

Seat No.	
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- 10) The elderly are at increased risk for deficiency of _____.
a) Vitamin D and B1 b) Vitamin A and B12
c) Vitamin D and B12 d) Vitamin A and B1

B) True or False.**06**

- 1) Protein needs of adolescent is 11-12 per cent of energy intake. True/ False
- 2) Low fat or fat free means no calories. True/False
- 3) Bright hair is sign of good health. True/False
- 4) It is recommended that babies are weaned at 6 months. True/False
- 5) Patients who are undergoing surgery with anesthesia can eat food just before surgery. True/False
- 6) Reference man weight is 62 kg. True/False

Q.2 Answer the following.**16**

- a) Define RDA.
- b) Write about exchange list system.
- c) Write about Adult hood.
- d) Write about tube feeding.

Q.3 Answer the following.

- a) Write in details about food groups.
- b) Write about guidelines of good nutrition.

08**08****Q.4 Answer the following.**

- a) Write about hospital diets.
- b) Write about Dietician and its responsibilities.

08**08****Q.5 Answer the following.**

- a) Complications in pregnancy.
- b) Difference between bottle feeding and breast feeding.

08**08****Q.6 Answer the following.**

- a) Write the nutritional needs of lactating woman.
- b) Nutritional needs of Adolescent.

08**08****Q.7 Answer the following.**

- a) Importance of tiffin menus.
- b) Write about dietary guidelines and food requirement in old age.

08**08**

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Day & Date: Wednesday, 15-05-2024
Time: 11:00 AM To 02:00 PM

Max. Marks: 80

Instructions: 1) Question no. 1 and 2 are compulsory.
2) Attempt any three questions from Q. No. 3 to Q. No. 7.
3) Figure to right indicate full marks.

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- 1) Requirement of Ca for lactating mother: _____.
a) 500 mg/day b) 1000 mg/day
c) 1200 mg/day d) 2000 mg/day
- 2) Lactose- milk sugar found in _____.
a) Wheat b) Rice
c) animal milk d) soy milk
- 3) D and L isomers are _____ of each other.
a) epimers b) enantiomers
c) mutarotation d) None of theses
- 4) Inulin is a polymer of _____ units.
a) Glucose b) Fructose
c) Galactosbe d) None of theses
- 5) Human body produces vitamin _____ by using sunlight.
a) A b) D
c) E d) K
- 6) One of the following is an essential fatty acid _____.
a) Palmitic acid b) linoleic acid
c) butyric acid d) acetic acid
- 7) One of the following is non-essential amino acid _____.
a) arginine b) valine
c) histidine d) glutamate
- 8) Amino acids are building blocks of _____.
a) carbohydrates b) lipid
c) protein d) starch
- 9) Sickel cell anemia is prevalent in _____.
a) Africa b) America
c) India d) China
- 10) _____ act as energy reserve in animal body.
a) Starch b) Glycogen
c) animal milk d) pectin

B) Fill in the blanks OR Write True/False.**06**

- 1) Fill in the blank: Cellulose is a polymer made up of _____.
- 2) Food sources of calcium for lactose intolerant patients are _____.
- 3) Examples of hydrolases enzyme are _____.
- 4) True or false: Enzymes may be defined as biocatalysts synthesized by living cells. They are protein in nature (exception - RNA acting as ribozyme), colloidal and thermolabile in character, and specific in their action.
- 5) True or false: Diffusion is a process resulting from random motion of molecules by which there is a net flow of matter from a region of high concentration to a region of low concentration.
- 6) True or false: lipids are made up of thousands of amino acids combined together by peptide bonds.

Q.2 Answer the following.**16**

- a) Explain colloids and properties of colloidal solution.
- b) Explain factors affecting body composition.
- c) Explain protein structure and biological value of proteins.
- d) Draw structures of any two disaccharides.

Q.3 Answer the following.

- a) Write definition of minerals with its functions and food sources.
- b) Explain metabolism of DNA.

10**06****Q.4 Answer the following.**

- a) How proteins classified based on its solubility.
- b) Explain characteristics of enzyme.

10**06****Q.5 Answer the following.**

- a) Describe classification, functions and deficiency diseases of vitamins.
- b) Explain how lipids are metabolized in body?

10**06****Q.6 Answer the following.**

- a) Explain proteins metabolism.
- b) Describe various methods of determining body composition.

08**08****Q.7 Answer the following.**

- a) Explain metabolism of carbohydrates.
- b) Explain classification of enzymes.

