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# **SRI Y.N. COLLEGE (Autonomous)**



(Affiliated to Adikavi Nannaya University)

Trice accredited by NAAC with 'A' Grade

Recognized by UGC as College with Potential for Excellence

**NARASAPUR – 534 275**

**III B.Sc., PARAMEDICAL TECHNOLOGY**

**SEMESTER – V**

**Applied Microbiology - PAPER-V**

## **UNIT – 1**

### **Normal microbial flora of the Human Body:-**

Normal flora of the skin, normal flora of the conjunctiva, normal flora of the nose, nasopharynx and sinuses, normal flora of the mouth and upper respiratory tract, normal flora of the gastrointestinal tract, normal flora of the genitourinary tract.

## **UNIT – 2**

### **Bacteriology of water, air, milk and food :-**

Bacteriological examination of water, viruses in water, protozoa in water, measurement of air contamination, Bacteriological examination of milk, Bacteriology of food.

## **UNIT - 3**

### **Laboratory control of Antimicrobial Therapy :-**

Antibiotic sensitivity tests, Antibiotic policy.

## **UNIT – 4**

### **Health care – associated infections :-**

Common types of health care – associated infections, sources and reservoirs of health care – associated infections, modes of transmission of microorganisms, measures to control infection in the health care setting .

## **UNIT – 5**

### **Biomedical waste management :-**

Types of Biomedical waste, general principles of waste management, waste treatment, BMW 2016 Rules.

**APPROVED**

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*Khuk*  
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DEPARTMENT OF ZOOLOGY  
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### **Semester – V**

### **III YEAR PARAMEDICAL TECHNOLOGY**

### **APPLIED MICRO BIOLOGY – PAPER - 5**

**NOTE: Question Bank: Examiners are requested to choose questions from Question Bank.**

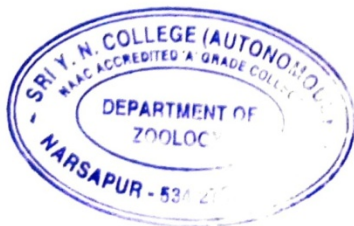
#### **SHORT ANSWER TYPE QUESTIONS :-**

1. Normal flora of the nose, nasopharynx and sinuses.
2. Normal flora of the mouth and upper respiratory tract.
3. Normal flora of the skin.
4. Types of bacteria in milk.
5. Methylene blue reduction test.
6. Sources of food contamination.
7. Antibiotic policy.
8. Mechanism of action of antimicrobial agents.
9. Antibiotic assays in body fluids.
10. Hand Hygiene.
11. Safe injection practices.
12. Biomedical waste management in hospitals.
13. Types of biomedical waste.
14. Segregation of biomedical waste.
15. Steps in waste management.

## ESSAY QUESTIONS :-

1. Write an essay on the normal flora of the gastrointestinal tract.
2. Describe about the normal flora of the mouth and upper respiratory tract.
3. Write an essay on the normal flora of the genitourinary tract.
4. Write an essay on the bacteriological examination of water. How is the quality of water classified based on bacteriological tests?
5. Discuss in detail the microbiology of air.
6. Write an essay on the microbiology of milk, with special emphasis on bacteriological examination of milk.
7. Write an essay on antibiotic sensitivity tests.
8. Describe about the mechanism of action of antimicrobial agents.
9. Write an essay on the measures to control infection in the Healthcare setting.
10. Discuss in detail the common types of healthcare associated infections.
11. What is Biomedical waste management? What are the precautions to be taken in the Operating theatre?
12. Describe about the steps to be followed in waste management.
13. Describe in detail about the methods of waste management.

**APPROVED**



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CHAIRMAN  
BOARD OF STUDIES  
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### **III YEAR PARAMEDICAL TECHNOLOGY**

**Semester – V**

**Applied Microbiology – Paper – 5**

Time : 3 Hrs.

Max. Marks : 75

#### **PART - I**

**Answer any Five of the following.**

**Draw a neat labeled diagram whenever necessary.**

**5 x 5 = 25M**

1. Normal flora of the mouth and upper respiratory tract.
2. Normal flora of the skin.
3. Sources of food contamination.
4. Types of bacteria in milk.
5. Antibiotic Policy.
6. Hand hygiene.
7. Safe injection practices.
8. Steps in waste management.

