

- Q.24 Explain the concept of balanced diet.
  - Q.25 How are carbohydrates classified?
  - Q.26 Explain 'food pyramid' in brief.
  - Q.27 Explain the role of any five enzymes in food processing.
  - Q.28 Discuss the importance of food additives in food preservation.
  - Q.29 Define water activity. Why is it important?
  - Q.30 Explain the role of colloidal chemistry in food production.
  - Q.31 Explain the role of emulsifier in food chemistry.
  - Q.32 Define simple and complex lipids.
  - Q.33 How energy in the food is calculated? Why it is important?
  - Q.34 Differentiate between fats and oils.
  - Q.35 Explain the sources and importance of lycopene.

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the deficiency disorders and requirement of calcium, iodine, iron and Vitamin A.

Q.37 Explain the major types of natural food pigments and highlights their importance.

Q.38 Explain the structure of water molecule, types and functions of water.

No. of Printed Pages : 4 181132/121132/031132  
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**3rd Sem / Food Technology**  
**Subject:- Food Chemistry and Nutrition**

Time : 3Hrs. M.M. : 100

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 A substance needed by the body for growth, energy, repair and maintenance is called a \_\_\_\_\_.

a) nutrient                  b) Carbohydrate

c) calorie                  d) fatty acid

Q.2 Your body needs vitamin and minerals because \_\_\_\_\_.

a) they give the body energy

b) they help carry out metabolic reactions

c) they insulate the body's organ

d) they withdraw heat from the body

Q.3 The disease beriberi is due to the deficiency \_\_\_\_\_.

a) vitamin A                  b) vitamin B

c) vitamin C                  d) vitamin D

Q.4 Red colour of tomato is due to \_\_\_\_\_.

a) chlorophyll                  b) xanthophylls

c) lycopene                  d) None of these

- Q.5 This food group is our body's best source of energy:  
a) Meat group      b) fats, oils and sweets  
c) breads and cereals      d) milk and cheese
- Q.6 This nutrient is most important for healthy vision:  
a) vitamin K      b) iron  
c) calcium      d) vitamin A
- Q.7 The bread, cereal, rice and pasta group is a good source of \_\_\_\_\_.  
a) carbohydrates      b) vitamin C  
c) Calcium      d) vitamin D
- Q.8 The milk, cheese and yogurt group are important for \_\_\_\_\_.  
a) strong bones      b) teeth  
c) muscles      d) all of the above
- Q.9 Eggs, milk and meat are usually classified as good sources of \_\_\_\_\_.  
a) carbohydrates      b) protein  
c) fat      d) None of these
- Q.10 The method of removing gases from cans gases is known as \_\_\_\_\_.  
a) exhausting      b) sealing  
c) Clinching      d) None of the above

## SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Deficiency of Vitamin A causes \_\_\_\_\_ in early stages. (night blindness/xerophthalmia).
- Q.12 Vitamin D is essential for \_\_\_\_\_.
- Q.13 Meat is rich in \_\_\_\_\_. (Carbohydrate/protein)
- Q.14 Vitamin A and D are \_\_\_\_\_. (water soluble/fat soluble)
- Q.15 RDA stands for \_\_\_\_\_.
- Q.16 Triglycerides, which are solid at room temperature are often known as \_\_\_\_\_.
- Q.17 Vitamin C is also known as \_\_\_\_\_.
- Q.18 Over nutrition is caused due to \_\_\_\_\_ (lack/excess) of nutrients.
- Q.19 How many carbon atoms are present in a glucose molecule?
- Q.20 Chlorophyll is a \_\_\_\_\_ (pigment/ester compound)

## SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Why is food important to us? Explain it.
- Q.22 List the functions of calcium.
- Q.23 Explain the industrial importance of protein.