10**06**

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Set

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P. G. Diploma in Dietetics and Nutrition (Semester - I) (New) (CBCS)
Examination: March/April-2024
Human Physiology (DDN104)

Day & Date: Friday, 17-05-2024

Time: 11:00 AM To 02:00 PM

Max. Marks: 80

Instructions: 1) Q. Nos. 1 and 2 are compulsory.
2) Attempt any three questions from Q. No. 3 to Q. No. 7
3) Figure to right indicate full marks.

Q.1 A) Choose the correct alternative.

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- Choose the correct alternative.
- 1) _____ hormone stimulates the growth of corpus Luteum.
a) LH
b) FSH
c) TSH
d) ADH
 - 2) _____ cells in pancreas produces insulin.
a) α cells
b) β cells
c) σ cells
d) Leydig's cell
 - 3) _____ hormone is secreted by posterior Pituitary.
a) GH
b) ADH
c) Oxytocin
d) Both b and c
 - 4) _____ gland produces 'T' lymphocytes.
a) Thyroid
b) Thymus
c) Ovary
d) Testies
 - 5) Functional unit of urinary system is _____.
a) Calyx
b) Nucleus
c) Neuron
d) Nephron
 - 6) Exchange of gases takes place in _____.
a) Trachea
b) Bronchus
c) Alveoli
d) Nose
 - 7) _____ Artery carries deoxygenated blood.
a) Renal artery
b) Pulmonary artery
c) Coronary artery
d) aorta
 - 8) Lifespan of RBC is _____ days.
a) 80
b) 90
c) 40
d) 120
 - 9) _____ is present in Gastric Juice.
a) HCL
b) Pepsin
c) Lipase
d) All of these
 - 10) Haversian canal present in _____.
a) bone
b) cartilage
c) both a and b
d) muscles

B) Write True or False**06**

- 1) Calcium metabolism is regulated by thyroid gland.
- 2) Ovaries produces both estrogen and testosterone.
- 3) Bile is responsible for fat metabolism.
- 4) Hematopoiesis is takes place in heart.
- 5) Muscles are attached to bones by tendons.
- 6) Prothrombin is necessary for blood clotting.

Q.2 Answer the following.**16**

- a) Write down functions of liver.
- b) Write down parts and names of hormones secreted by pituitary gland.
- c) Difference between Mitosis and Meiosis.
- d) Write down functions of Blood.

Q.3 Answer the following.

- a) Anatomical structure of heart and its functions. **08**
- b) Write down names of hormones and functions of thyroid gland. **08**

Q.4 Answer the following.

- a) Write down names of coagulation factors and mechanism of coagulation. **08**
- b) Write down process of exchange of gases in the human lungs. **08**

Q.5 Answer the following.

- a) Draw diagram of nephron and describe formation of urine. **10**
- b) Composition of Human Body. **06**

Q.6 Answer the following.

- a) Draw labelled diagram of female reproductive system and describe menstrual cycle. **10**
- b) What is immunisation? Write down various types of immunisation. **06**

Q.7 Answer the following.

- a) Write down Digestion and Absorption in small intestine. **08**
- b) Describe the structure of bone and write down classification of bone. **08**

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P. G. Diploma in Dietetics and Nutrition (Semester - II) (New) (CBCS)
Examination: March/April-2024
Nutrition and dietetics-II (DDN201)

Day & Date: Tuesday, 14-05-2024
 Time: 11:00 AM To 02:00 PM

Max. Marks: 80

Instructions: 1) Question no. 1 and 2 are compulsory.
 2) Attempt any three questions from Q. No. 3 to Q. No. 7.
 3) Figure to right indicate full marks.

Q.1 A) Choose correct alternative. 10

- 1) Insulin is closely associated with _____.
 a) Hypertension b) Diabetes
 c) CVD d) None of the above
- 2) Body Mass Index more than 30 indicates _____.
 a) Obesity b) Health
 c) Gout d) All of the above
- 3) Hypertension means increase in _____.
 a) Blood pressure b) Blood glucose
 c) Uric acid d) Electrolytes
- 4) _____ contains soluble dietary fiber.
 a) Gum b) Flax seeds
 c) ladies' finger d) All of the above
- 5) _____ is a good cholesterol.
 a) VLDL b) HDL
 c) LDL d) All of the above

B) Write true or false. 06

- 1) Insoluble dietary fiber plays an important role in Constipation.
- 2) Overweight is a GIT disease.
- 3) Atherosclerosis is a metabolic disorder.
- 4) To increase in blood pressure is known as Hypotension.
- 5) Sodium and potassium are responsible for Electrolyte balance in body.

