HMM COLLEGE FOR WOMEN

DEPARTMENT OF FOOD AND NUTTRITION

1ST SEMESTER MODEL QUESTIONS

FNTACOR01T

Introduction of Food and Nutrition

Short type – 1/2 marks

What do you mean by energy giving food?

What do you mean by body building and protective food?

What are macro and micro nutrients?

Define – malnutrition, balance diet, health, nutritional status, diet

Short notes – 4/5 marks

Malnutrition, Functional food, prebiotics, probiotics, phytochemicals, food pyramid, food groups, my pyramid, my plate.

What is the relation between food and nutrition, health and diseases? Explain. 10

FOOD ENERGY AND ENERGY REQUIREMENTS

Short type 1MARKS

What do you mean by Energy value of food?

What is physical and physiological calories?

What is Bomb calorimeter?

Define BMR.

Define RDA.

Define SDA.

Define PAR.

Define Reference Man and Reference Women?

What is direct and indirect calorimetry?

What is Physical activity? White down the types of it?

What is 1 kilo calorie?

What is 1 Kilo joule?

Short note type:5 MARKS

Short note on Bomb calorimeter?

Factors affecting BMR?

Factors affecting SDA?

Factors affecting RDA?

Classification of activities based on occupation?

Application of RDA?

What is Nutritional requirements?

Deference between physiological fuel value and gross fuel value?

Energy requirements of individual?

Digestion of Foods

1. Write Components of gastrointestinal tract. 10 marks
2. Draw a labelled diagram of GI Tract 5 marks
3. Write short notes on Digestive glands: structure of salivary glands, gastric glands and intestinal glands. 5 marks
4. Write short notes on Structure of pancreas and liver., 5 marks
5. write short notes on Digestive secretions: salivary juice, gastric juice, pancreatic juices and intestinal juices. Bile and bile secretion. 5 marks
6. Digestion and absorptions of carbohydrate, protein, lipid, fat soluble vitamins, water soluble vitamins(thiamine, riboflavin, niacin, pyridoxine, folate, vit B12, vit C), minerals (Ca, Fe, I, F, Cu, Zn) 10

   1 marks ques

1. Which vitamins are produced by bacteria in our large intestine?

2. Write four stages of stomach.
3. Write differences between small and large intestine.
4. How many pairs of salivary glands are present in human body and which gland produces high amount of saliva?
5. Write amount of saliva secretion in 24 hours.
6. What is the bacteriostatic enzymes of saliva?
7. What is the buffer of saliva?
8. Write the optimum temperature of ptyalin.
9. Mention the gaseous content of saliva.
10. What is the length of oseophagus?
11. What is the shape of stomach?
12. What are the 3 parts of stomach?
13. Write the total number of gastric glands.
14. What is the amount of secretion of gastric juice?
15. What is the pH of gastric juice?
16. Which substances protect stomach lining from HCL?
17. What are the different cells of stomach?write their secretion
18. What is chyme?'
19. Importance of HCL In stomach .
20. Which enzyme is the stimulator of gastric juice secretions?
21. What is villi?
22. Write the cells of villus?
23. What is the cell of small intestine?
24. What is the function of brass border cell?
25. What is lacteal?
26. Intestinal juice and pancreatic juice are secreted from cell?
27. Write the name of various glands and cells of small intestine.
28. What is mixed gland?
29. What is ilets of Langerhans?
30. Largest gland of human body.
31. What is the outer cover of liver?
32. What is the cells of liver?
33. What is the functions of mast cells of liver?
34. What are the functions of mast cells of liver.
35. Functions of kuffer cell of liver
36. Which blood coagulating protein is produced in liver?
37. Why liver is called "well equipped biochemical lab?
38. Bile is produced in _____?
39. Bile is stored in _____.
40. Buffer in bile is _____.
41. Give example of bile acids.
42. Write differences between liver bile and gall bladder bile.

43. Write differences between salivary amylase and pancreatic amylase
44. Which material is secreted as well as excreated through liver?
45. Give example of proteolytic enzyme.
46. Write composition of chylomicrons.
47. Heparin is secreted from which cells of liver?
48. Give examples of endopeptidase.
49. Activator of pepsinogen is____.

Food, Nutrients and cooking of foods

1. What is food? 2*11

2. What is nutrient?

3. What are the nutrients present in cereals and millets?

4. What are the nutrients present in pulses?

5. What are the nutrients present in fruits and vegetables?

6. What are the nutrients present I milk and milk products?

7. What are the nutrients present in flesh foods?

8. What are the nutrients present in egg?

9. What are salts?

10. How many types of salt are there?

11. Define non nutrient components present in food?

12. Name any two sources of: 10

a. phytate

b. tannins

c. oxalate

d trypsin inhibitor

e. goitrogens

13. How cooking is beneficial to health? 5

14. What are the disadvantages of cooking? 5

15. Mention the advantages and disadvantages of: 10 each

a. dry method of cooking

b. moist method

c. frying

d. microwave cooking

16. Write short notes on:

a. microwave cooking

b. solar cooking

FNTACOR02T

Unit of Life: Cell and Tissue

1. Difference between prokaryotic and eukaryotic cells & plant and animal cells, 5 marks
2. Structure and basic functions of animal cell organelles, 10 marks
3. Structure and functions of plasma membrane 5 marks
4. Role of membrane in transport and communications 10 marks
5. Short notes on :-Importance of cell junction- tight, gap and desmosome, 5 marks
6. Types of human tissue- location structure and functions. 5 marks
7. Structure of muscles, bones, teeth and joints 5 marks-10 marks

Blood and body fluids

SHORT QUESTION 1 MARKS

WHAT IS BLOOD?

