

**PARUL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**B.Sc. Winter 2018-19 Examination**

**Semester: 1**  
**Subject Code: 11113101**  
**Subject Name: Introduction to food technology**

**Date: 15/12/2018**  
**Time: 10:30 am to 1:00pm**  
**Total Marks: 60**

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**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type (4x2) (Each of 04 marks) (08)**  
(a).Composition and uses of by-product of cereals  
(b)Common names and scientific names of pulses
- Q.1. B) Answer the following questions (Any two) (04)**  
(a) Brief note (2x2) (Each of 02 marks) (04)  
1.Goitrogen is present in which pulses.  
2.How tennins can be removed from pulses?  
(b) Short note: Cooking and fermentation of pulses (04)  
(c) Short note: Essential fatty acids (04)
- Q.2. A) Answer the following questions. (04)**  
(a) Brief note (2x2). (Each of 02 marks) (04)  
1.Any one scientific name of pulses  
2.What is the symptoms in third stage of lathyrism?  
(b) Short note: Enzymatic browning (04)
- Q.2. B) Answer the following questions (Any two) (03)**  
(a) Multiple choice questions. (Each of 01 marks) (03)  
1.Which process is only used for colour and flavouring?  
a) Browning  
b) Ceramelization  
c) Soaking  
d) Fermentation  
2. Which of the following is perishable food?  
a) Oatmeal  
b) Pasta  
c) Whole grains  
d) Milk  
3.During which process Ascorbic acid content of pulses increases manifold after 48 hours?  
a) Germination  
b) Decortication  
c) Fermentation  
d) Sprouting  
(b) Short note: Butter (03)  
(c) Short note: Margarine (03)
- Q.3. A) Essay type (4x2) (Each of 04 marks) (08)**  
(a)Evaluation of food processing from prehistoric times till date  
(b)Composition and uses of maize, barely, rye and oats
- Q.3. B) Answer the following questions (Any two) (04)**  
(a) Do as directed (2x2) (Each of 02 marks) (04)  
1. Define food science and technology  
2.Structure of cereal  
(b) Short note: Gelatinization of starch  
(c) Short note: Process of malting

**Q.4. A) Answer the following questions.**

(a) Brief note (2x2). (Each of 02 marks)

**(04)**

1. Any one functions of glucose
2. First stage of Lathyrism

(b) Short note: Physiological changes in fruits and vegetables

**(04)**

**Q.4. B) Answer the following questions (Any two)**

(a) Multiple choice questions. (Each of 01 marks)

**(03)**

1. In which stage of Lathyrism is known as two stick stage?

- a) First stage
- b) Second stage
- c) Third stage
- d) Final stage

2. Saponins can be reduced by which method?

- a) Germinating and boiling
- b) Soaking
- c) Steeping and parboiling process
- d) None of the above

3. How much percentage of protein is present in pulses?

- a) 10-20%
- b) 20-40%
- c) 30-60%
- d) 60-80%

(b) Short note: Soaking

**(03)**

(c) Short note: Decortication

**(03)**