I Sem.
2017

B.Tech. (Food Tech.) 1st Year
Semester-I Examination -2017
Paper Title: Applied Chemistry
Paper Code: BFTC-104

Time Allowed: 3hr ***Maximum marks: 70***

(Write your Roll No. at the top immediately on receipt of this question paper)

Section **A** is Compulsory. Answer any **four** questions from **section B**

Section A (5x6=30)
(Answer all questions)

Q.1 Define internal energy and enthalpy. Explain Hess's law of constant heat summation.

Q.2 What are the assumptions of kinetic molecular theory of gases? Write kinetic gas equation.

Q.3 What are the different sources of water? Give specifications of drinking water.

Q.4 Define calorific value. Draw the diagram of bomb calorimeter.

Q.5 Activity of metal catalyst can be explain on the basis of adsorption theory. Justify the statement.

Section B (4x10 = 40)
(Answer any four questions)

Q.1 Define alkalinity and hardness of water. Discuss any one method of removal of total hardness of water.

Q.2 What are caking and coking coals? Explain the process of carbonization of coal.

Q.3 Distinguish between real and ideal gas? Explain Dalton's law of partial pressure and Graham's law of diffusion.

Q.4 Give characteristics and applications of thermostat and thermosetting plastics.

Q.5 What is synthetic petrol. Discuss Bergius process of synthesis of petrol.

Q.6 Write note on *any two* of the following

a) Negative and auto catalysis.

b) Natural rubber.

c) Two methods for prevention of corrosion

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