

Reg. No.:.....

**Second Year B.Sc Optometry Degree Supplementary Examinations  
September 2019**

**Pathology and Microbiology**

**(2014 scheme)**

**Time: 3 hrs**

**Max marks: 80**

- **Answer all questions**
- **Draw diagrams wherever necessary**
- **Write Section A and Section B in separate answer books (32 pages). Do not mix up questions from Section A and Section B**

**Q.P. Code: 213013**

**Marks: 40**

**Section A: Pathology**

**Essay (10)**

1. Define embolism. Enumerate the types of embolism. Describe the pathogenesis of fat embolism.

**Short notes (3x5=15)**

2. Describe the pathogenesis and morphology of retinoblastoma
3. Describe the pathogenesis and morphology of chronic myeloid leukemia.
4. Chemical carcinogenesis

**Answer briefly (5x2=10)**

5. Packed Cell Volume (PCV)
6. Leprosy - Classification and morphology.
7. Factors affecting healing.
8. Aplastic anemia
9. Endogenous pigments

**Fill in the blanks (5x1=5)**

10. Definition of neoplasia is .....
11. Four sites of primary tuberculosis .....
12. Two common ocular infections.....
13. Deficiency in hereditary spherocytosis .....
14. The type of necrosis in brain is .....

**(P.T.O)**

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**Section B: Microbiology**

**Essay**

**(10)**

1. Describe the pathogenesis, lab diagnosis and treatment of diphtheria. Add a note on its immunoprophylaxis. (3+3+2+2)

**Short notes**

**(3x5=15)**

2. Type 1 hypersensitivity
3. Describe the working of an autoclave
4. HIV - pathogenesis and lab diagnosis

**Answer briefly**

**(5x2=10)**

5. Opportunistic mycosis
6. Methicillin resistant staphylococcus aureus
7. Congenital toxoplasmosis
8. Agglutination reaction with examples
9. High level disinfectants

**Fill in the blanks**

**(5x1=5)**

10. Two free living amoeba -----
11. Two parasites causing eye infections -----
12. Two viruses causing keratoconjunctivitis -----
13. Two antifungals that can be used in the eye -----
14. Name two bacteria causing keratitis -----

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