Q.2 Answer the following. 16

- a) Gout Disease.
- b) Energy Imbalance.
- c) Role of fibers in constipation.
- d) Management of Underweight.

Q.3 Answer the following. 16

- a) What is Acute Glomerular Nephritis? Write in detail with its nutritional management.
- b) What is NSD? Discuss in detail about various cardiovascular diseases.

Q.4 Answer the following. 16

- a) Which are the liver diseases? Discuss in detail about types of Hepatitis.
- b) Discuss in detail about Diabetes mellitus with hypoglycemic drugs.

- Q.5 Answer the following.** **16**
- a) What are the objectives of Therapeutic diet? Discuss in relation with Diabetes and obesity.
 - b) Discuss in detail about Anorexia nervosa and Bulimia.
- Q.6 Answer the following.** **16**
- a) Write in detail nutritional management in regard with Anemia and Burns.
 - b) What should be the dietary care and management in various surgical conditions.
- Q.7 Answer the following.** **16**
- a) What is cancer and AIDS? Discuss the need of nutritional care in these diseases
 - b) Write in detail about need, importance and scope of Sport nutrition in regard to current.

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P. G. Diploma in Dietetics and Nutrition (Semester - II) (New) (CBCS)
Examination: March/April-2024
Food Science and Food Microbiology (DDN202)

Day & Date: Thursday, 16-05-2024

Max. Marks: 80

Time: 11:00 AM To 02:00 PM

- Instructions:** 1) Question no. 1 and 2 are compulsory.
 2) Attempt any three questions from Q. No. 3 to Q. No. 7.
 3) Figure to right indicate full marks.

Q.1 A) Multiple Choice Questions.**10**

- 1) Who is regarded as father of Canning?
 - a) Nicolas Appert
 - b) Louis Pasteur
 - c) John hall
 - d) Bryan Dokin
- 2) Which of the following food component is rich in fat?
 - a) Rice and maize
 - b) Milk, egg and legumes
 - c) butter, cheese and oil
 - d) None of the above
- 3) Food does not spoil for months if it is stored at _____.
 - a) -18°C
 - b) 5°C
 - c) 10°C
 - d) 25°C
- 4) Under the PFA act when is the food said to be adulterated _____.
 - a) If any ingredient is injurious to health
 - b) if it is obtained from a diseased animal
 - c) If spices are sold without their essence
 - d) All of the above options are correct
- 5) Repeated washing of pulses and rice might remove _____.
 - a) Vitamins
 - b) minerals
 - c) Both A and B
 - d) fats
- 6) Ranking test is ___ method of sensory evaluation.
 - a) Analytical
 - b) subjective
 - c) Preference
 - d) none of the above
- 7) Which of the following are the conventional methods of cooking?
 - a) Boiling
 - b) frying
 - c) Baking
 - d) all of the above
- 8) Glass jars and bottles are dried well in the sun before filling them with pickles why is it so?
 - a) To increase their temperature
 - b) to remove dust from them
 - c) to remove the moisture completely
 - d) to make pickles tasty
- 9) Fermentation occurs in the _____.
 - a) Presence of oxygen
 - b) absence of oxygen
 - c) presence of nitrogen
 - d) presence of carbon

- 10) Which of the following food items provides dietary fiber?
- a) Legumes
 - b) whole grains
 - c) fruits and vegetables
 - d) all of the above

B) State whether true or False.

06

- 1) Egg is a rich source of carbohydrates.
- 2) Pickling is a method of processing food in an edible anti-microbial liquid.
- 3) Powder and paste forms are more adulterated than solid lumps.
- 4) Viruses are responsible for spoilage of cooked food.
- 5) In The dry heat methods of cooking fat is used for the medium of heat transfer.
- 6) The tip of tongue is more sensitive for sweet taste.

Q.2 Answer the following.

16

- 1) State the characteristics of an ideal packaging material.
- 2) Define food adulteration and what are the common food adulterants used in milk and Milk products. pulses and Spices and condiments.
- 3) State the nutritional significance of fruits, vegetables, nuts and oil seeds.
- 4) Explain The paired difference test and triangle difference test of sensory evaluation.

Q.3 Answer the following.

- a) With the help of flowchart explain the steps involved in Canning of mango pulp giving the significance of each step.
- b) Functions of sugar cookery.

10

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Q.4 Answer the following.

- a) Describe various dry methods of cooking.
- b) Types of food additives and their functions.

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Q.5 Answer the following.

- a) Define leavening agent .What are different types of leavening agent and how they work?
- b) Factors contributing food spoilage.

