

B.Sc. 3rd Semester (Honours) Examination, 2018 (CBCS)

Subject : Nutrition

Paper : SEC-1

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

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

Candidates are instructed to attempt either Section-A or Section-B

Section-A

(Technology of Fruits and Vegetables)

1. Answer *any five* questions from the following: 2×5=10
- (a) What do you mean by blanching?
 - (b) State the difference between Jam and Jelly.
 - (c) State the reason for addition of salt and sugar during pickling.
 - (d) Define 'Asepsis'.
 - (e) State the role of pectin.
 - (f) What do you mean by pulping of tomato juice?
 - (g) What do you mean by water activity in foods?
 - (h) Mention the name of two chemicals used as preservatives.
2. Answer *any two* questions from the following: 5×2=10
- (a) Write down the importance of fruits and vegetables in a daily diet. 2½+2½=5
 - (b) Give a brief account on different types of pasteurization. State its significance. 3+2=5
 - (c) What are the different causes of food spoilage? Write the name of microbes which are responsible for food spoilage. 3+2=5
 - (d) What is 'head space' of canning? State the advantages of this process. 2+3=5
3. Answer *any two* questions from the following: 10×2=20
- (a) Draw a flow chart and describe the method of production of a typical fruit jam. What are the differences between natural juice and sweetened juice? 8+2=10
 - (b) Discuss the processing of fruit juices with special reference to
 - (i) juice extraction
 - (ii) de-aeration
 - (iii) straining
 - (iv) filtration
 - (v) clarification 2×5=10

- (c) Draw a flow chart and describe the process for making pickles of any fruit. 3+7=10
- (d) What do you mean by packing? What should be the features of a good container for packing of food items? Discuss the packaging process of any fruit preparation. 2+3+5=1

Section-B

(Environment Management and Public Health)

1. Answer *any five* questions from the following: 2×5=10
- Define hazard and mention the categories of environmental health hazard.
 - What is pollution?
 - Illustrate your concept on acid rain.
 - State the various categories of biomedical waste.
 - Define vector and give two examples of vector.
 - Write the name of causative agents of dengue and encephalitis.
 - What is Minamata disease?
 - List the causes of noise pollution.
2. Answer *any two* questions from the following: 5×2=10
- What do you mean by waste? Write a short note about waste handling and disposal. 1+4=5
 - Enlist the symptoms of arsenicosis and fluorosis. 2½+2½=5
 - Give a brief account on integrated management of mosquito control. 5
 - Mention the names of green house gases and describe how green house gases influence global warming. 1+4=5
3. Answer *any two* questions from the following: 10×2=20
- Define sewage. Briefly describe the sewage treatment process. 2+8=10
 - Write down the causes and symptoms of asbestosis. State how asbestosis affects public health. 2½+2½+5=10
 - What are the causes of water pollution in cities and villages? Write the names of some diseases caused by drinking of polluted water. Explain the sources and consequences of air pollutants for the following:
 - Sulphur di-oxide
 - Ozone
 - Fumes 2+2+(2×3)=10
 - What is bagassosis? Mention the causes and symptoms of bagassosis. How can bagassosis be prevented? 2+(2+2)+4=10