

Reg. No.:



Name:

University of Kerala

W6960

Third Semester FYUGP Degree Examination, November 2025

Discipline Specific Core Course

CHEMISTRY

UK3DSCCHE206 - GENERAL CHEMISTRY - III

Academic Level: 200-299

2024 Admission

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

**Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark
Each.Answer all questions**

Qn No.	Question	CL	CO
1	Give an example of antimalarial drug?	RE	1
2	Identify the type of electrolyte used in a polymer cell.	RE	2
3	Differentiate between natural and synthetic flavors with one example each	UN	1
4	Explain the method for synthesizing urea.	UN	3
5	Name one secondary explosive.	UN	3
6	Give an example of chain growth polymer.	UN	4

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Describe a fuel cell and give one example.	UN	2
8	Compare and contrast various applications of PETN and RDX as explosives	UN	3
9	Explain the action of sulpha drugs in treating infections in our body.	AP	1
10	Apply your understanding of biodegradable polymers to suggest eco-friendly alternatives to commonly used plastic products.	AP	4

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer:7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Discuss in detail different types of food additives with examples. Mention their importance in modern food products. OR B) You are developing a health drink for children. Apply your knowledge of nutritional components, health effects, and possible adulteration risks to suggest a safe and beneficial formulation.	AP	1, 1
12	A) Evaluate the construction, working, and advantages of polymer cells in comparison to fuel cells and solar cells, highlighting their potential applications. OR B) Compare the working principles of Pb-acid and Li-ion batteries and evaluate their advantages and limitations.	AN	2, 2
13	A) Compare and evaluate the manufacturing of both urea and ammonium nitrate. OR B) Compare the properties of lead azide and RDX.	EV	3, 3
14	A) Evaluate the extent to which plastic recycling can address the global problem of microplastic pollution. OR B) Create a classification scheme for a set of newly synthesized polymers based on structure, properties, and applications. Explain your criteria and reasoning for categorizing them.	CR	4, 4