R0344	Sub. Code
	558101

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2023

First Semester

Nutrition and Dietetics

HUMAN PHYSIOLOGY

(CBCS – 2023 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. The study of cells is denoted by the name ————————. (CO1, K1)

   (a) Cytology (b) Histology

   (c) Splanchnology (d) Myology

2. The squamous epithelium consists of ———————— cell types. (CO1, K1)

   (a) Cylindrical (b) Pillar

   (c) Flat (d) Cubical

3. Red blood cells also known as ————————. (CO2, K1)

   (a) Erythropoiesis (b) Granulocytes

   (c) Leukocytes (d) Erythrocytes

4. Heart is surrounded by an outer covering is called ————————. (CO2, K1)

   (a) Endocardium (b) Exocardium

   (c) Pericardium (d) Myocardium

5. The term dyspnea indicates ————————. (CO3, K1)

(a) Stopping of respiration for short intervals

(b) Difficulty in breathing

(c) Increase in depth of respiration

(d) Exceeding high rate of respiration

6. ———————— is all enzyme which converts starch into maltose dining digestion. (CO3, K1)

(a) Amylase (b) Maltase

(c) Lipase (d) Protease

7. ———————— hormone is released from anterior pituitary that stimulates milk secretion. (CO4, K1)

(a) Estrogen (b) Progesterone

(c) Prolactin (d) Oxytocin

8. The right kidney size is ———————— than the left kidney. (CO4, K1)

(a) Normal (b) Smaller

(c) Bigger (d) Longer

9. Insulin is secreted by ———————— cells of pancreas. (CO5, K1)

(a) Alpha (b) Beta

(c) Delta (d) Epsilon

10. Sense of smell is related to the ———————— nerves. (CO5, K1)

(a) Optic (b) Cochlear

(c) Olfactory (d) Oculomotor

Part B (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Differentiate the eukaryotic and prokaryotic cells. (CO1, K2)

Or

(b) Express the important organelles present in the cytoplasm. (CO1, K2)

12. (a) Illustrate the structure and functions of bone. (CO2, K3)

Or

(b) Simplify the factors involved in clotting of blood and its mechanism. (CO2, K3)

13. (a) Give a short note on small intestine and its function of digestion and absorption. (CO3, K4)

Or

(b) Examine the anatomy and physiology of liver. (CO3, K4)

14. (a) Summarize the formation of urine and its processes. (CO4, K5)

Or

(b) Express the different phases of menstruation. (CO4, K5)

15. (a) Interpret the role of insulin and glucagon in pancreas. (CO5, K6)

Or

(b) Explain the functions of salivary and sebaceous glands. (CO5, K6)

Part C (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Illustrate the structure of a cell and describe it. (CO1, K2)

Or

(b) Explain in detail about the classification of tissues. (CO1, K2)

17. (a) Relate the functions of blood and hemoglobin. (CO2, K3)

Or

(b) Explain the two phases of the cardiac cycle. (CO2, K3)

18. (a) Simplify the mechanism of respiration in respiratory system. (CO3, K4)

Or

(b) Write about the functions of bile salts in digestive system. (CO3, K4)

19. (a) Briefly explain about the male reproductive organs and its function. (CO4, K5)

Or

(b) Explain the physiology of eye and ear in sensory organs. (CO4, K5)

20. (a) Determine the anterior pituitary and posterior pituitary in pituitary gland. (CO5, K6)

Or

(b) Explain the nervous system's function and draw a diagram of it. (CO5, K6)

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R0345	Sub. Code 558102

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2023

First Semester

Nutrition and Dietetics

NUTRITION AND HEALTH

(CBCS – 2023 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. A balanced diet should provide around ———— of total calories from protein. (CO1, K1)

   (a) 10-12% (b) 15-30%

   (c) 20-24% (d) 60-70%

2. Which of the following factors is increasing BMR? (CO1, K1)

   (i) Fever (ii) Sleep

   (iii) Smoking (iv) More surface area

   (a) i, ii, iii (b) ii. iii, iv

   (c) i, ii, iv (d) i, iii, iv

3. A pregnant woman is anaemic if the haemoglobin level is below ———— (CO2, K1)

   (a) 10 g/dl (b) 11 g/dl

   (c) 12 g/dl (d) 13 g/dl

4. ———————— hormone is involved in the stimulation of milk production. (CO2, K1)

(a) Estrogen (b) Progesterone

(c) Prolactin (d) Oxytocin

5. The thick, yellowish fluid that the mammary gland secretes in the first two or three days following birth is known as ————————. (CO3, K1)

(a) Colostrum (b) Transition milk

(c) Foremilk (d) Hindmilk

6. ———————— is added to an infant's diet is called beikost. (CO3, K1)

