



Name:

Enrolment No:

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, July 2020**

**Course: Principles of Nutrition II**  
**Program: B.Sc. (Food, Nutrition and Dietetics)**  
**Course Code: HSCC\_1006**

**Semester: II<sup>nd</sup>**  
**Time 03 hrs.**  
**Max. Marks: 100**

**Instructions: Read the paper carefully. All questions are compulsory.**

**Multiple Choice Questions/True or False/ Fill in the blanks/ Multiple answer questions**

S. No.	Each question carries one mark. (100 Questions) All questions should map all the COs in course and ensure equal number of questions for each CO.	Marks	CO
Q 1	Insensible water loss occurs through urination. A. TRUE B. FALSE	1	CO1
Q 2	Metabolic acidosis may be caused by vomiting and excessive aldosterone secretion. A. TRUE B. FALSE	1	CO1
Q 3	Abnormally high levels of CO <sub>2</sub> in the blood would result in respiratory alkalosis. A. TRUE B. FALSE	1	CO1
Q 4	The most important source of acids in the body is ingestion of acidic foods such as oranges, lemons, and other citrus fruits. A. TRUE B. FALSE	1	CO1
Q 5	When water intake equals water output, water balance is achieved. A. TRUE B. FALSE	1	CO1
Q 6	Fats do not provide energy to our body. A. TRUE B. FALSE	1	CO1

Q 7	Edema is caused by increased movement of fluid from the plasma into the interstitial fluids. A. TRUE B. FALSE	1	CO1
Q 8	Potassium is the cation of the ICF and is also an important constituent of the ECF. A. TRUE B. FALSE	1	CO1
Q 9	Variation in total body water is due to differences in protein content. A. TRUE B. FALSE	1	CO1
Q 10	Hyponatremia is commonly caused by either retention of water or loss of Sodium. A. TRUE B. FALSE	1	CO1
Q 11	The normal functioning of cells is dependent on a proper balance of prooxidants and antioxidants. A. TRUE B. FALSE	1	CO2
Q 12	There are 3 known free radicals, the superoxide, the hydroxyl and the peroxide. A. TRUE B. FALSE	1	CO2
Q 13	In adults, total body water accounts for about _____ of the lean body mass.	1	CO1
Q 14	The _____ is the brain center that controls activities such as maintenance of water balance, regulation of body temperature.	1	CO1
Q 15	Metabolically active such as brain, liver, blood and muscles contain more water than _____ .	1	CO1
Q 16	The fluids, which exists inside the cells are called _____ which forms 55% of water in the body.	1	CO1
Q 17	The positively charged electrolytes is known as _____ .	1	CO1
Q 18	The negatively charged electrolytes is known as _____ .	1	CO1
Q 19	_____ protect biological systems against the potentially harmful effects of processes or reactions that can cause excessive oxidation.	1	CO2
Q 20	Vitamin C is strong reducing agent and serves as an _____ .	1	CO2

Q 21	_____ are biologically active phytochemicals that possess health benefits.	1	CO2
Q 22	_____ covers most of the therapeutics areas such as anti-arthritic, cold and cough.	1	CO2
Q 23	In iodine deficiency there is increased prevalence of _____ .	1	CO4
Q 24	Hypothyroidism and cretinism develops due to the deficiency of _____ .	1	CO4
Q 25	_____ and thiocyanate are important goitrogens	1	CO4
Q 26	_____ is a fat-soluble vitamin that is important for many bodily functions, including proper vision, a strong immune system, reproduction and good skin health.	1	CO2
Q 27	Preformed vitamin A is also known as _____ and commonly found in meat, fish, eggs and dairy products.	1	CO2
Q 28	_____ is defined as a decrease in the number of red blood cells or the amount of hemoglobin in the blood.	1	CO2
Q 29	Iron deficiency anemia can be prevented by eating a diet containing sufficient amounts of _____ .	1	CO2
Q 30	_____ is the protein in your RBCs that is responsible for carrying oxygen to your tissues.	1	CO2
Q 31	WHO defines _____ as the cellular imbalance between the supply of nutrient and energy and the body's demand.	1	CO2
Q 32	_____ is a form of malnutrition that is defined as a range of pathological conditions arising from coincident lack of dietary protein and/or energy (calories) in varying proportions.	1	CO2
Q 33	1st National nutritional disorder is _____ .	1	CO4
Q 34	_____ is low weight for height.	1	CO4
Q 35	_____ is low height for age.	1	CO4
Q 36	Greek word _____ which means withering or wasting.	1	CO4
Q 37	Moon face occurs due to _____ .	1	CO4
Q 38	All the following are important electrolytes in the body except. A. potassium ions B. carbon ions C. chloride ions D. sodium ions	1	CO1

