



NCC-003-047402 Seat No. _____

**B. Voc. (Pharm. Analysis & QA) (Sem. IV)
(CBCS) Examination**

April / May - 2017

BVPAQA - 402 : Food & Beverages Analysis

Faculty Code : 003

Subject Code : 047402

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory & carry equal marks.
(2) Draw diagram and/or scheme wherever necessary.

1 (A) Answer the following Questions : 10

- (1) Define Carbohydrates.
- (2) All amino acids are optically active except one, give the name of it.
- (3) Give the name of the method by which total nitrogen of milk is found.
- (4) Give reaction of triglycerides with NaOH.
- (5) Milk is an example of _____ (suspension, colloid)
- (6) Name the indicators used for estimation of calcium & magnesium in milk
- (7) Draw the chemical structure of caffeine.
- (8) Vanillin Hydrochloride method is used for the estimation of _____.
- (9) Define fat solvents. Give any one example of it.
- (10) Give any two examples of anti-oxidant substance.

(B) Answer the following Questions : 20

- (1) Differentiate between Monosaccharide's and Polysaccharides.
- (2) Write about the roles/functions of carbohydrates.
- (3) Discuss method of Preparation of Sample of Butter.

- (4) Discuss method for determination of Moisture in Ghee.
- (5) Enlist major constituents of milk in brief.
- (6) Enlist major constituents of soft-drinks.
- (7) Describe the classification of fats and oils.
- (8) Write in brief about soluble and insoluble fibers.
- (9) Vegetable fats preserve long time than animal fat.
- (10) Solubility of fat in organic solvents is increases with increases the side chain length of fatty acids.

2 Answer the following Questions : (Any **Four**) **20**

- (1) Give a detailed account of reactions of Monosaccharide's.
- (2) Describe procedure for determination of Milk Fat in Yoghurt.
- (3) Explain method to estimate amount of total protein in milk.
- (4) Describe in detail: Folin-Denis method for estimation of tannins in tea.
- (5) How will you estimate total carbohydrate in soft drinks?
- (6) Define Iodine value & Write down its Analysis.

3 Answer the following Questions : (Any **Four**) **20**

- (1) Classify amino acids based on their structure and polarity.
- (2) Describe procedure for determination of Milk Fat (by Acid Digestion Method) in Cheese
- (3) Describe the process for determination of calcium in milk.
- (4) Explain analysis of phosphate content in soft-drinks.
- (5) Explain determination of Iodine Value in brief.
- (6) Describe different physical & chemical Properties of fat & oil.