

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**B.Voc DEGREE EXAMINATION DECEMBER 2019
(Third Semester)**

Branch - **FOOD PROCESIING TECHNOLOGY**

EXTRUDED AND CONVENIENCE FOODS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks!)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 1 = 10)

- 1 _____ is used to gently mix and shape dough, for producing pasta and dough.
(i) Steam - induced expansion (ii) Cold extrusion
(iii) Hot extrusion (iv) Expanded co extrusion
- 2 _____ extruder is used when two (or) more ingredients are mixed.
(i) Forced extruder (ii) Twin screw extruder
(iii) Single screw extruder (iv) Mixed extruder
- _____ involves the incorporation of food ingredients in small capsules.
(i) Encapsulation (ii) Pelleliration
(iii) Expansion (iv) Co- extrusion
- 4 TVPis
(i) Twin Vegetable pelletizer (ii) Texturised vegetable protein
(iii) Texture vegetable profile (iv) Textural visco analyzer properties
- 5 _____ is used for assessing the pasting properties of flour.
(i) Texture profile analyzer (ii) Rapid visco analyzer
(iii) Scanning analyzer (iv) Expansion index analyzer
- 6 _____ determines the amount of polysaccharides release from granule on addition of excess of water.
(i) Expansion index (ii) Rapid viscosity index
(iii) Water solubility index (iv) Water absorption index
- 7 _____ is commercially prepared food designed for ease of consumption.
(i) Commercial food (ii) Quick food
(iii) Portable food (iv) Convenience food
- 8 _____ is a basic convenience food.
(i) Instant breakfast (ii) RTE cereals
(iii) Frozen waffles (iv) Instant potatoes
- 9 _____ nuggete must be deep fried only
(i) Breaded (ii) Battered
(iii) Coated (iv) Covered
- 10 _____ a powder designed to mix usually with water to produce a beverage resembling fruit juice (or) soda in flavour
(i) Carbonated beverage (ii) Drink mix
(iii) Liquid mix (iv) Instant mix

Cont..

SECTION - B (35 Marks)Answer **ALL** Questions**ALL** Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Explain the role of various ingredients used in extrusion process.
OR
b Write a brief note on single and twin screw extruders. .
- 12 a Enlist the long pasta products available and the extrusion process involved.
OR
b Briefly explain the modern extrusion techniques used in the processing of weaning foods.
- 13 a Explain the various functional characteristics used in quality control testing of extruded products.
OR
b Describe the textural properties used in analysis of quality of extruded products.
- 14 a Describe the various RTE food available in market.
OR
b Write a brief note on the challenges faced and current market trends of convenience foods.
- 15 a Give a brief account on the various instant beverage available in market.
OR
b Enlist the standards specified for extruded and convenience foods.

SECTION - C (30 Marks)Answer any **THREE** Questions**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Define extrusion. Discuss the functions, advantages and disadvantages of extrusion process.
- 17 Enumerate on the expansion, Pelletization and encapsulation technique involved in extruded product preparation.
- 18 Describe the various critical parameters used to select the raw materials used for extruded products.
- 19 Define convenience foods. Write a detailed note on the importance, advantage and disadvantages of convenience foods.
- 20 Discuss on the breakfast mixes, RTE gravies and instant mixes available in Indian market.

Z-Z-Z

END