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Q.6 Answer the following.

- a) Contamination of foods with toxic chemicals, pesticides and insecticides.
- b) How will you detect food adulteration in following foods:
 - i) Butter
 - ii) Chilies
 - iii) mustard seeds

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Q.7 Answer the following.

- a) Explain the importance of cooking methods and their effects on nutrient content in food.
- b) Hedonic scale or subjective methods of sensory evaluation.

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Set	P
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P. G. Diploma in Dietetics and Nutrition (Semester - II) (New) (CBCS)
Examination: March/April - 2024
Sports nutrition (DDN207)

Day & Date: Saturday, 18-05-2024
 Time: 11:00 AM To 02:00 PM

Max. Marks: 80

- Instructions:** 1) Q. No. 1 and 2 are compulsory.
 2) Attempt any three questions from Q. No. 3 to Q. No. 7
 3) Figure to right indicate full marks.

Q.1 A) Choose correct alternative. 10

- 1) Sports highly benefitted by carbohydrate loading _____.
 a) Long distance swimming b) Boxing
 c) Marathon d) All of the above
- 2) American heart association recommends total dietary fiber intake of _____.
 a) 5-10 gram/day b) 10-15 gram/day
 c) 15-20 gram/day d) 25-30 gram/day
- 3) _____ describe athletic performance enhancing substances and training techniques.
 a) Performance aids b) Strength aids
 c) Ergogenic aids d) None of above
- 4) Delayed onset muscle soreness (DOMS) causative agent _____.
 a) Hydroxyproline b) Proline
 c) leucine d) Isoleucine
- 5) The brain can use _____ cal/day of glucose from liver glycogen.
 a) 200 b) 400
 c) 600 d) 500
- 6) 1 gram of glycogen is stored with about 3 gm of _____.
 a) Lipid b) Amino acid
 c) Glucose d) Water
- 7) Creatine phosphate helps in all except _____.
 a) Football b) Marathon
 c) Power lifting d) Weight lifting
- 8) _____ primary role of transportation of fatty acids into mitochondria.
 a) L Carnitine b) L arginine
 c) L Valine d) L tyrosin
- 9) Glucosamine is helpful in _____.
 a) Nervous tissue b) Muscle tissue
 c) Connective tissue d) Epithelial tissue
- 10) _____ includes the chemical reactions that continue different biomolecules to create larger more complex one.
 a) Metabolism b) Anabolism
 c) Catabolism d) None of above

B) Fill in the blanks or Write true/false.**06**

- 1) _____ training greatly increases the body's functional capacity to transport and use oxygen and to burn fatty acids during exercise.
 - a) Aerobic
 - b) Anaerobic
 - c) Catabolic
 - d) None of above
- 2) _____ will mostly benefit long distance athletes.
 - a) L Carnitine
 - b) Whey protein
 - c) Creatine
 - d) Q 10
- 3) All are bioflavonoids except _____.
 - a) rutin
 - b) citrus fruits
 - c) hesperidin
 - d) none of above
- 4) Athletes participating in endurance events lasting longer than 2 hrs need to consider fluids which are _____.
 - a) dilute
 - b) Concentrated
 - c) neutral
 - d) none of above
- 5) Calorie reduction in fat loss program should not come from _____.
 - a) Fats
 - b) Simple carbohydrates
 - c) Proteins
 - d) None of the above
- 6) _____ is the amount of heat needed to raise the temperature of 1 kg of water by 1 degree Celsius.
 - a) 1 joule
 - b) 1 kilocalorie
 - c) 1 kilojoules
 - d) None of the above

Q.2 Answer the following.**16**

- a) Caffeine.
- b) Aerobic system changes.
- c) Mechanics of musclecontraction
- d) Fast twitch and slow twitch muscle fibers

Q.3 Answer the following.**16**

- a) Write a note on oxidative sports and anaerobic immediate energy sports and plan a sample menu for both athlete
- b) Describe briefly importance of water in athletes.

Q.4 Answer the following.**16**

- a) Write a note on Net protein utilization and branch chain amino acids.
- b) Write a note on carbohydrate loading and oxidative sports.

Q.5 Answer the following.**16**

- a) Athletic significance of lipid and importance of omega 3 fatty acids.
- b) Athletic significance of vitamins and a short note on fat soluble vitamins.

Q.6 Answer the following.**16**

- a) Muscle fibers types and function.
- b) Describe digestion and absorption in athletes.

Q.7 Answer the following.**16**

- a) Common Supplements Fat Loss Aids
- b) ZIGZAG method of fat loss.