

UG 5th Semester Examination 2021

CHEMISTRY [HONOURS]

Course Code: HDSE-T-1B

Full Marks: 10

Answer any five questions

[2×5=10]

1. Discuss advantages of fuel cells over ordinary batteries.
2. i) What is cement?

ii) Which one among the following is the chemical formula of gypsum which is an ingredient of cement?
a) Ca_2SiO_4 b) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ c) CaO d) $\text{CaSO}_4 \cdot 3\text{H}_2\text{O}$
3. Difference between Silicate and Nonsilicate Minerals.
4. Define primary and secondary batteries or cell with example.
5. Discuss the role of nitrogen and phosphorus in the healthy growth of plants.
6. What are the essential qualities of a good fertilizer? What are bio-fertilizers?
7. i) To make the steel hard requires in-
a) The quantity of carbon b) The quantity of manganese
c) The quantity of silicon d) The quantity of chromium

ii) Which of the following elements is added to iron to produce steel which can resist high temperature, have high hardness and abrasion resistance?
a) Aluminium b) Chromium c) Nickel d) Tungsten

