
 - (ii) Paruresis
 - (iii) Both of the above
 - (iv) None of the above.
- (c) Mousy smell of urine—
- (i) Phenylketonuria
 - (ii) Maple sirup urinediastate
 - (iii) Bence jones protein
 - (iv) None of the above.
- (d) Orthostatic proteinuria—
- (i) High urinary protein due to prolonged studying in youth
 - (ii) High urinary protein due to glomerulonephritis in youth.
 - (iii) Both of the above
 - (iv) None of the above.

- (e) Steatorrhoea is due to
- (i) Low lipase activity
 - (ii) low secretion of bile salt
 - (iii) High fatty diet
 - (iv) All of the above.
- (f) Pyelonephritis is
- (i) Inflammation of kidney due to bacterial infection
 - (ii) Inflammation of bladder due to bacterial infection.
 - (iii) Inflammation of urethra due to bacterial infection.
 - (iv) All of the above.
- (g) Birefringence optical polarized property is measured to detect.
- (i) Gout
 - (ii) MSU crystal
 - (iii) Calcium pyrophosphate crystals
 - (iv) All of the above.
- (h) Ketone body in urine is found in
- (i) Starvation
 - (ii) Diabetes
 - (iii) All of the above
 - (iv) None of the above.

- (i) Blood brain barrier is made by
- (i) Gap junction
 - (ii) Tight junction
 - (iii) Channel junction
 - (iv) Porus junction
- (j) Specific gravity is decreased with
- (i) Diabetes mellitus
 - (ii) Diabetes insipidus
 - (iii) Glucosuria
 - (iv) Penal artery stenosis.

2. (a) State the collection technique of 24 hrs urine.
- (b) How do you precondition the patient advised for 24 hours urine collection ?
- (c) Name few preservative used in 24 hrs urine collection with justification of its use. 2+5+3
3. (a) State the principle of harmonic oscillation densitometry for the measurement oscillation densitometry for the measurement of specific gravity of urine ?
- (b) How do you correct temperature deviation of urine sample.
- (c) Define oliguria and nocturia. 3+3(2+2)

4. (a) State the collection method of stool with special reference to the Landling of stool contains ova and parasites.
- (b) Discuss the clinical implication of presence of stool color odor, pH, Leukocytes, trypsin, porphyrins in stool sample.
- (c) Differentiate between transudate and exudate.
- 3+4+3
5. (a) Discuss the different crystals in urine sample with clinical significance of its presence. Draw the crystals of different shapes.
- (b) Which types of crystals are found in synovial fluid ?
- (c) What is 'Ropes' test and how do you interpret the results of this test ?
- 3+2+2+3
6. Write short notes on (Any two) :
- 5+5
- (a) Proteinuria
- (b) Abnormalities of CSF
- (c) CS of urine sample.
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