

S. B. Roll. No.....

APPLIED CHEMISTRY-I
1st Exam/Common/6052/Jun'2021
(For 2018 batch onwards)

Duration: 1.15Hrs.

M.Marks:25

SECTION-A

Q1. Attempt any five questions.

5x3=15

- a. Draw the shapes of s and p orbitals.
- b. Differentiate between orbit and orbital.
- c. Calculate the pH of 0.01 M HCl.
- d. What are the advantages of Long form of periodic table?
- e. What are the limitations of Bohr's atomic model?
- f. State Faraday's First law of Electrolysis.
- g. What are the qualities of drinking water?
- h. What is an Ionic bond? Give example.
- i. State Aufbau's principle.

SECTION-B

Attempt any one question.

1x10=10

Q2. What are Quantum numbers? Explain all the four quantum numbers in detail.

10

Q3. a) Write a note on periods of periodic table.

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b) Give the characteristics of Homologous series.

5

Q4. a) Explain sp hybridization by taking suitable example.

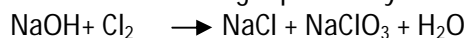
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b) Explain molarity, normality and molality.

5

Q5. a) Balance the following equation by Hit and Trial method:

3



b) What is hard water and soft water?

2

c) Write the formula of following compounds:

i) Acetic acid ii) Ethanol iii) Ethene iv) Acetaldehyde v) Ethyne

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