

Rajiv Gandhi University of Health Sciences, Karnataka

II Semester B. Sc Nursing Degree Examination - 16-Jun-2025

Time: Three Hours

Max. Marks: 25

APPLIED BIOCHEMISTRY – SECTION – B (RS-6)

Q.P. CODE: 1780

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1779 and 1780 are to be answered within total duration of 3 hours)

SHORT ESSAYS

3 x 5 = 15 Marks

1. Explain the procedure of Glucose Tolerance test
2. Explain Lipid Profile test
3. Define Amino Acids. Explain the classification of Amino Acids

SHORT ANSWERS

3 x 2 = 6 Marks

4. List the causes of Metabolic Acidosis
5. Define Jaundice
6. What is 24 hours Urine test?

Multiple Choice Questions

4 x 1 = 4 Marks

7. The Enzyme that hydrolyses sucrose is
 - A. Invertase
 - B. Amylase
 - C. Lactase
 - D. Maltase
8. The earliest reliable indicator of Myocardial infarction is
 - A. Aldose
 - B. SGOT
 - C. CK-MB
 - D. ALT
9. A common cause of Metabolic Alkalosis is
 - A. Diabetic Ketoacidosis
 - B. Prolonged Vomiting
 - C. Emphysema
 - D. Lack of sleep
10. The immunoglobulin involved in type - I hypersensitivity is
 - A. IgM
 - B. IgG
 - C. IgE
 - D. IgA



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

SRI DEVARAJ URS COLLEGE OF NURSING

B.Sc. Nursing First Year (Semester-II) August 2025 Examination

Time: 3.00 Hrs

**Subject: Applied Biochemistry and Applied Nutrition and Dietetics
(Used Separate Answer Booklet Sec A & B)**

Section: A Applied Biochemistry [Max.Marks:25]

Q.P Code: R2035

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

I MULTIPLE CHOICE QUESTIONS

4x1= 4 Marks

1. One of the molecule is a biologically important Peptide

- a. Albumin
- b. Glutathione
- c. Lipoproteins
- d. Alanine

2. Glucose and Galactose are

- a. Anomers
- b. Constituents of Sucrose
- c. Diastereoisomers
- d. Epimers

3. Aminoacid which is ketogenic

- a. Alanine
- b. Glutamic acid
- c. Leucine
- d. Aspartic Acid

4. Biological reference interval of serum Total Bilirubin is

- a. 0.2- 0.8 mg/dL
- b. 1- 2 mg/dL
- c. 2- 5 mg/dL
- d. 5- 10 mg/dL

II SHORT ESSAYS

3X5= 15 Marks

1. List out the Diabetic Profile Investigations with the biological reference Interval
2. Define Essential Amino acids. Give Examples. Mention the different types of classifications of Amino acids (1+1+3)
3. Define Lipids. Classify lipids with suitable examples and write the Biomedical importance (1+2+3)

IV SHORT ANSWERS

3X2= 6 Marks

4. Write the Diagnostic enzymes of Myocardial infarction
5. What is Respiratory Acidosis
6. Write the biological reference interval of Serum Albumin. List any two conditions causing hypoalbuminemia (1+1)

Applied Nutrition and Dietetics
Section: B [Max.Marks:50]
Q.P Code: R2036

I. MULTIPLE CHOICE QUESTIONS:

8x1=8 Marks

1. Which of the following is a rich source of Vitamin C?
A. Milk
B. Lemon
C. Rice
D. Wheat
2. The deficiency of iodine causes:
A. Rickets
B. Night blindness
C. Goitre
D. Anemia
3. Protein-energy malnutrition is commonly seen in:
A. Elderly
B. Adolescents
C. Infants and young children
D. Pregnant women
4. Which of the following is a fat-soluble vitamin?
A. Vitamin B
B. Vitamin C
C. Vitamin D
D. Vitamin B12
5. Which mineral is essential for the formation of hemoglobin?
A. Calcium
B. Zinc
C. Iron
D. Iodine
6. The process of nutrition assessment includes:
A. Cooking
B. Shopping
C. Anthropometry
D. Infection control
7. Which food item is a good source of complete protein?
A. Rice
B. Pulses
C. Egg
D. Bread
8. A diet that supplies all essential nutrients in adequate amounts is called:
A. Deficient diet
B. Junk diet
C. Balanced diet
D. Therapeutic diet

