

M.Sc. 3rd Semester Examination, 2018

BIO-MED. LAB SCI AND MGM

PAPER –BLM-302

Full Marks : 40

Time : 2 hours

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

The figures in the right-hand margin indicate marks

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

Illustrate the answers wherever necessary

1. Answer any *ten* questions of the following : 1×10
 - (a) What is immuno histochemistry ?
 - (b) Write the full form of PAS.
 - (c) What are the constituents of carnoy fixative ?
 - (d) Why haematoxylin known as dye molecule ?

(Turn Over)

- (e) State any one function of clearing agent.
- (f) Write the full form of DPX.
- (g) Write the name of any one fluorescent molecule used in immunofluorescent histochemistry.
- (h) What is the melting point of paraffin used in routine purpose in histology ?
- (i) Why Sudan-Black known as Stain ?
- (j) Write the names of any two PAS positive material.
- (k) What is the advantages of graded dehydration of tissue ?
- (l) What is target biomolecule of Fielgen reaction ?
- (m) What is mordant ?
- (n) What is metastasis ?
- (o) Write the name of one dehydrating agent other than alcohol.

2. (a) What do you mean by tissue fixation ?
(b) State the objectives of tissue fixation.
(c) Write the application of carnoy fixative. $2 + 5 + 3$
3. (a) Write the full form of PAP in histochemistry.
(b) State the principle of PAP immuno-histochemistry.
(c) Write the basic steps forward for detection of enzyme activity in tissue by histochemical technique. $2 + 3 + 5$
4. (a) What is antigen retrieval in immuno-histochemistry ?
(b) Why does marker detection is preferred for cancer diagnosis than histological study ?
(c) Write the preparation of haematoxylin dye solution. $3 + 3 + 4$
5. (a) Write the principle of trichrome staining.

(4)

(b) State the protocol of trichrome staining.

(c) Write the application of cryocut. 2 + 5 + 3

6. (a) Write the names automated devices which are generally used in histology laboratory.

(b) State the advantages and disadvantages of automation in histology lab.

(c) Why does immuno fluorescence technique is preferred over immuno histochemistry ?

$$2 + \left(2\frac{1}{2} + 2\frac{1}{2} \right) + 3$$
