

DIPLOMA IN OPHTHALMIC NURSING ASSISTANT**FIRST YEAR****PAPER II – PHARMACOLOGY & MICROBIOLOGY***Q.P. Code: 841602***Time : Three Hours****Maximum : 100 marks****Answer ALL questions in the same order.****I. Elaborate on:**

	Pages (Max.)	Time (Max.)	Marks (Max.)
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|--|---|---------|----|
| 1. Write in detail about Gram positive bacteria. | 7 | 20 min. | 10 |
| 2. Dyes used in ophthalmology. | 7 | 20 min. | 10 |
| 3. Describe the pharmacokinetics and pharmacodynamics of parenteral eye drugs. | 7 | 20 min. | 10 |

II. Write notes on:

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|--|---|--------|---|
| 1. Diagnostic drugs used in ophthalmology. | 4 | 9 min. | 5 |
| 2. Specimen collection in ophthalmology. | 4 | 9 min. | 5 |
| 3. Different staining techniques used in microbiology. | 4 | 9 min. | 5 |
| 4. Disinfection and disinfectants. | 4 | 9 min. | 5 |
| 5. Irrigating solutions. | 4 | 9 min. | 5 |
| 6. Mydriatics. | 4 | 9 min. | 5 |
| 7. Antifungal drugs. | 4 | 9 min. | 5 |
| 8. Incubation period. | 4 | 9 min. | 5 |
| 9. Drugs used for dry eye. | 4 | 9 min. | 5 |
| 10. Do's and Don'ts while applying eye drops. | 4 | 9 min. | 5 |

III. Short Answers on:

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|--|---|--------|---|
| 1. Name two visco elastics. | 1 | 3 min. | 2 |
| 2. Phenol. | 1 | 3 min. | 2 |
| 3. Name two imidazole compounds. | 1 | 3 min. | 2 |
| 4. Name two mast cell stabilizers. | 1 | 3 min. | 2 |
| 5. Ocular complications of systemic steroids. | 1 | 3 min. | 2 |
| 6. Causative agents for follicular conjunctivitis. | 1 | 3 min. | 2 |
| 7. Specific and non specific immune defenses. | 1 | 3 min. | 2 |
| 8. Intracellular components of bacteria. | 1 | 3 min. | 2 |
| 9. Conjunctival flora. | 1 | 3 min. | 2 |
| 10. Name two viruses affecting eye. | 1 | 3 min. | 2 |

DIPLOMA IN OPHTHALMIC NURSING ASSISTANT

FIRST YEAR

PAPER II – PHARMACOLOGY & MICROBIOLOGY

Q.P. Code: 841602

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Pharmacokinetics of drug absorption, distribution and biotransformation.
2. Write in detail about the uses, types, mechanism of action and side effects of antibiotics and corticosteroids.
3. Elaborate on classification of microbes. Add note on structure and physiology of the bacteria.

II. Write notes on:

(10 x 5 = 50)

1. Gram Negative and Gram positive bacilli.
2. Physical methods of controlling microbes.
3. Bacterial growth.
4. Sterilization.
5. Viral replication.
6. Morphology and physiology of bacteria.
7. Diagnostic drugs.
8. Preparation and packing of ophthalmic drugs.
9. Corticosteroids and viscoelastics agents.
10. Drug toxicity.

III. Short Answers on:

(10 x 2 = 20)

1. Bacteriostatic and Bactericidal.
2. Pasteurization.
3. Mention the types of ophthalmic preparations.
4. Any two bacteria causing eye infection.
5. Symptoms of conjunctivitis.
6. Mydriatics.
7. Important factors to be considered in ophthalmic preparation.
8. Glaucoma medications.
9. Explain about any one diagnostic drug.
10. Two antiviral drugs.

[LD 0212]

AUGUST 2013

Sub. Code: 1602

DIPLOMA IN OPHTHALMIC NURSING ASSISTANT

FIRST YEAR

PAPER II – PHARMACOLOGY & MICROBIOLOGY

Q.P. Code: 841602

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Gram negative bacteria.
2. Corticosteroids.
3. Contact lens solutions.

II. Write notes on:

(10 x 5 = 50)

1. Infectious keratitis.
2. The methods of Sterilization.
3. Antihistamines.
4. Conjunctival allergy.
5. Fumigation.
6. Viscoelastic substances.
7. The mechanism of action of NSAID.
8. Facultative anaerobes.
9. The side effects of epinephrine.
10. Drugs used for dry eye.