Q 39	A base may be defined as a chemical compound that _____ . A. removes hydrogen ions from a solution B. adds sodium chloride to a solution C. adds hydrogen ions to a solution D. eliminates sodium ions from a solution	<b>1</b>	CO1
Q 40	The intracellular fluid compartment refers to all the water found in _____ . A. areas within the gastrointestinal tract  B. the bones of the body C. areas outside the body cells D. all cells of the body	<b>1</b>	CO1
Q 41	Approximately one-third of the body water exists in the _____ . A. Blood B. extracellular fluid compartment C. kidneys and urinary bladder D. transcellular fluid compartment	<b>1</b>	CO3
Q 42	In the process of osmosis _____ . A. water moves from a region of low solute concentration to a region of high solute concentration B. water moves from a region of high solute concentration to a region of low solute concentration C. Sodium ions move through a semipermeable membrane D. chloride ions follow the movement of sodium ions to a region of low concentration	<b>1</b>	CO3
Q 43	Free radicals, a type of prooxidant A. are a type of phytochemical B. increase the risk of cardiovascular disease C. are a type of non-phytochemical D. were part of the 1960's anti-war movement	<b>1</b>	CO3
Q 44	What is the best way to prepare vegetables to retain the most antioxidant activity? A. Microwave B. Frying C. Boiling	<b>1</b>	CO3

	D. Steam lightly		
Q 45	Which drink bestows the most heart-healthy antioxidant power? A. Tea B. Cold drinks C. Green tea D. Milk	<b>1</b>	CO3
Q 46	A free radical is _____ . A. A cell that promotes health throughout the body. B. A naturally or artificially occurring substance that causes disease if left unchecked. C. A vitamin that is distributed at no charge at health food stores and natural-medicine clinics. D. A nutrient that works to correct any imbalance in your body.	<b>1</b>	CO3
Q 47	Which of the following will not cause the most free radical accumulation in your body? A. Eating fruits and vegetables B. Spending four hours in a smoke-laden bar C. Drinking five beers D. Eating two combos at McDonald's	<b>1</b>	CO3
Q 48	Which of the following have antioxidant qualities? A. Vitamin D B. Vitamin C C. Calcium D. Iron	<b>1</b>	CO3
Q 49	Blueberries are considered functional foods because they contain _____ . A. phytochemicals B. fat C. protein D. carbohydrates	<b>1</b>	CO3
Q 50	The functional food concept was developed in Japan in at the early at 1980's as FOSHU which stand for _____ . A. Food for social Health B. Food for Specified Health	<b>1</b>	CO3

	<p>C. Functional for social Health</p> <p>D. Fruit for safe health</p>		
Q 51	<p>Which of the following enhances gut functioning?</p> <p>A. Probiotics</p> <p>B. Antioxidants</p> <p>C. Oestrogen</p> <p>D. Omega 3 fatty acids</p>	<b>1</b>	CO3
Q 52	<p>Which one of the following is not part of the usual definition for a functional food?</p> <p>A. It is not a pill, a capsule or any form of dietary supplement</p> <p>B. It is consumed as part of a normal food pattern</p> <p>C. None of the above</p> <p>D. It has physiological benefits and/or reduces the risk of chronic disease beyond basic nutritional requirements</p>	<b>1</b>	CO3
Q 53	<p>Iron-deficiency anemia can cause pica, a rare condition in which a person craves eating nonfood items such as _____ .</p> <p>A. ice</p> <p>B. soil</p> <p>C. clay</p> <p>D. all of the above</p>	<b>1</b>	CO3
Q 54	<p>Why is dietary fibre considered to be an active non-nutrient?</p> <p>A. It is broken down in the body to provide energy.</p> <p>B. It has antiinflammatory properties but is not stored as fat.</p> <p>C. It is not absorbed but is beneficial to the digestive system.</p> <p>D. It acts to stop low density lipoproteins breaking apart.</p>	<b>1</b>	CO3
Q 55	<p>A diet high in cholesterol is most likely to lead to disease in which organ of the body?</p> <p>A. Heart</p> <p>B. Kidney</p> <p>C. Liver</p> <p>D. Pancreas</p>	<b>1</b>	CO4
Q 56	<p>Which age groups of children are more predisposed to kwashiorkor?</p>	<b>1</b>	CO4

