

Singhania University

Diploma in Diabetology - Duration – 1 Year

Subjects:-

a) Diabetis in Acute & Chronic Complications-	100
b) Diabetis in Pregnancy & Surgery -	100
c) Epidemiology – Diagnosis & Treatment -	100
d) Pathophysiology – Diagnosis & Treatment -	100
e) Viva & Practical	100

Diabetis in Acute & Chronic Complications

Paper-I **Full Marks – 100**

Unit – 01 : Definition – Classification of Diabetes Mellitus (DM)

Unit – 02 : Normal Glucose Metabolism
Fat Metabolism
Metabolic Disturbances in DM

Unit – 03 : Aetiopathogenesis of DM

Unit – 04 : Clinical Features
Clinical Examination of Patients with DM
Presenting Problems

Unit – 05 : Long Term Complications of DM

Unit – 06 : Laboratory Diagnosis of DM

Unit – 07 : Diabetic Ketoacidosis
Hypoglycemia

Unit – 08 : Non-Ketotic Hyper Osmolar Diabetic Coma

Unit – 09 : Insulin Resistance
Pancreatic and Cell Failure
Management

Unit – 10 : Genetic Predisposition
Environmental Factors in DM
Exercise and Non-Drug Therapy in DM

Unit – 11 : Oral Anti-Diabetic Agents
Combination Therapy in DM
Advantages and Disadvantages.

Unit – 12 : Insulin Kinetics and Insulin Therapy

Diabetis in Pregnancy & Surgery

Paper-II

Full Marks – 100

Unit – 01	:	Gestational Diabetes Mellitus(GDM) Definition Diagnostics Giteria
Unit – 02	:	Neonatal Complication for GDM Fate of GDM after Delivery. Screening for Assessment Progress of GDM
Unit – 03	:	Implications for Mother and Fetus in GDM Progress after Delivery Management.
Unit – 04	:	Pre-Operative Assessment. Peri-Operative Assessment Surgical Emergencies in Diabetes Mellitus.
Unit – 05	:	Diabetes and Infections Diabetic Foot Aetiology Complications and Management.
Unit – 06	:	Obesity Weight Management in Diabetic Patients Effects of Alcohol and Addiction in DM
Unit – 07	:	Diabetic Food Sweetening Agents Diet in Diabetes
Unit – 08	:	Hyperglycaemia in Acute Myocardial Infarction
Unit – 09	:	Hypoglycaemia Clinical Assessment, Causes, Morbidity, Prevention & Management.
Unit – 10	:	Dyslipidemia in Diabetes Target Level for the Lipids in Management of Diabetes.
Unit – 11	:	Juvenile Diabetes Occurrence in Different Age Groups. Complication and Management.

Epidemiology – Diagnosis & Treatment

Paper-III

Full Marks – 100

Unit – 01	:	Introduction to Epidemiology Target Population Clinical Epidemiology Health Management Frameworks
Unit – 02	:	Incidence and Prevalence : Introduction Incidence Rate Prevalence Incidence Vs. Prevalence Epidemiological Methods and Studies Measures of Occurrence.
Unit – 03	:	Analytical Epidemiology : Introduction Case Control Study Cohort and Case Control Studies Measures of Disease and Association Cohort Studies.
Unit – 04	:	Assessment of Causality Association and Causation Sufficient and Component Causes Multi Causality Strength of a cause
Unit – 05	:	Interaction Among Causes Sum of Attributable Fractions Making Causal Inferences
Unit – 06	:	The Dubious Value of Causal Criteria Hill's Criteria The Use of Epidemiology
Unit – 07	:	Diabetes in India : Introduction Environmental and Lifestyle Risk Factors for Diabetes Treatment Infections in General Osteomyelitis
Unit – 08	:	Ophthalmologic Complications Nephropathy Neuropathy Diabetic Foot Disease Macrovascular Disease
Unit – 09	:	Obesity : Introduction Obesity in India Causes of Obesity

BMI
Diabetes and the Obesity Risk Factor

Unit -10 : Definition
Classification of Diabetes Mellitus : Diabetes
The Impact of Diabetes
Types of Diabetes
Eye Complications
Kidney Damage
Nerve Damage
Diabetes at a Glance
National Diabetes Control Programme.

