

U.G. 5th Semester Examination - 2021**CHEMISTRY**

Course Code : BCEMDSHC2 [DSE2]

Course Title : Inorganic Materials of Industrial
Importance

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **ten** of the following questions:

1 × 10 = 10

- What are the basic raw materials of procelain?
- What is chrome yellow?
- Write down the uses of KCl as fertilizer.
- What is TNT? Give its structure.
- What is complete fertilizer?
- Comment on the uses of K_2SO_4 over KCl as fertilizer.
- What is 'sulphate of potash'?
- What is the chemical composition of Sodalime Glass?

- What is the purpose of using P60 in glass as raw material?
- What is fuel cell?
- What is superphosphate of lime?
- What are the major ingredients of Glass?
- Mention the chemical formula of Pure Clay or Kaolin.
- State one application of zeolite as catalyst.
- Name a pigment that is used for blue paint.

2. Answer any **five** of the following questions:

2 × 5 = 10

- Write a short note on Borosilicate Glass.
- How can you prepare Lead Azide?– Give its balanced equation.
- What are the main pigments used for making Red paint?
- Write the chemical formula of Urea and important uses of it.
- Write down the major role of Magnesium as an essential agent in fertilizer for plants.
- Write down some important uses of Ceramics.
- What do you mean by mixed fertilizer? Give an example.
- What are the advantages of solid state battery over lithium battery?

3. Answer any **two** from the following: $5 \times 2 = 10$

- a) i) Write a short note on safety Glass.
 - ii) Give a brief description about the physical properties of glass. $3 + 2 = 5$
 - b) i) What are the basic requirements of a good paint?
 - ii) How can you prepare Chrome Green? –comment on its uses. $3 + 2 = 5$
 - c) i) Write down the equation of working principles of Pb-acid battery.
 - ii) Differentiate between primary and secondary batteries. $3 + 2 = 5$
-