Reg. No. | | | | | | | | |

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.

(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.Sc., PHYSICS

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
IV	PART- III	GENERIC ELECTIVE - II	U21CH4A4	ALLIED CHEMISTRY- II

Date & Session: 25.04.2025/FN **Time: 3 hours** **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer ALL Questions.
CO1	K1	1.	Which Is the Non- Benzenoid Aromatic Compound? a) Toluene b) Benzene c) Phenol d) Pyridine
CO1	K2	2.	How many resonance structures are possible for anthracene? a) 1 b) 2 c) 3 d) 4
CO2	K1	3.	The difference between the actual mass of a nucleus and the sum of the masses of its individual protons and neutrons (nucleons) _____. a) Mass Defect b) Binding Energy c) Energy Defect d) All of these
CO2	K2	4.	Helium nuclei particles are called _____. a) Gamma particles b) Beta particles c) Alpha particles d) No particles that are helium nuclei
CO3	K1	5.	The simplest amino acid is _____. a) Glycine b) Alanine c) Asparagine d) Tyrosine
CO3	K2	6.	The monomeric unit of nucleic acid are called _____. a) Nucleosides b) Nucleotides c) Purines d) Pyrimidines
CO4	K1	7.	Potassium is used as fertilizer for which purpose? a) Development of stems and leave b) Accelerating seeding c) To prevent disease d) Early stages of plant growth
CO4	K2	8.	Which of the following is a primary gaseous fuel? a) Water gas b) Oil gas c) Refinery gas d) Liquefied petroleum gas
CO5	K1	9.	Identify the air born disease given below? a) Cholera b) Typhoid c) Chickenpox d) Hepatitis A
CO5	K2	10.	**Analgesics**, also called. a) Anesthetics b) painkillers c) Sulfonamides d) antibiotics
Course Outcome	**Bloom's K-level**	**Q. No.**	**SECTION – B (5 X 5 = 25 Marks) Answer ALL Questions choosing either (a) or (b)**
CO1	K3	11a.	State Huckel rule of aromaticity with example. **(OR)**
CO1	K3	11b.	Write any two preparations of benzene.
CO2	K3	12a.	How will you separate isotopes using diffusion method. **(OR)**
CO2	K3	12b.	Difference between Nuclear fission and fusion.

CO3	K4	13a.	Classify the carbohydrate. **(OR)**
CO3	K4	13b.	Illustrate the types of RNA.
CO4	K4	14a.	Outline the composition of producer gas and Water gas. **(OR)**
CO4	K4	14b.	Explain the manufacturing process of Portland cement.
CO5	K5	15a.	Write note on Water borne diseases. **(OR)**
CO5	K5	15b.	Discuss about sulpha drugs and antibiotics with examples.

Course Outcome	**Bloom's K-level**	**Q. No.**	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	16a.	Explain the general characteristics of aromatic compounds. **(OR)**
CO1	K3	16b.	Discuss the preparation and properties of naphthalene.
CO2	K4	17a.	Illustrate the following terms suitable a) Isotopes b) Isotones c) Isobars **(OR)**
CO2	K4	17b.	Analyse the application of radio isotopes.
CO3	K4	18a.	Classify the proteins based on composition and Solubility. **(OR)**
CO3	K4	18b.	Examine the structure of DNA.
CO4	K5	19a.	Assess the cleansing action of soap. **(OR)**
CO4	K5	19b.	Evaluate the uses of borosilicate's.
CO5	K5	20a.	Explain Hypoglycemia and hyperglycemia in detail. **(OR)**
CO5	K5	20b.	Summarise the importance of Indian medicinal plants.