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~~217-A~~

APRIL 1989

EXAMINATION FOR THE DIPLOMA IN DIABETOLOGY.
APRIL 1989

Paper I — BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL the questions.

1. Define impaired glucose tolerance (I.G.T.). Discuss its clinical significance. (20 marks)
2. Discuss the hormones affecting the secretion and actions of insulin. (20 marks)
3. Write notes on : (6×10=60 marks)
 - (a) HDL cholesterol.
 - (b) C-peptide.
 - (c) Microalbuminuria.
 - (d) Glycosylated haemoglobin.
 - (e) Red blood cell changes associated with diabetes.
 - (f) Renal glycosuria.

EXAMINATION FOR THE POST-GRADUATE DIPLOMA IN
DIABETOLOGY, (D. DIAB) SEPTEMBER 1990

Paper I — BASIC MEDICAL SCIENCES

Time : Three hours.

Maximum : 100 marks.

Answer ALL the questions.

1. Discuss the role of non-genetic, environmental factors in the aetiology and pathogenesis of idiopathic diabetes mellitus. (20 marks)
 2. Describe the abnormalities of lipid and lipoprotein metabolism in diabetes mellitus and discuss their role on accelerated atherosclerosis. (20 marks)
 3. Write notes on : (6 × 10 = 60 marks)
 - (a) Regulation of insulin secretion.
 - (b) Glucose transport across cell membrane, role of insulin and hyperglycaemia.
 - (c) Rheological factors in the pathogenesis of complications of diabetes.
 - (d) Histopathology of diabetic nephropathy.
 - (e) Measures to modify rate of carbohydrate digestion and absorption.
 - (f) Extraprocreatic effects of sulphonylurea compounds.
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OCTOBER 1991

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**EXAMINATION FOR THE POST-GRADUATE DIPLOMA IN
DIABETOLOGY (D. DIAB.), OCTOBER 1991.**

Paper I — BASIC MEDICAL SCIENCES

Time : Three hours. Maximum : 100 marks.

Answer ALL questions.

1. Discuss the hormonal control of hepatic glucose metabolism. (25 marks)
 2. Discuss the prevention of diabetes and its complications. (25 marks)
 3. Discuss briefly : (5 × 10 = 50 marks)
 - (a) Self monitoring of blood glucose.
 - (b) Problems of intensive therapy.
 - (c) Islet cell antibodies.
 - (d) Role of exercise in diabetics.
 - (e) Dietary fiber.
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APRIL 1992

[239]

**EXAMINATION FOR THE POST-GRADUATE DIPLOMA IN
DIABETOLOGY (D.D.), APRIL 1992.**

Paper I — BASIC MEDICAL SCIENCES

Time : Three hours.

Maximum : 100 marks

Answer ALL questions.

1. Discuss the role of counter regulatory hormones in diabetes and its complications. (25 marks)
 2. Discuss the pathogenesis of diabetic nephropathy. Outline the preventive measures that you would adopt to arrest its progression. (25 marks)
 3. Discuss Briefly : (5 × 10 = 50 marks)
 - (a) Role of trace elements in diabetes.
 - (b) Infants of diabetic mothers.
 - (c) Coronary bypass surgery in diabetes.
 - (d) C. peptide.
 - (e) Impaired glucose tolerance.
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APRIL 1993

[RS287]

DIPLOMA IN DIABETOLOGY.

Paper I – BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe the applied anatomy of the sole of the foot with special reference to "Diabetic foot salvage".
(25)
 2. Briefly describe the changes that take place in the neutrophil functions in a diabetic patient. How will you assess the neutrophil dysfunction?
(25)
 3. Write short notes on : (5 × 10 = 50)
 - (a) Cyanoglycosides.
 - (b) Somatostatin.
 - (c) Immunological markers in I.D.D.M.
 - (d) Microalbuminuria.
 - (e) Iso amylin polypeptide (Amylin).
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NOVEMBER 1993

[PR 531]

DIPLOMA IN DIABETOLOGY.