II long essay:

1x10=10 Marks

1. What is food safety? Discuss food laws to ensure safety.

III Short essay:

4x5=20 Marks

1. Explain about Mid-Day Meal Program.
2. Discuss different food preservation techniques and their effectiveness.
3. Define macronutrients and list the three main types of macronutrients.
4. Discuss about the functions of calcium in the human body.

IV Short answer:

6x2=12 Marks

1. Meaning of nutritional deficiency disorders.
2. Define food preservation.
3. Name two minerals important for bone health
4. Mention the characteristics of a balanced diet
5. Food source of vitamin C
6. Define over Nutrition



I. MULTIPLE CHOICE QUESTIONS:

12 x 1 = 12 Marks

- 1. One PHC located is for a population of**
 - a. 5000
 - b. 30000
 - c. 1.00.000
 - d. 500
- 2. It is considered as a modifiable factor of health**
 - a. Age
 - b. Genetics
 - c. Lifestyle
 - d. Gender
- 3. The best method of sterilization of rubber gloves**
 - a. Hot steam
 - b. Autoclaving
 - c. Sunlight
 - d. Glutaraldehyde solution
- 4. Comfort device used to prevent foot drop is**
 - a. foot stool
 - b. Foot step
 - c. Foot rest
 - d. Foot roll
- 5. The nurse must wear this while taking temperature of a patient with a droplet-spread of infection**
 - a. Gloves
 - b. Goggles
 - c. Gown
 - d. Mask
- 6. Stomatitis is inflammation of the**
 - a. Stoma
 - b. Mucous membrane of mouth
 - c. Gums
 - d. Roots of teeth
- 7. The Glasgow Coma Scale (GCS) used for**
 - a. Measuring blood pressure
 - b. Assessing consciousness level
 - c. Monitoring heart rate
 - d. Measuring oxygen saturation
- 8. The position is given to patient while administering enema**
 - a. Left lateral position
 - b. Lithotomy position
 - c. Knee chest position
 - d. Fowlers position

9. Appropriate first aid measures for dog bit include all except

- a. Wash the area
- b. Watch the dog
- c. Apply sterile dressing
- d. All of the above

10. Hypothalamus controls

- a. Body temperature
- b. Pulse
- c. Respiration
- d. Blood pressure

11. The color code for discarding for sharp instruments

- a. Red
- b. Yellow
- c. Green
- d. White puncture proof

12. One pint is equal to

- a. 300 ml
- b. 500 ml
- c. 700 ml
- d. 900ml

II. LONG ESSAY:

2 x 15 = 30 Marks

- 13. a) Define Fever (2 marks)
- b) Discuss the types of Fever (6 marks)
- c) Explain the procedure of tepid sponging for the patient with fever of 103-degree F (7 marks)
- 14. a) Define decubitus ulcer (2m)
- b) List the common sites on occurrence of decubitus ulcer (6m)
- c) Explain prevention and management of decubitus ulcer (7m)

III. SHORT ESSAYS

5 x 5 = 25 Marks

- 15. Discuss universal precautions practiced at hospital?
- 16. Explain nursing care of patient with constipation
- 17. List the principle and routes administration of drug
- 18. Discuss role of nurse in discharge procedure.
- 19. Explain the steps of nursing process

IV. SHORT ANSWERS

4 x 2 = 8 Marks

- 20. Define autopsy.
- 21. List the types of Colostomy.
- 22. List the types of reports
- 23. Define immunity