(a) Liquid food (b) Solid food

(c) Fermented food (d) Starchy food

7. Which of the following is the physical sign of anorexia nervosa? (CO4, K1)

(a) Eats large meals

(b) Usually overweight or obese

(c) Rapid loss of weight

(d) Both (a) and (c)

8. Expansion of PCOD is ————————. (CO4, K1)

(a) Polycystic ovular disease

(b) Polycystic ovum disease

(c) Polycystic omphalocele disease

(d) Polycystic ovarian disease

9. After the age of 35 years the basal metabolic rate is ————————. (CO5, K1)

(a) Normal (b) Decreased

(c) Increased (d) Standard

10. It is advised that athletes drink ———————— ml of water 10–15 minutes prior to the competition. (CO5, K1)

(a) 250 ml (b) 500 ml

(c) 750 ml (d) 1000 ml

Part B (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Relate between hunger, appetite and satiety. (CO1, K2)

Or

(b) Summarize the basal metabolic rate and active metabolic rate. (CO1, K2)

12. (a) Discover the nutritional requirements for expectant mothers. (CO2, K3)

Or

(b) Develop the summary of complications and nutritional problems of pregnancy. (CO2, K3)

13. (a) Examine the nutritional status and nutritional allowances of the infants. (CO3, K4)

Or

(b) Examine the feeding methods of preterm and low birth weight infants. (CO3, K4)

14. (a) Evaluate the nutrition and academic performance of school going children. (CO4, K5)

Or

(b) Determine any two general nutritional problems of women. (CO4, K5)

15. (a) Elaborate the physiological, metabolic, body composition changes in ageing process. (CO5, K6)

Or

(b) Estimate the quantity of fluids taken by an athlete during special events. (CO5, K6)

Part C (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Briefly write the major nutrients present in different food groups. (CO1, K2)

Or

(b) Summarize the ICMR Recommended Dietary Allowances (RDA) for Indians. (CO1, K2)

17. (a) Identify the physiological changes of pregnancy. (CO2, K3)

Or

(b) Predict the benefits of lactation in relation to growth and health of infants. (CO2, K3)

18. (a) Distinguish the breast feeding and formula feeding. (CO3, K4)

Or

(b) Examine the growth and development of preschool children. (CO3, K4)

19. (a) Determine the eating disorders of adolescence. (CO4, K5)

Or

(b) Explain in detail on risk factors, methods of detection and prevention of Infertility. (CO4, K5)

20. (a) Compile the nutritional and health status of aging person. (CO5, K6)

Or

(b) Discuss about numerous food items that astronauts can consume in outer space. (CO5, K6)

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R0346	Sub. Code
	558103

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2023

First Semester

Nutrition And Dietetics

ADVANCED FOOD SCIENCE

(CBCS – 2023 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following questions by choosing the correct option.

1. Almonds has a good sources of which vitamin? (CO1, K1)
   (a) Vitamin E (b) Vitamin C
   (c) Vitamin A (d) Vitamin K

2. The process of tea leaves is dried at the temperature of _____. (CO1, K1)
   (a) 65-70°C (b) 77-85°C
   (c) 87-93°C (d) 91-110° C

3. The major carbohydrate of rice starch contains _____ %. (CO2, K1)
   (a) 57-58 (b) 77-78
   (c) 67-68 (d) 47-48

4. Yellow corn contains a pigment called _____ (CO2, K1)
   (a) Cryptoxanthin (b) Lycopene
   (c) Violaxanthin (d) Neoxanthin

5. Khoa' is a milk product which comes under (CO3, K1)

(a) Fermented milk product

(b) Heat desiccated milk product

(c) Coagulated milk product

(d) Frozen milk product

6. Which part of egg is richest in protein and fat? (CO3, K1)

(a) Egg Yolk (b) Egg White

(c) Egg Shell (d) Whole egg

7. Which oil is the world's leading vegetable oil in term of both production and consumption? (CO4, K1)

(a) Groundnut oil (b) Coconut oil

(c) Soyabean oil (d) Olive oil

8. Which country first produced green tea? (CO4, K1)

(a) Australia (b) Germany

(c) Japan (d) China

9. A substance intentionally added that preserves flavor and improves taste is called _____ (CO5, K1)

(a) Food adulterant (b) Food additive

(c) Food contaminant (d) Food material

10. Which country first introduced GM crop? (CO5, K1)

(a) India (b) Brazil

(c) China (d) USA

Part B (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) What are the roles of emulsifiers in food? (CO1, K2)

Or

(b) Describe the sensory characteristics of food. (CO1, K2)

12. (a) Identify the factors that is affecting the gluten formation. (CO2, K3)

Or

(b) Discover the effect of cooking on pigments and nutrients. (CO2, K3)

13. (a) Summarize the physical properties on milk. (CO3, K4)

Or

(b) Explain the post mortem changes in meat. (CO3, K4)

14. (a) Assess the role of nuts and oilseeds in cookery. (CO4, K5)

Or

(b) Explain the properties of sugar. (CO4, K5)

15. (a) Why modified starches are important in food? Simplify. (CO5, K6)

Or

(b) Interpret a short note on generically modified food. (CO5, K6)

Part C (5 × 8 = 40)

Answer any **all** the questions not more that 1000 words each.