WHAT ARE THE TYPES OF BLOOD?

WHAT IS PLASMA?

WHAT ARE THE PLASMA PROTEIN?

WHAT ARE THE NORMAL LEVEL OF HEMOGLOBIN IN MALE AND FEMALE?

WHITE DOWN THE NORMAL LEVEL OF BLOOD UREA AND CREATININ?

WRITE DOWN THE NAME OF BLOOD CELLS?

WHAT IS FIBRINOGEN?

WHAT IS HEPARIN?

WHAT DO YOU MEAN BY ESR?

WHAT DO YOU MEAN BY NORMAL BLEEDING AND NORMAL COAGULATION TIME?

WHAT IS THROMBIN?

WHAT IS FIBRIN?

WHAT IS NATURAL INHIBITORS OF COAGULATION?

WHAT IS FIBRINOLYSIS?

WHAT IS BLOOD VOLUME?

WHAT DO YOU MEAN BY BONE MARROW?

WHAT IS ERYTHROCYTES?

WHAT IS ERYTHROPOIESIS?

WHAT IS LEUCOCYTES?

WHAT IS THROMBOCYES?

WHAT DO YOU MEAN BY IMMUNITY?

WHAT DO YOU MEAN BY BLOOD TRANSFUSION?

WHAT DO YOU MEAN BY ABO BLOOD GROUP?

WHAT IS AGGLUTINOGENS AND AGGLUTININ?

WHAT IS Rh FACTORS?

SPAN OF LIFE OF RBC WBC AND PLATELET .

SHORT TYPES QUESTION 5 MARKS

WRITE DOWN THE FUNCTIONS OF BLOOD?

WRITE DOWN THE FUNCTIONS OF PLASMA PROTEIN?

WRITE DOWN THE FACTORS PREVENTING COAGULATIO?

WRITE DON THE FACTORS PREVENTING COAGULATION?

WHAT ARE THE FUNCTIONS OF BONE MARROW?

FUNCTION OF RED BLOOD CORPUSCLES?

WRITE DOWN THE STRUCTURE OF HEMOGLOBIN? AND SYNTHESIS OF HEMOGLOBIN?

WRITE DOWN THE FUNCTION OF HEMOGLOBIN?

FUNCTION OF WHITE BLOOD CORPUSCLES?

FUNCTION OF PLATELETS?

WHAT DO YOU MEAN BY RH FACTOR? CLINICAL IMPORTANCE OF RH FACTORS?

WRITE DOWN THE HAZARDS OF INCOMPATIABLE BLOOD TRANSFUSION?

LONG QUESTION 10 MARKS

IMPORTANCE OF COAGULATION OF BLOOD? OR

MECHANISM OF COAGULATION?

WRITE DOWN A SHORT NOTE ON BLOOD COAGULATION FACTORS

NUMERAL SYSTEM OF INTERNATIONAL NOMENCLATURE OF BLOOD COAGULATION FACTORS?

Cardiovascular system

1. Discuss the structure of heart. 10

2. Define- 2*3

a. artery

b. vein

c. capillary

3. Discuss the properties of cardiac muscle. 5

4. Describe cardiac cycle. 10

5. Describe cardiac output. 10

6. Define heart rate. 2

7. Discuss heart rate.5

8. Discuss heart sound. 5

9. What is ECG ? 2

10. What is normal and abnormal ECG. 5

11. Discuss systemic and pulmonary circulation. 5+5

12. What is blood pressure? 2

13. What is pulse pressure? 2

14. What is radial pressure? 2

15. What are the factors affecting blood pressure? 5

16. Discuss coronary circulation. 10

Respiratory System

LONG QUESTIONS:

1. Name different parts of the respiratory system with diagram.

2. Describe the mechanism of breathing.

3. Mention the steps of Oxygen transport from lungs to tissues.

4. Mention the steps oc CO2 transport from tissues to lungs.

5. What is O2 Dissociation curve? Mention different factors influencing the curve.

6. Describe the Neural regulation of respiration.

7. Describe the chemical regulation of respiration.

8. Describe Chloride Shift with diagram.

SHORT QUESTIONS:

1. What is diaphram?
2. What is trachea?
3. Name the respiratory muscles and mention their function (one function for each).
4. What are Inspiration & Expiration?
5. Definition & Amount of different lung volumes.
6. What do you mean by Physiological & Anatomical Dead Space?
7. What is Hering Breuer

Reflex?

8. What is J reflex?
9. What is Bohr Effect?
10. What is Haldane Effect?
11. What is Hamburger Phenomenon?