



Reg. No. :

Name :

Second Professional M.B.B.S Degree Examination, June 2009
PATHOLOGY (Paper – I)
(Includes Lab Medicine and General Pathology)

Time : 2 Hours

Max. Marks : 40

SECTION –A

I. Single best response type.

- a) Do not write anything on the question paper.
- b) Write your register number in the answer sheet **provided**.
- c) Select one most appropriate response and encircle the corresponding alphabet against **each** question number in the answer sheet **provided**.

1) 'Tell tale sign of ageing' is _____ pigment.

- a) Melanin
- b) Bile
- c) Hemosiderin
- d) Lipofuscin

2) Basement membrane is composed of _____ Collagen

- a) Type I
- b) Type II
- c) Type III
- d) Type IV

3) Fixative of choice for cytology

- a) 10% formaline
- b) 8% HNO₃
- c) 95% ethyl alcohol
- d) Osmium tetroxide

4) All are examples of free radicals EXCEPT

- a) Ferrous ions
- b) Transferrin
- c) Glutathione Peroxidase
- d) Ceruloplasmin

5) Which of the following is a powerful chemoattractant ?

- a) Thromboxane A₂
- b) Nitric Oxide
- c) Leucotriene B₄
- d) Bradykinin

P.T.O.



- 6) All are antigen presenting cells EXCEPT
- a) B cells
 - b) NK cells
 - c) CD₈ T cells
 - d) Dendritic cells
- 7) Which is NOT an example of Type II Hypersensitivity ?
- a) Rheumatoid arthritis
 - b) Autoimmune hemolytic anemia
 - c) Myasthenia gravis
 - d) ABO incompatibility
- 8) All are features of autosomal dominant disorders EXCEPT
- a) Onset of disease is late in life
 - b) Variable expressivity
 - c) Variable penetrance
 - d) Consanguinity

(8×½ =4 Marks)

II. Match the following :

- | | |
|-----------------------|------------------------|
| A) 1) EDTA | A) Coagulation studies |
| 2) HEPARIN | B) Osmotic fragility |
| 3) Sodium Citrate 1:4 | C) Peripheral Smear |
| 4) Sodium Citrate 1:9 | D) ESR estimation |
| | E) Coombs test |
| B) 1) Amyloid | A) Vonkossa |
| 2) Lipid | B) Pearls |
| 3) Calcium | C) Sudan black |
| 4) Iron | D) Congored |
| | E) Alcian blue |

(8×½ = 4 Marks)

III. Draw and label :

(1×2=2 Marks)

- 1) Tuberculous granuloma
- 2) Oxalate crystals in urine.



IV. Short answer question.

(1×4=4 Marks)

- 1) What is Virchow triad ?
- 2) What are Opsonins ? Give one example.
- 3) Mention two difference between transudate and exudate.
- 4) What is dystrophic calcification ? Give one example.

V. Write short notes on :

- 1) Sputum cytology
- 2) Mitochondrial inheritance
- 3) Acute transplant rejection reaction.

(3×2=6 Marks)

SECTION – B

VI. 30 year old female c/o fever, joint pain for a duration of 3 weeks. O/E butterfly rashes present on her face. Investigation revealed haematuria and massive proteinuria.

- a) What is your diagnosis ?
- b) Mention two serological test by which you can confirm the diagnosis.
- c) Mention two common cardiac lesions that can occur in the patient.
- d) Mention the characteristic microscopic finding seen in renal biopsy.
- e) Mention the usual hematological presentation in this condition.
- f) What is the usual cause of death in these patients ?

(2+2+2+2+1+1=10)

VII. Short answer question.

- a) What is anaplasia ?
- b) What is double hit theory or Knudson hypothesis ?
- c) What is 'Pleiotropism'? Give a suitable example.
- d) What is granulation tissue ?

(4×1=4 Marks)

VIII. Write short notes on :

- a) Trephine biopsy
- b) Apoptosis
- c) Oncogenic Viruses

(3×2=6 Marks)
