## TOTAL PAGE: 1 14CHP19A/15ESP18B PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## MSc DEGREE EXAMINATION MAY 2018 (Third Semester)

# Common to Branches -CHEMSISTRY & ENVIRONMENTAL SCIENCE

# FOOD CHEMISTRY & QUALITY CONTROL

Time: Three Hours

Maximum: 75 Marks

 $\frac{\text{SECTION -A (30 Marks)}}{\text{Answer ALL questions}}$ ALL questions carry EQUAL Marks (5x6 = 30)

1 a Describe the composition and properties of polysaccharides. OR

b Explain hydrogen ion bonding, bound and free water.

2 a Discuss on non-enzymatic browning.

b Write on effect of cooking on myoglobin and haemoglobin.

3 a Elaborate on added natural colours and their uses.

#### OR

b How are food additives classified?

4 a Brief on sensory methods of evaluation of food quality.

## OR

b List out the objective tests to evaluate the food quality.

5 a Explain the methods of detecting the adulterants in milk and milk products. OR b Write on BIS and AGMARK.

> <u>SECTION -B (45 Marks!</u> Answer any THREE questions ALL questions carry EQUAL Marks (3x15 = 45)

- 6 Write on composition, properties and gelatinization of starch.
- 7 Describe the changes during cooking of plant pigments.
- 8 Discuss on artificial colours, uses and maximum permissible limits.
- 9 Explain chemistry and physiology of taste.
- 10 Discuss on the importance of enzymes in food processing.