

B.Sc. (CBCS Pattern) Semester-VI
**CHT15 - Chemistry Paper-III - Discipline Specific Elective Chemistry VII :
Inorganic Materials of Industrial Importance**

P. Pages : 2

Time : Three Hours



GUG/S/25/13343

Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.

1. a) What are cements? Give classification of cement. 5
b) Explain manufacturing and processing of glass. 5

OR

- c) Discuss super conducting oxides. 2½
d) Explain borosilicate glass. 2½
e) Discuss carbon nanotubes and carbon fibre. 2½
f) Explain glassy state and its properties of silicates. 2½
2. a) Explain the manufacture of urea fertilizer. 5
b) What are paints? Discuss Eco-friendly paint. 5

OR

- c) Write a short note on metallic coating. 2½
d) How mixed fertilizers are prepared? 2½
e) Give classification of surface coating. 2½
f) Explain in short Wax polishing. 2½
3. a) Explain working of solar cell and polymer cell. 5
b) Explain manufacture of steel. 5

OR

- c) Write characteristics of battery. 2½
d) Explain argan treatment for surface treatment. 2½
e) Explain ferrous and non-ferrous alloy. 2½
f) Discuss working of Li-battery. 2½

4. a) Explain general principles and properties of catalysts. 5
b) Discuss origin of explosive properties in organic compounds. 5

OR

- c) Explain Zeolites as catalysis. 2½
d) Explain Haber's process for catalysis. 2½
e) Discuss the factors affecting on enzyme activity. 2½
f) Write a short note on RDX. 2½
5. Attempt **any ten**. 1x10
=10
- 1) What is ceramic?
 - 2) Write ingredients of Portland cement.
 - 3) What is clay?
 - 4) Define fertilizers.
 - 5) What is thinners?
 - 6) Define emulsifying agent.
 - 7) Define secondary battery.
 - 8) What is alloy?
 - 9) Write the name of battery component.
 - 10) What is rocket propellants?
 - 11) Define man – made catalyst.
 - 12) Define phase transfer catalyst.