Pathophysiology – Diagnosis & Treatment

Paper-IV

Full Marks – 100

Unit – 01 : Complication of DM : Diabetic Ketoacidosis
Treating Ketoacidosis
Hyperosmolar Non Ketotic Coma
Hypoglycemia
Long Term Complications
Diabetic Retinopathy
Diabetic Microangiopathy
Diabetic Neuropathy
Infections
Heart Disease and Stroke
Pathophysiology

Unit – 02 : Diabetic Nephropathies : Introduction
History of Diabetic Nephropathy
Screening for Albuminuria
Effect of Glycemic Control Hypertension
Control
Use of Antihypertensive Agents
Signs and Symptoms of Diabetic Nephropathy
Causes
Exams and Tests

Unit – 03 : Diabetic Neuropathies : Introduction
Causes of Diabetic Neuropathies
Symptoms of Diabetic Neuropathies
Symptoms of Nerve Damage may Include
Types of Diabetic Neuropathy
Peripheral Neuropathy Affects

Autonomic Neuropathy Affects
 Proximal Neuropathy Affects
 Focal Neuropathy Affects
 Peripheral Neuropathy
 Autonomic Neuropathy
 Hypoglycemia Unawareness
 Heart and Blood Vessels
 Digestive System
 Urinary Tract and Sex Organs
 Sweat Glands
 Eyes
 Proximal Neuropathy
 Focal Neuropathy
 Diabetic Neuropathies Diagnosis
 Foot Exams O Neuropathies Treatment
 Pain Relief
 Gastrointestinal Problems
 Dizziness and Weakness
 Urinary and Sexual Problems
 Foot Care

- Unit – 04** : Diabetic Retinopathies : Introduction
 Natural History of Diabetic Retinopathy
 Risk Factors and Treatments
 Glycemic Control
 Blood Pressure Control
 Aspirin Treatment
 Laser Photocoagulation
 Evaluation of Diabetic Retinopathy
- Unit – 05** : Diabetic Foot : Introduction
 Diabetic foot Care Causes
 Diabetic Foot Care Symptoms
 Exam and Tests
 Diabetic Foot Care Treatment
 Medical Treatment
 Prevention
- Unit – 06** : Cardio Vascular Diseases : Introduction
 Understanding Insulin Resistance
 Risk Factors
 Diabetes and Heart Disease
 Lower your Cholesterol Level
 Physical Activity
 Risk Factors in DM
- Unit – 07** : Diabetes Mellitus and Stroke : Introduction
 Epidemiology of Diabetes Mellitus and Stroke
 DM Independently Associated with some Subtypes of Ischemic Stroke
 Impact of Acute Hyperglycemia on Brain Infraction
 Stroke Prevention in Diabetics
 Treatment of Hyperglycemia
 Treatment of Hypertension
 Treatment of Hyperlipidemia

Antithrombotic Therapy
 Transient Ischemic Attacks

- Unit – 08** : Hypertension : Introduction
 Blood Pressure Measuring
 Blood Pressure Defined
 Borderline High Blood Pressure
 Causes of High Blood Pressure
 Exams and Tests
- Unit – 09** : Blood and Urine investigation in DM : Introduction
 Investigations for Diabetes Mellitus
 Glucose Tolerance Test
 Glycosylated Haemoglobin
 Microalbumin
 Insulin
 Insulin Antibodies
 Free Insulin
 Proinsulin
 GAD Antibodies
 Blood Glucose Tests
 Diabetes and Urine Tests
 Glycated Hemoglobin
 Blood Lipids
- Unit – 10** : Hyper Glycaemia: Diabetes and Hyperglycemia
 Type I Diabetes
 Type II Diabetes
 Drugs
 Hyperglycemia in Diabetes Treated
 Glycemic Control
- Unit – 11** : Self Injection Tactics of Insulin : Insulin Administration
 Storage
 Mixing Insulin
 Syringes
 Disposal
 Needle Reuse
 Syringe Alternatives
 Injection Technique
 Patient Management
- Unit – 12** : Diabetic Ketoacidosis : Introduction
 Diabetic Ketoacidosis Symptoms
 Type I Diabetes and Ketoacidosis
 Pathogenesis.