Paper I — BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe briefly the modern Physiology of the Digestion - Absorption - and Transport and storage of carbohydrates in the normal Human Body and give a succinct account of the various aspects involved in Maintenance of Blood Glucose levels in Normal individuals in Health. (25 marks)
 2. Describe the Haemo Rheological changes and Vascular Endothelial changes in Diabetes Mellitus both in NIDDM and IDDM. (25 marks)
 3. Write short notes on : (5 × 10 = 50 marks)
 - (a) The Sorbitol-pathway and its clinical applications.
 - (b) Islet cell Transplantation.
 - (c) Insulin like growth Factors.
 - (d) The Eicosanoids and Fish oils in Diabetes Mellitus.
 - (e) Patterns of Impaired glucose tolerance (IGT).
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NOVEMBER 1994

[ND 361]

DIPLOMA IN DIABETOLOGY.

Paper I – BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe in detail the various aspects of Insulin – Biosynthesis – Secretion – Storage and Insulin release in health and in disease. (25)

2. Describe briefly the modern concepts of physiology of digestion – absorption – and transport and metabolism of fats and lipids in normal individuals.

Also discuss briefly the so called "Diabetic Hyper Lipidaemia". (25)

3. Write short notes on : (5 × 10 = 50)

(a) The glucose renal threshold.

(b) Hepatic output of glucose.

(c) The glucose transporters in diabetes mellitus.

(d) The entero-insular axis.

(e) The Branched Chain amino acids and the glucogenic amino acids.

SV 367

APRIL 1998

DIPLOMA IN DIABETOLOGY

(New Regulations)

Part I

Paper I - APPLIED BASIC MEDICAL SCIENCES

Time: Three hours

Max. marks:100

Answer All Questions

1. Write an essay on Enteroinsular axis. (25)
 2. Discuss the role of various hormone analysis in the diagnosis and management of various diabetes syndromes. (25)
 3. Write briefly on: (5x10=50)
 - (a) Role of infection in the aetiopathogenesis of diabetes
 - (b) Biochemical basis for night time insulin therapy in type II diabetes mellitus
 - (c) Light and electron microscopic features of diabetic kidney disease in its various stages
 - (d) Exocrine pancreatic function tests
 - (e) Animal diabetes.
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APRIL 1999
[SG 1552] **Sub. Code : 3064**

DIPLOMA IN DIABETOLOGY EXAMINATION.

(New Regulations)

Part I

APPLIED BASIC MEDICAL SCIENCES

Time : Three hours Maximum : 100 marks

Answer ALL questions.

- 1. Discuss the Biochemical basis of the complications of Diabetes. (25)**
 - 2. Define impaired glucose tolerance. Discuss its clinical significance and management. (25)**
 - 3. Write short notes on : (50)**
 - (a) Insulin Analogues.**
 - (b) Hb A₁C.**
 - (c) Glucagon.**
 - (d) Hypoglycaemia unawareness.**
 - (e) Value of urine exam in a Diabetic.**
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OCTOBER 1999

KA 1552

DIPLOMA IN DIABETOLOGY EXAMINATION.

(New Regulations)

Part I

APPLIED BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss Nerve conduction studies in Diabetic Neuropathy. (25)
2. Write an essay on genetics and Diabetes mellitus (25)
3. Write Briefly on: (5 × 10 = 50)
 - a) Diabetic Kidney - Histopathological features
 - b) Auto-Immunity and Type I Diabetes mellitus
 - c) Glucoreceptor Hypothesis
 - d) C - Peptide Assay
 - e) Non - Diabetic glucosurias.

APRIL 2000

[KB 1552]

Sub. Code : 3064

DIPLOMA IN DIABETOLOGY EXAMINATION.

(New Regulations)

Part I

Paper I — APPLIED BASIC MEDICAL SCIENCES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss Post-Receptor Actions of Insulin and write a note on Post-Receptor Defects in Insulin Resistance. (25)
 2. Gut Hormones and Insulin. Discuss the functional inter-relationships. (25)
 3. Write briefly on :
 - (a) Fallacies of Glycated Haemoglobin.
 - (b) Micro-albuminuria in Type II Diabetes Mellitus
 - (c) Metabolic abnormalities in Impaired Glucose Tolerance
 - (d) Histological changes in Islet of Langerhan's in Diabetes
 - (e) Platelets and Diabetes Mellitus. (5 × 10 = 50)
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