

August 2011

[KZ 065]

Sub. Code: 1902

**MASTER OF CHIRURGIAE (M.Ch.) DEGREE EXAMINATION
(SUPER SPECIALITIES)**

BRANCH X – ENDOCRINE SURGERY

ENDOCRINE SURGERY - GENERAL

Q.P. Code:181902

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Discuss about the Management of Adrenal Medullary tumour. | 11 | 35 | 15 |
| 2. Discuss about Focused Parathyroidectomy. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. MIBG scan. | 4 | 10 | 7 |
| 2. Sipple's syndrome. | 4 | 10 | 7 |
| 3. Recurrent Adrenocortical cancer. | 4 | 10 | 7 |
| 4. Von Hippel Lindau Syndrome. | 4 | 10 | 7 |
| 5. Growth Hormone secreting pituitary tumor. | 4 | 10 | 7 |
| 6. Virilism Adrenal tumor. | 4 | 10 | 7 |
| 7. Congenital adrenal hyperplasia. | 4 | 10 | 7 |
| 8. Insulinoma. | 4 | 10 | 7 |
| 9. ACTH assay. | 4 | 10 | 7 |
| 10. Parathyroid autotransplantation. | 4 | 10 | 7 |

[LB 065]

AUGUST 2012

Sub. Code: 1902

M.Ch – ENDOCRINE SURGERY
Paper – II ENDOCRINE SURGERY - GENERAL
Q.P. Code: 181902

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|--|----|----|----|
| 1. A 32 year old female patient presented with recurrent attacks of hypoglycaemia and profuse sweating. Ultrasonography showed a mass in the pancreas. Discuss in detail the management of this patient. | 16 | 35 | 15 |
| 2. A 40 year old male patient was detected to have a 4cm x 6cm Right adrenal mass during routine health check. Discuss in detail the management of this patient. | 16 | 35 | 15 |

II. Write notes on :

- | | | | |
|---|---|----|---|
| 1. Management of Conn's syndrome. | 4 | 10 | 7 |
| 2. Investigations for Acromegaly and the surgical management of the same. | 4 | 10 | 7 |
| 3. Management of Bilateral adrenal hyperplasia. | 4 | 10 | 7 |
| 4. Steps involved in Parathyroid auto transplantation and indications for parathyroid auto transplantation. | 4 | 10 | 7 |
| 5. Hypercalcemic crisis and its management. | 4 | 10 | 7 |
| 6. Postoperative management of parathyroid adenoma. | 4 | 10 | 7 |
| 7. Indications for MIBG scan and its relevance in the management of Pheochromocytoma. | 4 | 10 | 7 |
| 8. What is Focussed parathyroidectomy? Write about indications and contraindications for the same. | 4 | 10 | 7 |
| 9. Investigations to differentiate Cushing's disease from Cushing's syndrome. | 4 | 10 | 7 |
| 10. Midgut carcinoid and its management. | 4 | 10 | 7 |

M.Ch. – ENDOCRINE SURGERY
Paper – II ENDOCRINE SURGERY - GENERAL
Q.P.Code: 181902

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. A 36 year old female presented with multiple bone fractures and found to have serum calcium of 13.5 mg%. Discuss the management of this patient.
2. A 45 year old female presented with truncal obesity, striae and vertebral collapse fractures. Discuss your approach to diagnosis and management.

II. Write notes on:

(10X7=70)

1. Ultrasound evaluation of thyroid nodules.
2. Trans-sphenoidal hypophysectomy.
3. Clinical presentation and pathology of primary, secondary and tertiary hyperparathyroidism.
4. Management of Conn's Syndrome.
5. Nelson's syndrome.
6. Familial paraganglioma syndrome.
7. Preoperative preparation and anaesthetic management of pheochromocytoma.
8. Management of hypocalcaemia.
9. Minimally invasive strategies for parathyroidectomy.
10. Zollinger-Ellison syndrome.

[LF 065]

AUGUST 2014

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY
Paper II – ENDOCRINE SURGERY - GENERAL

Q. P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Surgical anatomy of pituitary gland and detail the causes and management of Hypopituitarism.
2. Ectopic hormone syndromes - diagnosis and management.

