

## U.G. 6th Semester Examination - 2020

### NUTRITION

Course Code : BNUTDSHC6

Course Title : Food Biotechnology

Full Marks : 30

Time : 2 Hours

*The figures in the right-hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **ten** questions from the following:  
 $1 \times 10 = 10$ 
  - a) Name a substance which is used in industrial fermentation to produce food and drinks.
  - b) Define genetic engineering.
  - c) Name the process which is helped to joining of donor DNA fragment and vector DNA fragments with the help of DNA ligase enzyme.
  - d) What is the another name of molecular cloning?
  - e) Define totipotency.

- f) By which the DNA of vector is cut into fragments?
  - g) By which technological process yoghurt is produced?
  - h) What is the other name of hybrid DNA?
  - i) Define braising.
  - j) Name two white fish.
  - k) What do you mean by the term 'single cell protein'?
  - l) Why fermented foods are so popular?
  - m) Of the foods we eat how much contains the genetic material DNA?
  - n) Define hydroponics.
  - o) What is the other name of green tea?
2. Answer any **five** questions from the rest :  $2 \times 5 = 10$ 
    - a) State the basic concept of bio-technology.
    - b) Define YAC.
    - c) Name some cybrid plants.
    - d) What is proplast fusion?
    - e) Where is a hybridoma cell made from?
    - f) Distinguish between plasmids and cosmids.

- g) What is the use of plant tissue culture?
- h) What are the difference between GMOs and GM foods?

3. Answers any **two** questions from the rest :  $5 \times 2 = 10$

- a) What are spoilage specific organisms? Explain pesticide herbicide contamination in food.

1+4=5

- b) What is a restriction enzyme? Mention the types of restriction endonucleases.

2+3=5

- c) How are artificial seeds produced? State importance of artificial seeds.

2+3=5

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