July - Aug - 2021

BLDE (DEEMED TO BE UNIVERSITY)
B.Sc. BIOTECHNOLOGY

Time: 3 Hours] **[Max.Marks: 80]**

I SEMESTER
PAPER – I (CELL BIOLOGY)
QP CODE: 8176

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

ong Questions **10X1 = 10 Marks**

. Explain fluid mosaic model and chemical composition of cell plasma membrane.

hort Essays: (Any – 8) **5 X 8 = 40 Marks**

. Structure and function of endoplasmic reticulum
. Write about cytoskeleton.
. Centriole.
. Types of lysosomes and its functions.
. Explain structure of chloroplast.
. Function of nucleus.
. Characteristic of cancer cell.
. Mitochondrial genome.
0. Write in detail about ribosomes.

ery Short Essay (Any – 10) **3 X 10 = 30 Marks**

1. Carcinogenic agents
2. Vacuoles.
3. Lipid layer.
4. Mitosis.
5. Types of cell division.
6. Pinocytosis.
7. Nucleotide.
8. Cytosol.
9. Apoptosis.
0. Types of cancer.
1. ATP & ADP

July - Aug - 2021

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. Biotechnology

[Time: 3 Hours] [Max.Marks: 80]

I SEMESTER

PAPER – I (CHEMISTRY)

QP CODE: 8175

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions **10X1 = 10 Marks**

1. Give a detailed account on first and second order reaction rate equation.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. Discuss on amalgam gas.
3. Describe the graham's law.
4. Give an account on inter-ionic attraction.
5. Write a note on electrolytes.
6. Write a note on conductance.
7. Describe Boyle's law.
8. Discuss the potentiometric titration.
9. Describe the single electrode potential.
10. Write a note on electrochemical cells.

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

1. Debye Huckel equation
2. Kinetic theory of translational motion
3. Colligative properties
4. Thermodynamics of electrode potentials
5. Oxidation-reduction reactions
6. Dalton's Law
7. Faradays' law
8. SAR
9. Alkanes
0. Arrhenius theory
1. Conductometric titrations

July - Aug - 2021

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. AHS FOOD & NUTRITION AND DIETETICS

[Time: 3 Hours] [Max.Marks: 80]

I SEMESTER

PAPER – III (FOOD SCIENCE)

QP CODE: 8182

Your answer should be specific to the questions asked.
Write Question No. in left side of margin

Long Questions **10X1 = 10 Marks**

1. Explain Cereal grain with neat labelled diagram.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. Write a note on effect of cooking on Sulphur containing vegetables.
3. Elaborate processing of pulses.
4. What are flavor compounds in vegetables and fruits?
5. What is parboiling. Give their different methods.
6. Explain the role of cereals in cookery.
7. What are objectives of cooking?
8. Make a short essay on functions of food.
9. What are ICMR classification of food groups?
10. Explain cutting and grating, processing with their advantages and disadvantages.

Very Short Essay (Any – 10) **3 X 10 = 30 Marks**

11. Define Non nutrients of food, Antioxidants and food fortification.
12. Expand ICMR and give its IV food group system.
13. Write a note on Gelatinization.
14. Explain germination of pulses with their advantages.
15. Write a note on Aflatoxin.
16. What is the role of nuts and oilseeds in cookery?
17. Give classification of vegetables with example.
18. Write a note on Enzymatic browning.
19. Explain cereal starch.
20. Write a note on nutritive value of rice.
21. What is lathyrism? What are its symptoms?

July - Aug - 2021

BLDE (DEEMED TO BE UNIVERSITY)
B.Sc. AHS FOOD & NUTRITION AND DIETETICS

[Time: 3 Hours] [Max.Marks: 80]

I SEMESTER
PAPER – I (HUMAN NUTRITION)
QP CODE: 8180

Long Questions **10X1 = 10 Marks**

1. Define Health. Describe the role of Nutrition in maintenance of Health.

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. What are methods of Diet surveys?
3. How will you assess Nutritional status clinically & biochemically?
4. Give functional classification of Proteins.
5. Discuss digestion & absorption of Fats in body.
6. Write factors affecting bio-availability of proteins?
7. Note on measurement of Energy Balance of body.
8. Classify & explain basic structure of carbohydrates.
9. Elaborate Evaluation of Protein quality.
10. What is Specific Dynamic action of foods?
11. What is role of dietary fibers in Health?

Very Short Essay (Any – 10) **3 X 10 = 30 Marks**

12. Define Nutrition.
13. Write Nutritional significance of PUFA.
14. Mention Essential amino acids?
15. What is Polysaccharide?
16. Define calorie & Joule.
17. Define Recommended Dietary Allowances (RDA).
18. Define Basal Metabolic Rate.
19. Supplementary action of proteins.
20. What are the sources & requirements of Fats?
21. What are Saturates fatty acids?

July - Aug - 2021

BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. ALLIED HEALTH SCIENCES

[Time: 3 Hours] **[Max. Marks: 80]**

I SEMESTER

PAPER – III (BIOCHEMISTRY)

QP CODE: 8127,8132,8137,8142,8147,8152,8157,8162,8167,8172

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions **10X1 = 10 Marks**

1. Discuss the sources, RDA, functions and deficiency manifestations of Vitamin C in the human body. (1+1+4+4)

Short Essays: (Any – 8) **5 X 8 = 40 Marks**

2. Denaturation of proteins.
3. Describe the classification of carbohydrates.
4. Describe manifestation associated with inadequate intake of Vitamin A.
5. Definition, substrates and significance of gluconeogenesis.
6. Write a note on Watson and crick model of DNA.
7. Define enzymes. Classify enzymes with suitable examples.
8. Glucose tolerance test.
9. Atherosclerosis.
10. What is balanced diet? What is the role of essential nutrients in the balanced diet?

Short Answers: (Any – 10) **3 X 10 = 30 Marks**

11. Explain how change in temperature alters the enzyme activity.
12. Mention different classes of lipoproteins.
13. What are essential fatty acids? Describe their biomedical importance.
14. Write a note on Pellagra.
15. Write the normal ranges of serum calcium, phosphorus and iron.
16. Define pH. What is the importance of pH meter?
17. Protein energy malnutrition.
18. List the criteria applied to reject the samples in clinical Biochemistry laboratory.
19. Describe the health risks associated with obesity.
20. Categories of biomedical wastes.
21. Significance of HMP shunt pathway