

**GOVT. D.B. GIRLS P.G. AUTONOMOUS COLLEGE**  
**RAIPUR CHHATTISGARH**

**FACULTY OF HOME SCIENCE**

**SYLLABUS**  
**OF**  
**P.G. DIPLOMA IN DIETETICS**

**2020-21**

**Signature of Chairman**

**Signature of Member (Subject)**

## P.G. DIPLOMA IN DIETETICS


### Scheme of examination

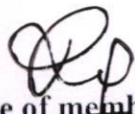
S.NO.	EXAM.	PAPERS	MINIMUM MARKS	TOTAL MARKS
1	Theory	4 Papers	100/ each paper	400
2	Practical	1	200	200
3	Internship/Training	6 weeks-In Any Recognised Hospital	Grade	A/B/C

S.NO.	NOMENCLATURE OF PAPER	MARKS
1	Basic Nutrition & Meal Management	100
2	Basic Dietetics	100
3	Advanced Dietetics	100
4	Nutritional Biochemistry & Physiology	100

#### PRACTICAL

S.NO.	PRACTICAL	MARKS
1	Basic & Advanced Dietetics	200
	Viva - 40	
	Sessional - 40	
	Case Study & Project - 45	
	Cooking - 40	
	Planning & calculation - 35	

  
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**CLASS: P.G. DIPLOMA DIETETICS**  
**SESSION : 2020-21**

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**NAME OF PAPER : BASIC NUTRITION & MEAL MANAGEMENT**

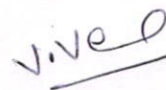
**PAPER-I**

MAX.MARKS:100

1. **INTRODUCTION TO NUTRITION:** Food as source of nutrients, function of foods, definition of nutrition & nutrients. Adequate, Optimum and Good Nutrition, Mai nutrition, Balance Diet.
2. **FOOD GUIDE:**  
Basic food groups, use of food guide.
3. **WATER:**  
Water as a nutrient, function, sources, requirement, water balance, effect of deficiency.
4. **CARBOHYDRATES:**  
Composition, Classification and food sources, functions, storage in body.
5. **FATS & OILS :**  
Composition, saturated and unsaturated fatty acids, Classification, food Sources, Function of Fats.
6. **PROTEINS**  
Composition, Sources, Essential amino acids, Source of Proteins, Functions, Protein Deficiency.
7. **MINERALS**  
Functions, Sources Bioavailability and Deficiency of following minerals- Calcium, Iron, Iodine, Fluorine, Sodium, Potassium (In very brief)



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**8. VITAMINS**

Classification, Units of measurement, Sources, Functions & Deficiency (in very brief) about following vitamins:-

- Vitamin - A
- Vitamin- B Complex- Thiamine, Riboflavin, Niacin, folic acid B6, B9, B12
- Vitamin - E
- Vitamin - K
- Vitamin - C
- Vitamin - D

**9. FIBRE**

Sources, Functions requirement, Deficiency, Importance in various diseases

**10. NUTRITION IN PREGNANCY**

Physiological changes of pregnancy-Nutritional Requirements, food selection, Complications of pregnancy.

**11. NUTRITION DURING INFANCY**

Physiology of lactation - Nutritional Requirements.

**12. NUTRITION DURING INFANCY**

Growth & Development- Nutritional Requirements-Breast Feeding, Infant Formula, Introduction to supplementary Foods.

**13. NUTRITION DURING EARLY CHILDHOOD (TODDLER / PRE-SCHOOL)** Growth & Nutrient Needs, Nutrition related Problems, Food pattern.

**14. NUTRITION DURING SCHOOL GOING AGE :** Nutritional requirement, Importance of breakfast School lunch programme.

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15. **NUTRITION DURING ADOLESCENCE**

Growth & Nutrition Needs, Factors Influencing, Food Choices, Eating Habits.

16. **GERIATRIC NUTRITION**

Factor Affecting food intake & Nutrient-Use, Nutrient needs, Nutrition related Problems.

17 **SPORTS NUTRITION**

Sports Requirements of sports person and athletes.




