

## **THIRD YEAR T. D.C.SCIENCE, 2018-19**

### **ENVIRONMENTAL SCIENCES**

The third year TDC examination shall consist of three theory papers, each of three hours duration and a practical examination of five hours duration.

	<u>Marks</u>
<b>Paper-I: Toxicology</b>	<b>50</b>
<b>Paper-II: Pollution Ecology</b>	<b>50</b>
<b>Paper-III: Resource Conservation, Legislation, Planning and Wild Life</b>	<b>50</b>
<b>Practical:</b>	<b>75</b>

#### **Pattern of question paper in the annual examination and distribution of marks:**

Each theory paper in the annual examination shall have three sections i.e. A, B, and C. In section A, total 10 questions will be set in the paper, selecting at least two from each unit. These questions to be answered in a word or so. All questions are compulsory. Each question carries 0.5 marks, total 05 marks.

In section B, there shall be total 10 questions, selecting two questions from each unit, five questions to be answered by the student selecting at least one from each unit. Answer should be given in approximately 250 words. Each question carries 05 marks, total 25 marks.

In section C, 04 descriptive type questions will be set in the examination paper from five units of the syllabus of the paper, selecting not more than one question from a unit. Each question may have two sub divisions. Students are required to answer any two questions approximately in 500 words. Each question is of 10 marks, total 20 marks.

# **THIRD YEAR T. D.C.SCIENCE, 2018-19**

## **ENVIRONMENTAL SCIENCES**

### **PAPER-I**

### **TOXICOLOGY**

Duration: 3 Hrs.

M.M.: 50

#### **UNIT-I**

Definition of Toxicology, toxic substances in the environment; Concept of dose-response relationship; acute toxicity, chronic toxicity, lethal concentration, effective concentration, median tolerance limits.

#### **UNIT-II**

Metabolism of toxic substances by animals – uptake, excretion, chemical localization and its consequences; hepatic metabolism; Synergistic and Antagonistic effects.

#### **UNIT-III**

Metabolism of toxic substances by plant – uptake, translocation, metabolism and excretion, pathogen toxins, herbicides; Atmospheric toxicants and plants; Algal toxins, Mycotoxins.

#### **UNIT-IV**

Environmental factors in human health; Occupational hazards and diseases and their prevention. Food poisoning, toxicity of drugs, antibiotics, pesticides, metals; drug allergies.

#### **UNIT-V**

Teratogenicity, carcinogenesis and brief idea of genotoxicity.

Fumacatories and masticatories – sources, uses, effects on human body and evil effects on the society.