II. Write notes on:

(10 x 7 = 70)

1. McCune Albright syndrome
2. Bilateral inferior petrosal sinus Anatomy and sampling
3. Diagnosis and management of Pancreatic incidentalomas
4. Hypoglycemic Endocrinopathies
5. Familial hypocalciuric hypercalcemia
6. Parathyroid hormone related protein and its clinical implications
7. Pathogenesis of Hypoaldosteronism and its management
8. Insulin like growth factor I and its clinical applications
9. Autoimmune polyglandular syndromes
10. Indications for Vitamin D screening and management of sub clinical Vitamin D deficiency.

M.Ch. – ENDOCRINE SURGERY
Paper II – ENDOCRINE SURGERY - GENERAL
Q.P.Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the evaluation and surgical approach to hyperthyroidism in detail.
2. Discuss the etiology, clinical presentation and management of the multiple endocrine neoplasia syndrome – MEN Type I.

II. Write notes on: **(10 x 7 = 70)**

1. Carcinoid syndrome.
2. Investigative approach to hypoglycemia.
3. Anaplastic thyroid carcinoma.
4. Management of primary hyperparathyroidism.
5. Adrenocortical cancer.
6. Hypoadrenalism – etiology, clinical presentation and management.
7. Tumours of the adrenal medulla.
8. Perioperative management of patients with pheochromocytoma.
9. Ectopic thyroid.
10. Classification of Neuroendocrine tumours.

[LH 065]

AUGUST 2015

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

PAPER II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. A 35 years aged lady presents with early morning hypoglycaemia and also gives history of passing stones in urine. Describe the condition, workup and management.
2. Genetics in Pheochromocytoma and paragangliomas and management strategies.

II. Write notes on :

(10 x 7 = 70)

1. Imaging modalities in Hyperparathyroidism.
2. Cushing's disease and its management and complications related to surgery.
3. Metabolic changes in Hyperaldosteronism.
4. Localization studies in Gastrinomas.
5. Addisonian crisis and its management.
6. Multiple endocrine neoplasias.
7. Parathyroid auto transplantation.
8. Medical and Surgical management of Adrenocortical carcinoma.
9. Anaplastic thyroid cancer- work up and management.
10. Normocalcemic Primary Hyperparathyroidism.

(LJ 065)

AUGUST 2016

Sub. Code:1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P.Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss minimally invasive approaches to the parathyroid gland.
2. List the various causes for hypercalcemia and discuss the management of a young patient with a primary hyperparathyroidism.

II. Write notes on:

(10 x 7 = 70)

1. Surgical approach to parathyroid hyperplasia.
2. Posterior approach to the adrenal gland.
3. Screening protocol of family members with MEN2A syndrome.
4. Cushing's syndrome.
5. MEN2B syndrome and its surgical management.
6. NIPHS (Noninsulinoma pancreatogenous hypoglycemia syndrome).
7. Parathyroid autotransplantation.
8. Pancreatic surgery for MEN1 syndrome.
9. Adrenal haemorrhage.
10. Preoperative preparation for pheochromocytoma.

(LL 065)

AUGUST 2017

Sub. Code:1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P.Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the etiopathology and management of primary hyperparathyroidism.
2. A 42 year old male presents with hypertension, panic attacks and adrenal mass on imaging. Discuss management in detail.

II. Write notes on:

(10 x 7 = 70)

1. Complications of pancreatic surgery.
2. Management of hypoadrenalism.
3. Parathyroid cryopreservation.
4. Recurrent and persistent hyperparathyroidism.
5. Adrenal incidentaloma.
6. Minimally invasive approach to adrenal tumours.
7. Management of adrenocortical cancer.
8. Localization techniques for parathyroid tumours.
9. Prolactinoma.
10. Glucagonoma.

(LN 065)

AUGUST 2018

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P.Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Management of pancreatic fistula post insulinoma surgery.
2. Chyle leak and its management options.

II. Write notes on: **(10 x 7 = 70)**

1. Parathyroid hyperplasia.
2. Parathyroid carcinoma.
3. Poorly differentiated thyroid cancer - management options.
4. Bone metastases in thyroid cancer.
5. Weiss score and its modifications.
6. Clinical activity score and its importance in management.
7. Asymptomatic primary hyperparathyroidism – medical versus surgical management.
8. Adrenal Hyperplasias- causes and management.
9. Surgery for Gastrinomas.
10. Thymectomy in Multiple Endocrine Neoplasia type 1 syndrome.

(LP 065)

AUGUST 2019

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the clinical features, diagnosis, pre-operative preparation, surgical management and follow up of a patient with pheochromocytoma.
2. Describe the approach to a patient with hypokalemic periodic paralysis.

