

Total Page: 1

PG CBCS
M.Sc. Semester-I Examination, 2020
CHEMISTRY
PAPER: CEM 104

Full Marks: 40**Time: 2 Hours****Write the answer for each unit in separate sheet**Unit -1**Answer any two questions:****10X2=20**

1. Write the major dietary sources of carbohydrates. What do you mean by protein sparing action of carbohydrates? Write about the role of carbohydrates on lipid metabolism. 4+6
2. Write the chemical properties of protein? Briefly discuss about the major functions of protein on immunity. What do you mean by rancidity of lipids? 2+5+3
3. What do you mean by culture media? Write the different types of culture media with example. 2+8
4. Briefly discuss about the two extrinsic and two intrinsic factors that affect the bacterial growth and survivability. 10
5. Define food spoilage. Explain the different causes of food spoilage. 2+8

Unit -2**Answer any two questions:****10X2=20**

1. a) Write down the Huntington postulates.
 b) State and prove De Morgan's law in the context of Boolean algebra. 5+5
2. a) Draw the block diagram of a computer.
 b) Write down the differences between a clerk and a computer. 5+5
3. a) Write a short note on Full Adder.
 b) Draw the block diagram of Full Adder using Half Adder.
 c) Write down the differences between Boolean algebra and algebra of real numbers. 5+2+3
4. a) Minimize the following Boolean expression $f(x, y, z) = \sum(0, 1, 2, 3, 7)$.
 b) Find the value of $.0011010-10.001100$
 c) Find the value $1011.101+101.1011$. 5+3+2
5. a) Write the decimal equivalent of the binary numbers 11011.0011
 b) Write a short note on Half Adder.
 c) Differentiate RAM and ROM. 3+5+2