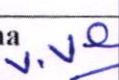






**Book Recommended**

1. Recommended Dietary Intakes for Indians I.C.M.R. 1989.
2. Good Hart-Nutrition in health & disease, 1982

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**NAME OF PAPER : BASIC DIETETICS**

**PAPER-II**

MAX.MARKS:100

**1. CONCEPT OF DIET THERAPY**

Growth and source of dietetics, Purpose & principles of therapeutic diets, Modification of Normal Diet, Classification of therapeutic Diets.

**2. ROLE OF DIETICIAN**

Definition Of Nutritional Care, Inter Personal Relationship with Patient, Planning and Implementing dietary care, Team approach to nutritional care.

**3. INTRODUCTION TO HOSPITAL FOOD SERVICE MANAGEMENT**

Types of food services, Selection of food material, Cost Control, Sanitation and safety(In brief).

**4. ROUTINE HOSPITAL DIETS**

Pre-operative and post-operative diets, study and review of hospital diets, Basic Concepts and methods of (I) Oral Feeding (II) Tube Feeding (III) Parenteral Nutrition.

**5. DIET IN FEVERS AND INFECTIONS**

Types, Metabolism In Fevers, General Dietary Considerations, Diet in Influenza ,Typhoid Fever, Recurrent malaria and Tuberculosis.

**6. DIET IN BURNS AND FRACTURES**

**7. OBESITY AND LEANNESS**

Causes, complications & Health effects, Dietary treatment & other recommendations.



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8. **DIET IN ALLERGY**

Definition, Classifications Manifestation, Common food Allergy Tests and dietetic treatment.

9. **DIET AND DRUG INTERACTION**

A The effects of Drugs on Nutrient intake, Absorption metabolism and requirements.

B The effects of Nutrients and Nutritional status on the Absorption and Metabolism of Drugs.

10. **PLANNING AND PREPARATION OF THE FOLLOWING DIET:**

A Sodium - High & Low

B Protein - High & Low

C. Calorie - High & Low




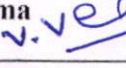



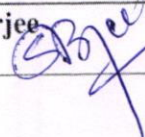

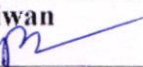
D. Fiber - High & Low

11. **DIET & DENTAL DISEASES:** Dental Caries, Periodontal Disease.

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**NAME OF PAPER : ADVANCED DIETETICS**

**PAPER-III**

MAX.MARKS:100

- 1. DIET IN INTESTINAL DISEASES:**
  - A. Peptic Ulcer - Aetiology, Symptoms, Dietary modification, Intervals of Feeding, Bland Diet, Four Stage Diet Therapy, prevention of Reoccurrence.
  - B. Diarrhoea - Classification, Modification of diet with special emphasis to fibre & Fluids.
  - C. Constipation- Classification, Dietary Consideration.
  - D. Ulcerative Colitis- Symptoms, Dietary treatment.
- 2. DIET IN DISEASES OF LIVER & GALLBLADDER:**
  - a. Etiology, Symptoms & Dietary treatment in Jaundice, Hepatitis Cirrhosis & Hepatic coma.
  - b. Role of Alcohol in liver diseases.
  - c. Dietary Treatment in Cholecystitis, chole-lithiasis, Pancreatitis.
- 3. DIET IN DIABETES MELLITUS:**
  - a. Incidence & Predisposing Factors.
  - b. Symptoms, Types & Diagnosis
  - c. Metabolism In Diabetes.
  - d. Dietary treatment & Meal Management.
  - e. Hypoglycemic Agents & Insulin.
  - f. Complications of Diabetes.



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4. **RENAL DISEASES:**

Basic Renal functions, Classification of Renal diseases Acute & Chronic Glomerulonephritis, Nephrosis, Renal Failure & Dialysis, Urinary Calculi.

5. **DIET IN CARDIOVASCULAR DISEASES:**

Classification, Hyperlipidemia & Atherosclerosis, Hypertension, Rheumatic Heart Disease.




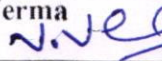






6. **CANCER & TUMORS:**

- a. Types of Cancer.
  - b. Nutritional effect of Cancer.
  - c. Nutritional disorders related to Cancer treatment.
  - d. Diet in Cancer
7. Locomotive disorders, Role of diet with reference to Gout and Arthritis.
8. AIDS-Nutrition in AIDS.

