

Reg. No.....

**Second Year B.Sc Optometry Degree Regular/Supplementary Examinations  
February 2023  
Pathology & Microbiology  
(2016 Scheme)**

**Time: 3 hrs**

**Max. Marks: 80**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
  - *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*
- *Write Section A and Section B in separate answer books. Do not mix up questions from Section A and Section B*

**QP Code: 223013**

**Section A - Pathology**

**Marks: 40**

**Essay:**

**(10)**

1. Define apoptosis. Describe in detail the mechanisms involved in apoptosis.

**Short Notes:**

**(3x5=15)**

2. Describe the pathology of diabetic retinopathy.
3. Chemical mediators of inflammation.
4. Pathogenesis of thrombosis

**Answer Briefly**

**(5x2=10)**

5. Routes of metastasis
6. Pathological calcification
7. Blood picture of chronic myeloid leukemia
8. Hemophilia A
9. Urinary sediments

**One Word Answer**

**(5x1=5)**

10. Two reducing substances in urine
11. Two opportunistic infections
12. Heart failure cells are seen in .....
13. Two causes for hemolytic anemia
14. The component cells of a granuloma are .....

**P.T.O**

**QP Code: 224013**

**Section B: Microbiology**

**Marks: 40**

**Essay**

**(10)**

1. Define immunity. Classify hypersensitivity reactions. Describe the mechanism of type 1 hypersensitivity reactions in detail

**(1+2+7)**

**Short Notes**

**(3x5=15)**

2. Moist heat method of sterilization
3. Prophylaxis for hepatitis B virus
4. Viral culture methods

**Answer Briefly**

**(5x2=10)**

5. Chronic amoebic keratitis
6. Anaerobic culture methods
7. Ophtalmia Neonatorum.
8. Ocular manifestations of tuberculosis
9. Standard precautions

**One Word Answer**

**(5x1=5)**

10. Name two blood borne viruses
11. Name two diseases transmitted by mosquitoes
12. Name two DNA viruses
13. Name two live attenuated vaccines
14. Name two viruses causing acute hemorrhagic conjunctivitis

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