II. Write notes on: **(10 x 7 = 70)**

1. The intraoperative approach to a missing parathyroid gland.
2. Adrenocortical cancer.
3. NIPHS.
4. Struma ovary.
5. Malignant hyperthermia in thyrotoxicosis.
6. Management of adrenal incidentaloma.
7. Non-functioning PNETS and its management.
8. Imaging protocol for adrenal tumours.
9. Sex hormone producing tumours of the adrenal gland.
10. Post adrenalectomy stress protocol.

(LR 065)

**NOVEMBER 2020
(AUGUST 2020 SESSION)**

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Surgical approaches to insulinoma
2. Minimally invasive approaches to adrenal tumours.

II. Write notes on:

(10 x 7 = 70)

1. Parathyroid cancer
2. Glucagonoma
3. Approach to hypergastrinemia
4. Evaluation of diabetic foot ulcer
5. Evaluation of hypercalcemia
6. Bladder pheochromocytoma
7. Severe neonatal hyperparathyroidism
8. Conn's syndrome
9. Familial isolated primary hyperparathyroidism
10. Men II syndrome

(MCH 0821)

AUGUST 2021

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Surgical approach to early breast cancer.
2. Pathology of parathyroid tumours.

II. Write notes on:

(10 x 7 = 70)

1. Ectopic Cushing's syndrome.
2. MIBI Scan for hyperparathyroidism.
3. Hypercalcemic crisis in parathyroid tumours.
4. Retroperitoneoscopic adrenalectomy.
5. Pathogenesis of diabetic foot ulcer.
6. Modified weiss score.
7. Surgical approach of familial PHPT.
8. MEN 1 syndrome.
9. Genetics of pheochromocytoma.
10. Pasieka scoring system.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0822)

AUGUST 2022

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

Paper II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Histopathological features of various thyroid neoplasms.
2. Peri operative management of Pheochromocytoma.

II. Write notes on: **(10 x 7 = 70)**

1. Primary adrenal hyperplasia.
2. Neonatal severe primary hyperparathyroidism.
3. Various iodine preparations used in Graves' disease.
4. Gastrinoma.
5. Diagnosis and management of parathyroid carcinoma.
6. Medical management of PHPT.
7. Adrenal venous sampling.
8. Paraganglioma syndromes.
9. Diagnosis and management of adrenal insufficiency.
10. Assessment and management of a child with growth hormone deficiency.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0124)

JANUARY 2024

Sub. Code: 1902

M.Ch. – ENDOCRINE SURGERY

PAPER II – ENDOCRINE SURGERY - GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 15 = 30)**

1. Management of metastatic breast carcinoma.
2. Management of Adreno cortical carcinoma – Describe recent advances.

II. Write notes on: **(10 x 7 = 70)**

1. Breast conservation surgery.
2. Management of surgical hypocalcemia.
3. Zollinger Ellison syndrome.
4. Calcimimetics and calcilytics.
5. Prolactinoma.
6. Treatment of persistent hyperparathyroidism after parathyroidectomy for primary hyperparathyroidism.
7. Intra operative PTH assay.
8. Pseudo Cushing's syndrome.
9. Indication for MIBG scan and therapy in pheochromocytoma.
10. Management of phyllodes tumor.

THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0225)

FEBRUARY 2025

Sub. Code: 1902

M.Ch. BRACH X – ENDOCRINE SURGERY

PAPER II – ENDOCRINE SURGERY – GENERAL

Q.P. Code: 181902

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. A 65-year-old lady presented with a history of recurrent renal calculi. Biochemical evaluation revealed a serum calcium of 11.2mg/dl, serum phosphorous 2.2mg/dl and serum PTH 1200pg/ml. Enumerate the types and causes of renal stones. Elaborate on the management of this patient.
2. A 20-year-old gentleman presented with history of episodic palpitations, headache and sweating over the past 2 years. Blood pressures were recorded to be 200/130mmhg during one of these episodes. He was also noted to have a 3cm firm mobile right solitary thyroid nodule. Discuss the management of this patient.

II. Write notes on:

(10 x 7 = 70)

1. Hypercalcaemic crisis.
2. TSH receptor antibody.
3. Post-adrenalectomy stress protocol.
4. TENIS.
5. Adrenal myelolipoma.
6. Nesidioblastosis.
7. Riedel's thyroiditis.
8. Metabolic complications of Primary hyperparathyroidism.
9. Pancreatic surgery in MEN 1.
10. Parathyroid gland auto-transplantation.
