

# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Food. Engg) 2012 Admission  
VII<sup>th</sup> Semester Final Examination-January -2016

Cat. No: Fdpr.4106

Marks: 80.00

Title: Processing of Marine products (2+0)

Time: 3 hours

## I Fill up the blanks/State True or False

(10 x 1=10)

1. Z value of \_\_\_\_\_ °c is designated as F0
2. Freezer that use liquid nitrogen at -196<sup>0</sup>c is \_\_\_\_\_ freezing
3. \_\_\_\_\_ is the principle used in freeze drying
4. \_\_\_\_\_ is a valuable product from prawn shell
5. Case hardening is a defect with freezing
6. Spoilage of fresh water fish does not result in production of Trimethyl Amine
7. SI unit of irradiation is \_\_\_\_\_
8. \_\_\_\_\_ is an example of fresh water fish
9. Cans for packing fish are coated with \_\_\_\_\_ lacquer to prevent discoloration
10. Aluminium foil is used as a barrier against \_\_\_\_\_

## II Write short notes on any TEN questions

(10 x 3=30)

1. Water activity
2. Smoking of fish
3. Z value
4. Exhausting
5. Retortable pouches
6. Cryoprotectants
7. Fish sauce
8. Eutetic point
9. Commercial sterility
10. Antibiotics in fish preservations
11. Masmin
12. HTST process

## III Write short essay on any SIX questions

(6 x 5=30)

1. Individual Quick Freezing
2. Cold point in canning
3. Slow and quick freezing
4. Drying curve
5. Pickling

6. Block ice manufacture
7. Pelagic and demersal fish
8. Chitosan

**IV Write essay on any ONE**

**(1 x 10=10)**

1. Explain the causes of fish spoilage and principle behind i) Drying ii) Freezing iii) icing
2. What is aseptic packaging .Describe the different package forms