	<p>A. Under one year</p> <p>B. After 18 months</p> <p>C. Under 10 years</p> <p>D. Under 5 years</p>		
Q 57	<p>What are the different risk factors involved for the development of protein energy malnutrition?</p> <p>A. Ignorance of parents about the importance of child nutrition</p> <p>B. Low socioeconomic conditions</p> <p>C. Infections like measles, Pertusis, diarrhea</p> <p>D. All of the above</p>	<b>1</b>	CO4
Q 58	<p>What sanitary measures should be taken to prevent PEM?</p> <p>A. Personal and environmental hygiene should be maintained</p> <p>B. Provision of safe and adequate food</p> <p>C. Sources of water should be protected</p> <p>D. All of the above</p>	<b>1</b>	CO4
Q 59	<p>The following clinical findings can be used to make a formal diagnosis of malnutrition except.</p> <p>A. Insufficient food intake</p> <p>B. Cold and Cough</p> <p>C. Fluid accumulation</p> <p>D. Loss of muscle mass</p>	<b>1</b>	CO4
Q 60	<p>Protein-energy malnutrition (PEM) refers to a state where the infant's dietary intake is insufficient in.</p> <p>A. Vitamin and Protein</p> <p>B. Protein and Fat</p> <p>C. Protein and Mineral</p> <p>D. Calorie and Protein</p>	<b>1</b>	CO4
Q 61	<p>The ideal first food for the newborn and young infant up to age six months is_____ .</p>	<b>1</b>	CO4

	<p>A. Iron- fortified formula</p> <p>B. Breast milk</p> <p>C. Rice cereals</p> <p>D. Soy milk</p>		
Q 62	<p>Benefits of breast milk include_____ .</p> <p>A. Digestive superiority</p> <p>B. Better utilization of nutrients</p> <p>C. Immunological benefits</p> <p>D. All of the above</p>	<b>1</b>	CO3
Q 63	<p>Which of the following body parts is strongly dependent on the trace mineral iodine?</p> <p>A. Thyroid gland</p> <p>B. Kidney</p> <p>C. Liver</p> <p>D Pancreas</p>	<b>1</b>	CO3
Q 64	<p>Which food is source of iodine?</p> <p>A. sweetened beverage</p> <p>B. Iodized salt</p> <p>C. Tea</p> <p>D Bakery products</p>	<b>1</b>	CO4
Q 65	<p>The best indicator for monitoring the impact of Iodine Deficiency Disorders control programme is_____ .</p> <p>A. Prevalence of goiter among school children</p> <p>B. Urinary iodine levels among pregnant women</p> <p>C. Neonatal Hypothyroidism</p> <p>D Idoine level is soil</p>	<b>1</b>	CO4
Q 66	<p>What are the two main hormones secreted by Thyroid gland?</p> <p>A. TSH</p> <p>B. T3</p> <p>C. T4</p> <p>D Both A and B</p>	<b>1</b>	CO4



Q 67	Too much release of thyroid hormone in the body causes _____ . A. Hypothyroidism B. Goitre C. Hyperthyroidism D None of the above	<b>1</b>	CO4
Q 68	Name a disease causes due to the deficiency of iodine _____ . A. Goitre B. Thyroid cancer C. Solitary thyroid nodules D Thyroiditis	<b>1</b>	CO4
Q 69	The symptoms of hypothyroidism are _____ . A. Joint and muscle pain B. Dry skin and hair C. Depression D All of the above	<b>1</b>	CO4
Q 70	An autoimmune disease of the thyroid tissue is called _____ . A. Graves disease B. Thyroiditis C. Thyroid Cancer D None of the above	<b>1</b>	CO4
Q 71	Which gland mainly controls and regulates the actual thyroid activity? A. Hypothalamus B. Pituitary gland C. Both A and B D Only A	<b>1</b>	CO4
Q 72	Deficiency of vitamin A in children causes _____ . A. Goitre B. Poor cognitive development C. Poor bone growth D Increased risk of mortality	<b>1</b>	CO4
Q 73	Which of the following could lead to iodine deficiency? A. Intake only of locally grown food in central Africa	<b>1</b>	CO4