#### **PART – II**

**Answer Five Questions choosing at least TWO Question from each section A&B.**

**Draw a neat labeled diagram whenever necessary.**

**5 x 10 = 50M**

#### **SECTION - A**

9. Write an essay on the normal flora of the gastrointestinal tract.
10. Describe about the normal flora of the mouth and upper respiratory tract.
11. Discuss in detail the microbiology of air.
12. Write an essay on the microbiology of milk, with special emphasis on bacteriological examination of milk.
13. Describe about the mechanism of action of antimicrobial agents.



### SECTION - B

14. Write an essay on antibiotic sensitivity tests..
15. Discuss in detail the common types of health care associated infections.
16. Write an essay on the measures to control infection in the Health care setting.
17. What is Biomedical waste management? What are the precautions to be taken in the operating theatre?
18. Describe about the steps to be followed in waste management.

### BLUE PRINT :

#### PAPER 5 BLUE PRINT FOR QUESTION PAPER SETTERS

Unit No	Essay Questions (10 Marks)	Short Answers (5 Marks)	Marks allotted to the unit
UNIT – 1	02	02	30
UNIT – 2	02	02	30
UNIT – 3	02	01	25
UNIT – 4	02	02	30
UNIT – 5	02	01	25

### PRACTICALS

- ❖ Methylin Blue Reduction Test
- ❖ Antibiotic Sensitivity Test
- ❖ Bacteriological Examination of water

### PRACTICAL MODEL QUESTION PAPER

Time: 3 Hrs.

Max.Marks : 50

#### **1. Major Experiment :**

**10 + 10 = 20M**

Demonstrate and write the description of Methylin Blue Reduction Test.

#### **2. Minor Experiment :**

**1 x 15 = 15M**

Examination of Bacteria in given water sample.

#### **3. Record and Field Note book.**

**10 + 5 = 15M**

# SRI Y.N. COLLEGE (Autonomous)



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Semester — V Paper - VI

## Clinical Endocrinology & Toxicology

### SYLLABUS

#### LNIT –1

Meaning of Hormones, Introduction of Endocrine system, Organs and their secretions, functions, regulation and Mechanism of actions.

#### UNIT – II

Thyroid stimulating Hormone, function test, disorders associated with thyroid hormone. detection of T<sub>4</sub>, T<sub>3</sub>, and TSH. Thyroid

#### UNIT - II\_J

Growth Hormone, Aldosterone, cortisol and hypo and hyper deficiencies.

#### UNIT – IV

Luteinizing H and disorders, infertility, sterility, their functions. FSH, TSH, Estrogen, Progesterone, prolactin Hormone

Introduction of Toxicology, Alcohol, Opioids, lead poisoning, drug abuse.

## SHORT ANSWERS

1. Define Endocrinology. Write meaning of hormones and their functions.
  2. Write the short notes on pituitary gland.
  3. Write short notes on Thyroid Stimulating hormone with labeled diagram.
  4. Write the short notes on T3 and T4 hormones.
  5. Write short notes on Dwarfism.
  6. Write short notes on Hyper Thyroidism.
  7. Write an essay on Toxicology.
  8. Write short notes on Alcohol abuse.
  9. Write short notes on Estrogen
10. Write short notes on disorders of growth hormones.
11. Write short notes on Oxytocin.
12. Write short notes on Alcohol poisoning.

# **J.N. COLLEGE (Autonomous)**

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Semester – V

## III YEAR PARAMEDICAL TECHNOLOGY

### Clinical Endocrinology & Toxicology – PAPER - VI

**NOTE: Question Bank:** Students are requested to choose questions from Question Bank.

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1. Write an essay on the Endocrine system.
2. Write about Growth Hormone, functions, and disorders associated with hormone.  
an essay on TSH, secretions functions and disorders
3. Write an essay associated with TSH.
4. Define Endocrine system. Write the organs, functions and their secretions with labeled diagram.
5. Define TSH and prolactin, functions, secretions and disorders associated with these hormones.
6. Define posterior pituitary system. Write the hormones, secretions and their functions disorders associated with Oxytocin, progesterone.
7. Define progesterone. Write the functions, secretions and disorders associated with progesterone hormone in females.
8. Define Testosterone. Write the functions, secretions and role of testosterone in infertility cases.
9. Define Toxicology. Write an essay on Alcohol abuse.
10. Define poisoning. Write an essay on Alcohol poisoning.