16. (a) What are the different methods of cooking and explain its functions? (CO1, K2)

Or

(b) Name and describe the instrument used for texture evaluation. (CO1, K2)

17. (a) Discover the advantages and disadvantages of parboiling cereals. (CO2, K3)

Or

(b) Identify the factors affecting the cooking quality of pulses. (CO2, K3)

18. (a) Classify cheese and draw a flow chat and explain its preparation process. (CO3, K4)

Or

(b) Outline the neat diagram of egg and discuss in detail. (CO3, K4)

19. (a) Explain the different types of rancidity. (CO4, K5)

Or

(b) Interpret the steps involved in preparation of good coffee. (CO4, K5)

20. (a) Classify the different types of food additives and briefly explain them. (CO5, K6)

Or

(b) Generate the current scenario on developing the modified foods in Bharat. (CO5, K6)

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R0347	Sub. Code
	558501

M.Sc. DEGREE EXAMINATION, NOVEMBER – 2023

First Semester

Nutrition and Dietetics

Elective : HOME SCIENCE EDUCATION AND COMMUNICATION

(CBCS – 2023 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following questions by choosing the correct option.

1. Jute is called as ———————— fiber (CO1, K1)

   (a) Golden (b) Silver

   (c) Copper (d) Aluminium

2. The amount of twist is measured by the number of ———————— (CO1, K1)

   (a) Yarn per centimeter

   (b) Yarn per meter

   (c) Yarn per inch

   (d) Twist per inch

3. A certain amount of crispness in apparel and household linen gives them a fresh look, So, what is this? (CO2, K1)

   (a) Stiffening agent (b) Chemical agent

   (c) Softener (d) Bleaching agent

4. Eco-friendly-this term simply describes a product that is ———————— (CO2, K1)

(a) Disadvantage to the environment

(b) Not harmful to the environment

(c) Harmful to the environment

(d) Not friendly to the environment

5. Operation chart is used to study ———————— movements only. (CO3, K1)

(a) Leg (b) Hand

(c) Finger (d) Body

6. The fatigue, when one person does not work but spend all his/her energy is called ———————— fatigue. (CO3, K1)

(a) Physiological (b) Psychological

(c) Both (a) and (b) (d) None of these

7. Symmetry or an identical proportion and arrangement of objects on both sides of a center point. (CO4, K1)

(a) Formal Balance (b) Informal Balance

(c) Proportion (d) None of these

8. The tools used to create good design is called ———————— of design. (CO4, K1)

(a) Rules (b) Elements

(c) Options (d) Principles

9. Example of verbal communication is ————————. (CO5, K1)

(a) Facial expressions (b) Email

(c) Eye contact (d) Gestures

10. In communication, a major barrier to reception of messages is audience ———————— (CO5, K1)

(a) Knowledge (b) Education

(c) Income (d) Attitude

Part B (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) Briefly express about the natural fiber. (CO1, K2)

Or

(b) Explain about the yarn twist and its types.(CO1, K2)

12. (a) Summarize the principles of laundering in textile industries. (CO2, K2)

Or

(b) Show the advantages and disadvantages of dry cleaning. Brief it. (CO2, K2)

13. (a) Identify the qualities of good home maker in home management. (CO3, K3)

Or

(b) How do you practice the techniques of work simplification? (CO3, K3)

14. (a) Discover the elements of design used in interior decoration. (CO4, K3)

Or

(b) Develop the care and selection of flowers for flower arrangement. (CO4, K3)

15. (a) Examine the definition and objectives of Communication. (CO5, K4)

Or

(b) Simplify the essentials of good communication. (CO5, K4)

Part C (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Explain the classification of textile fibre. (CO1, K2)

Or

(b) Summarize importance of eco-friendly processing in environment protection. (CO1, K2)

17. (a) Express the principles of laundering in textile industries. (CO2, K2)

Or

(b) Outline the importance of eco-friendly processing in environment protection. (CO2, K2)

18. (a) Construct the steps involved in planning of home management. (CO3, K3)

Or

(b) Generate the Mundel's classes of change in work simplification. (CO3, K3)

19. (a) Explain the types of interior design used in home decor. (CO4, K3)

Or

(b) Give brief notes on the principles of flower arrangement. (CO4, K3)

20. (a) Categories the types of communication used in education. (CO5, K4)

Or

(b) How do you interpret the classroom communication in home science studies? (CO5, K4)