	<p>B. Low intake of fruits and vegetables</p> <p>C. Insufficient caloric intake</p> <p>D Inadequate sunlight exposure</p>		
Q 74	<p>Which of the following nutrients deficiencies can lead to anaemia?</p> <p>A. Vitamin D and zinc</p> <p>B. Zinc and protein</p> <p>C. Copper and iron</p> <p>D Iodine and vitamin C</p>	<b>1</b>	CO4
Q 75	<p>Which vitamin is required for vision in dim light?</p> <p>A. Vitamin D</p> <p>B. Vitamin A</p> <p>C. Vitamin E</p> <p>D Vitamin K</p>	<b>1</b>	CO4
Q 76	<p>Which vitamin is required for synthesis of the blood clotting proteins?</p> <p>A. Vitamin D</p> <p>B. Vitamin E</p> <p>C. Vitamin K</p> <p>D Vitamin A</p>	<b>1</b>	CO4
Q 77	<p>Which of the following will be increased in vitamin K deficiency?</p> <p>A. The plasma concentration of prothrombin</p> <p>B. The time for broken bones to heal</p> <p>C. The time for blood to clot</p> <p>D The plasma concentration of calcitonin</p>	<b>1</b>	CO4
Q 78	<p>What happens when a person is suffering from anemia?</p> <p>A. The blood does not have enough red blood cells</p> <p>B. The body produces too much iron</p> <p>C. The blood becomes thick</p> <p>D Too many white blood cells are produced</p>	<b>1</b>	CO4
Q 79	<p>What is the most common cause of anemia?</p> <p>A. Too much sugar</p> <p>B. Exposure to X-ray radiation</p> <p>C. Too little sleep</p>	<b>1</b>	CO4

	D Too little iron in the blood		
Q 80	Which of these groups is the most likely to have anemia? A. Women B. Man C. Elderly D Infants	<b>1</b>	CO4
Q 81	Which of these are signs of anemia? A. Pale gums B. Dark circles under the eyes C. Numbness in hands and feet D Bleeding	<b>1</b>	CO4
Q 82	Deficiency of iron may occur as a result of _____.(Select all the appropriate answers) A. Adequate utilisation B. Increased demand C. Increased iron stores D Inadequate utilisation	<b>1</b>	CO4
Q 83	What are the factors that increase free radical formation?(Select all the appropriate answers) A. Energy metabolism B. low level of vitamin C C. Diabetes D Low oxygen levels	<b>1</b>	CO3
Q 84	Antioxidant play an important role in inhibiting many oxidation reaction_____.(Select all the appropriate answers) A. by promoting chain propogating radicals B. by preventing initiation reactions C. by decreasing localised oxygen concentration D breakdown of transition metal ion catalyst	<b>1</b>	CO3
Q 85	First line of defence are _____. (Select all the appropriate answers) A. blood B. acidic secretion C. antibodies	<b>1</b>	CO4

	D Mucous		
Q 86	Exogenous antioxidants are nutrients such as _____.(Select all the appropriate answers) A. Ascorbic acid B. Tocopherols C. Tannins D Phytate	<b>1</b>	CO4
Q 87	What are the enhancing factors which affect absorption of nonhaeme iron?(Select all the appropriate answers) A. Increased acidity B. Phytates and Oxalates C. Lactoferrin and Lactalbumin D Polyphenols	<b>1</b>	CO4
Q 88	What are the symptoms of cretenism?(Select all the appropriate answers) A. Edema B. deaf-mutism C. GIT disorder D Spastic paralysis of leg	<b>1</b>	CO4
Q 89	Goitre is defined as _____.(Select all the appropriate answers) A. Non-neoplastic B. Non toxic C. inflammatory D Non reversable	<b>1</b>	CO4
Q 90	What are the aetiology of Vitamin A deficiency disorder?(Select all the appropriate answers) A. Inadequate dietary intake B. Diarrhoea and nausea C. Inadequate intestinal absorption D excessive vomiting	<b>1</b>	CO4
Q 91	_____ manifest as dry patches of non-wettable conjunctiva.	<b>1</b>	CO4
Q 92	Softening and dissolution of the cornea occurs in _____.	<b>1</b>	CO4
Q 93	Myoglobin is only found in _____ where it serves as a reservoir of oxygen.	<b>1</b>	CO3

Q 94	Removal or addition of electrons is the most frequent mechanism known as _____ .	<b>1</b>	CO3
Q 95	_____ is a lipophilicquinone which function as an electron carrier in the mitochondrial electron transport chain.	<b>1</b>	CO3
Q 96	Antioxidant activity _____ significantly during deep frying of soaked black gram dal.	<b>1</b>	CO3
Q 97	During sprouting and malting, there is a significant _____ in the phenolic content of wheat.	<b>1</b>	CO2
Q 98	Processing of baking bread produces a novel type of antioxidant called _____ .	<b>1</b>	CO2
Q 99	Heating the oil has shown to increase _____ content.	<b>1</b>	CO3
Q 100	_____ are raised, muddy and dry triangular patches .	<b>1</b>	<b>CO4</b>