Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Voc. (Building Construction and Technology) (Sem.–1)

APPLIED CHEMISTRY

Subject Code : BVBCT-103-20

M.Code : 79023

Date of Examination : 19-01-23

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) Write the electronic configuration of Fe (At No: 26).

b) What is Atomic Radius?

c) What is the calorific value of fuel?

d) What types of impurities are present in water?

e) What is coordinate bond? Give examples.

f) What are thermos-plastic polymers? Give examples.

g) What are the different constituents of composites polymers?

h) What are the properties of Natural gas?

i) What is Atomic Volume? Explain.

j) Write the possible values of quantum numbers for electron present in 4s orbital.

SECTION-B

2. a) Discuss the Rutherford model of Atom and also discuss the significance of de - Broglie equation.

   b) Why electron affinity of noble gases is Zero? Explain.

3. a) What is the role of interface in composite performance and durability.

   b) Discuss the electron cloud model in metallic bond.

4. What are Fuels? Give its characteristics and classifications in detail.

5. What is Alkalinity of water? How it can be determined?

6. What is Ionization energy? How it shows variation along the period and down the group?

SECTION-C

7. a) What is Natural Gas? Discuss the treatment process of natural gas.

   b) What are Natural gas liquids? Explain.

8. What is Corrosion? Give its types. Discuss the method of its prevention by using metallic coating.

9. a) Discuss the fibre-Reinforced Composites. What are their advantages?

   b) Why Electron affinity of halogens is very high? Explain.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.