

Exam Code: 306201
(20)

Paper Code: 1238

**Programme: Post Graduate Diploma in Nutrition and
Dietetics Semester-I**

Course Title: Physiology

Course Code: PNDL-1281

Time Allowed: 3 Hours

Max Marks: 70

Attempt five questions, selecting atleast one question from each section. The fifth question may be attempted from any section. All questions carry 14 marks.

Section-A

1. (a) Draw & explain cell structure.
(b) Explain functions of inclusion bodies. (7+7)
2. (a) What is blood pressure. What's is normal range, what do you understand by the term RH incompatibility. (3)
(b) What are blood groups. What do you understand by term Universal donor & Recipients. (3)
(c) Explain basic structure of heart & write brief overview of cardiac cycle. (4+4)

Section-B

3. (a) Explain Regulatory functions of Kidney. (2)
(b) Write about mechanism of Urine Formation. (2)
(c) Role of kidney in homeostasis & regulation of body temperature. (3+3)
(d) Explain structure of kidney. (4)
4. Write note On:-
(a) Transmission of nerve impulse (3)
(b) Synapse formation (3)
(c) Sympathetic & Parasympathetic nervous system. (2.5+2.5)
(d) Functions of nerve & Receptor cells. (3)

Section-C

5. (a) Explain Structure of respiratory system. (4)
(b) Draw a Labelled diagram of human respiratory system. (4)
(c) Write about Mechanism of Respiration & its regulation. (3+3)
6. (a) Explain functions & regulation of
(i) Salivary glands
(ii) Stomach
(iii) Pancreas

- (iv) Liver (4x2.5=10)
(b) Role of Enzymes in digestion of carbohydrates and Proteins. (2+2)

Section-D

7. (a) What are basic functions of Hormones. (3)
(b) What are types of Hormones. Explain any four. (7)
(c) Explain functions of Thyroid & Pancreas glands. (2+2)
8. (a) Explain function of male & female Sex Organs. (3+3)
(b) Write Note on- Menstrual cycle. (4)
(c) Explain role of Hormones in reproduction Follide-Stimulating Hormone (FSH). (4)

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Paper Code: 1239

Post Graduate Diploma in Nutrition and Dietetics - Semester I

Course Title: Community Nutrition and Social Welfare

Course Code: PNDL-1282

Time: 3 Hours

Max. Marks: 70

Note: Attempt five questions, selecting one question from each section. The fifth question can be attempted from any section. Each question carries 14 marks.

Section-A

- Q1. Discuss in detail about Health Care System. Give examples.
Q2. Explain the following with examples:-
a) Green Revolution
b) Enrichment
c) GM foods

Section-B

- Q3. What is Food Adulteration? Explain various methods of detecting food adulteration at home.
Q4. What are the various causes of infection? Discuss the vicious cycle of Nutrition and Infection.

Section-C

- Q5. Explain the methods of direct assessment of nutritional problems in community.
Q6. How do you conduct a nutritional education programme? Discuss the principles of executing the programme.

Section-D

- Q7. What is Social Welfare? Discuss the broad fields of social welfare?
Q8. Describe the following Social Welfare agencies:-
a) All India Women's Conference
b) The Home Science Association of India

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Paper Code: 1240

**Programme: Post Graduate Diploma in Nutrition and
Dietetics Semester-I**

Course Title: Institutional Food Administration

Course Code: PNDL-1283

Time Allowed: 3 Hours

Max Marks: 70

Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carry 14 marks.

SECTION A

1. What are various Quantity food production techniques? How would you cook large quantities of food?
2. Define the term Personnel Management and write down the scope and importance of personnel management.

SECTION B

3. Briefly explain the staff development process in the food industry and also state principles governing it.

4. Explain the concept of wages, also state the relation between work and wages.

SECTION C

5. State the concept of costing in food industry .How can you control food cost.
6. What is the importance of financial management in food based enterprise.

SECTION D

7. Write a brief note on storage and serving unit of a food industry.
8. How important are equipment in food production ?How can we prevent equipment failure.

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Paper Code: 1241

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**Programme: Post Graduate Diploma in Nutrition and
Dietetics Semester-I**

Course Title: Nutritional Biochemistry

Course Code: PNDM-1284

Time Allowed: 3 Hours

Max Marks: 50

Note: Candidates are required to attempt any five questions, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 10 marks.

Section A

1. (a) Write the biological roles of carbohydrates. (5)
(b) Classified the total carbohydrates into various major and minor classes with examples. (5)
2. (a) Arrange the total twenty standard amino acids into five main classes. (5)
(b) What are essential and non-essential amino acids in human? Also write their names. (5)

Section B

3. (a) Write the only overview of glycolysis pathway. (5)

- (b) What is TCA cycle? Prove that TCA cycle is amphibolic pathway. (5)
4. (a) Draw a schematic diagram which shows that blood sugar regulation in the human body. (5)
- (b) Why ketone bodies are important? How ketone bodies are formed in body? (5)

Section C

5. (a) Write the general characteristics of enzymes. (5)
- (b) Mentioned the main classes of enzymes with examples. (5)
6. (a) Explain about the two inborn errors present in human metabolism. (5)
- (b) Write the general mechanisms of hormones action. (5)

Section D

7. (a) Write the biological roles of vitamins in normal human health. (5)
- (b) Write the various roles of A and D. (5)
8. (a) Write the Biological role of vitamin C. (5)
- (b) Write a short note on Antioxidants. (5)

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Paper Code: 1242

Post Graduate Diploma in Nutrition and Dietetics Semester I

Course Title: Basic Nutrition

Course Code: PNDL-1287

Time: 3 Hours

Max. Marks: 50

Note: Attempt five questions, selecting one question from each section. The fifth question can be attempted from any section. Each question carries 10 marks.

Section-A

Q1. Define the following terminologies

- a) Food
- b) Nutrients
- c) Optimum Nutrition
- d) Essential amino acids

Q2. Explain the different cooking methods. Give examples.

Section-B

Q3. Describe the methods of storage and use of egg, fish and poultry.

Q4. Write the various methods of food preparation.

Section-C

Q5. What is Protein? Write the functions and food sources of it.

Q6. Discuss the classification of fat. Give examples.

Section-D

Q7. Briefly discuss the factors affecting the BMR.

Q8. Write a short note on Specific Dynamic Action.