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**NAME OF PAPER : NUTRITIONAL BIOCHEMISTRY & PHYSIOLOGY**  
**PAPER-IV**

MAX.MARKS:100

**1. CARBOHYDRATES:**

- a. Chemistry: classification and biological importance of carbohydrates.
- b. Metabolism: (I) Glycolysis  
(II) Glycogenolysis  
(III) T.CA.cycle  
(IV) Glycogenesis  
(V) Gluconeogenesis

**2. LIPIDS:**

- a. Chemistry: Classification and Properties of lipids
- b. Metabolism:
  - 1.  $\beta$ -Oxidation of fatty acids Ketosis
  - 2. Lipogenesis
  - 3. Hydrolysis of fats
- c. Cholesterol: Biosynthesis and Regulation of cholesterol

**3. PROTEINS:**

- a. Chemistry:
  - 1. classification
  - 2. Sources
  - 3. Physical and chemical properties
- b. Metabolism:
  - 1. Transamination
  - 2. Deamination
  - 3. Urea-cycle.
- c. Definition and Names of Ketogenic and glycogenic amino acids.



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4. **ENERGY METABOLISM:**

- a. Definition of calorie and calorie value of foods.
- b. B.M.R.- Definition, measurement and factors affecting B.M.R.
- c. R.Q.
- d. Specific Dynamic Action of foods.

5. **BLOOD:**

- a. Composition of blood: RBC, WBC and Platelets
- b. Clotting factors of blood
- c. Factors affecting blood clotting
- d. Plasma proteins

6. **CIRCULATORY SYSTEM:**

- A. Structure and function of the heart
- B. Process of circulation
- C. Elementary knowledge of heart beat, heart sound, pulse rate and blood Pressure.

6. **NORMAL AND ABNORMAL CONSTITUENTS OF BLOOD AND URINE**

7. **HORMONES: MODE OF ACTION AND REGULATION OF :-**

1. Pituitary
2. Thyroid
3. Parathyroid
4. Pancreas
  - Glucagon
  - Insulin
5. Adrenal

8. **CIRCULATORY SYSTEM**

- A. Structure and function of the heart
- B. Process of circulation
- C. Elementary Knowledge of heart beat, heart sound, pulse rate and blood pressure

9. **RESPIRATORY SYSTEM**

- a. Process of respiration
- b. Organs of respiration, their structure and function.



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10. **DIGESTIVE SYSTEM**

- a. Physiology of digestion. Organs of digestive system, Digestion of Protein, CHO and Fat.

11. **EXCRETORY SYSTEM**

- a. Process of excretion  
b. Organs of excretion  
c. Structure and function of kidney.

*Dr*

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*V.V.E*

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**NAME OF PAPER : BASIC & ADVANCED DIETETICS PRACTICAL**

MAX.MARKS:100

**1. PLANNING & PREPARATION OF DIETS FOR THE FOLLOWING STAGES:**

- A. Infancy
- B. Pre-school
- C. School Going Children
- D. Adolescents
- E. Pregnancy
- F. Lactation
- G. Old age

**2. PLANNING & PREPARATION OF:**

- A. Hospital Basic Diet
- B. Liquid Diet
- C. Soft Diet
- D. Bland Diet

**3. PLANNING & PREPARATION OF:**

- A. High & Low Calorie Diet
- B. High & Low Protein Diet
- C. High & Low Fiber Diet
- D. High & Low Fat Diet
- E. High & Low Sodium Diet


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4. **PLANNING & PREPARATION OF DIET FOR DIFFERENT DISEASE:**



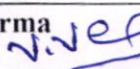

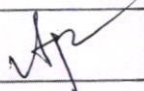


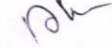
- A. Fevers-Acute & Chronic
  - B. Pre-Operative & post Operative
  - C. Peptic Ulcer.
  - D. Diarrhoea, Constipation, colitis.
  - E. Jaundice, Cirrhosis & Hepatitis.
  - F. Atherosclerosis
  - G. Hypertension
  - H. Nephritis, Nephrosis & Kidney Stones.
  - I. Diabetes Mellitus (IDDM & NIDDM)
  - J. Food exchange list for diabetes.
  - K. More than one complication.
5. Case study of patients with different diseases.

Note:- The cost of the diets have to be calculated also.

  
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