III. Short Answers on:

(10 x 2 = 20)

1. Phenol.
2. Imidazoles.
3. Normal flora.
4. Ocular Herpes virus infection.
5. Fungal keratitis with two examples.
6. The anterior chamber irrigating solutions.
7. The agents used in migraine.
8. Four types of bacteria.
9. Ultra violet radiation.
10. Pharmacodynamics.

[LE 0212]

FEBRUARY 2014

Sub. Code: 1602

DIPLOMA IN OPHTHALMIC NURSING ASSISTANT

FIRST YEAR

PAPER II – PHARMACOLOGY & MICROBIOLOGY

Q.P. Code: 841602

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Bioavailability.
2. The routes of drug Administration in ophthalmology.
3. The characteristics of bacteria.

II. Write notes on:

(10 x 5 = 50)

1. The methods of Sterilization.
2. DNA and RNA viruses with examples.
3. Pathogenesis and clinical features of HIV and lab diagnosis of AIDS.
4. The characteristics of fungi.
5. *Fusarium* eye infections and their treatment.
6. Treatment for dry eye syndrome.
7. The complications of general anesthesia.
8. Drug potency and efficacy.
9. Antagonism.
10. Prolongation of drug action.

III. Short Answers on:

(10 x 2 = 20)

1. Virus and virion.
2. The modes of transmission of HIV.
3. The differences between antiseptic and disinfectant.
4. The advantages of moist heat.
5. Fungal spores.
6. Proprietary name of the drug.
7. Pinocytosis.
8. Oxidation in drug reactions.
9. Enzymes.
10. Synergism.

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PAPER II – PHARMACOLOGY & MICROBIOLOGY

Q.P. Code: 841602

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify microbes. Write in detail about the structure and function of microbial cell.
2. Explain about the pathogenic mechanisms in ocular infection process.
3. Write in detail about the available corticosteroid containing eye preparation and the mechanism of action.

II. Write notes on:

(10 x 5 = 50)

1. Briefly write about the Bioavailability of drug.
2. Mention the drug toxicity related to ocular antibiotic Ofloxacin.
3. Write about the principles of ocular pharmacology.
4. Write short notes on Tachyphylaxis.
5. Mention about the drugs available for dry eye and their action.
6. Write about the host parasite relationship.
7. What are the physical methods for sterilisation? Explain about Autoclave.
8. Briefly write about Replication of HIV.
9. Write the difference between Bactericidal and Bacteriostatic activity of drugs with examples.
10. Briefly write about the biochemical characterisation of microbes.

III. Short Answers on:

(10 x 2 = 20)

1. Mention the dyes used in eyes for diagnosis.
2. Name two viruses causing eye infections.
3. Define Disinfection.
4. Name two Gram positive bacilli.
5. Mention two Disinfectants.
6. What is an Antibiotic?
7. What is immunity?
8. Define Pasteurisation.
9. Name two bacterial culture media.
10. What is meant by Infection.

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Time : Three Hours

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Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. What is Immunity? What are the types of Immunity?
Write in detail about them with suitable examples.
2. What is disinfection? Write in detail about the Disinfectants and their uses.
3. Write in detail about the Anti-Glaucoma drugs, their mode of action & adverse effects.

II. Write notes on:

(10 x 5 = 50)

1. Briefly write about the Dose response relationship.
2. Mention the drug toxicity related to ocular Steroids.
3. Write about the diagnostic drugs used in Optometry.
4. Write short notes on drug biotransformation.
5. Mention about the drugs used for local anaesthesia and their action.
6. Write about the Preparation and Packaging of Ophthalmic drugs.
7. How to Sterilise an Operation room before an ocular surgery?
8. Briefly write about Replication of Herpes virus.
9. Classify microbes.
10. Briefly write about the Physiological characterisation of microbes.

III. Short Answers on:

(10 x 2 = 20)

1. What is a culture media?
2. Mention two bacteria causing eye infections.
3. Define Immunity.
4. Name two Viscoelastic agents.
5. What is meant by drug toxicity?
6. What is Biotransformation of a drug?
7. How are ocular steroids metabolized?
8. Name two antiglaucoma drugs.
9. Name two ocular antibiotics.
10. Name two Ocular antifungal agents.