

M.MED.FAMILY MEDICINE
FIRST YEAR THEORY EXAM– AUGUST 2015
PAPER II - SURGERY AND ALLIED SCIENCES

Q.P. Code: 434002

TIME: THREE HOURS

MAXIMUM: 100 MARKS

INSTRUCTIONS

- The paper will be for a total of **100 marks**.
- Answer **all** the Questions.
- The Paper has 2 parts – **Part A & Part B**.
- **Part A** will be **descriptive type questions** based on case scenarios (**40 marks**).
- **Part B** will have Objective type EMQs [**Extended Matching Questions**](**60 marks**).
 - ✓ This will have 10 sets of these questions.
 - ✓ Each set will have 6 questions.
 - ✓ Each question will carry 1 mark.
 - ✓ Each set has a **theme** on the top. Below this, some **options** are given followed by some **questions**. The options are lettered using the English Alphabets **A, B, C, D** and so on.

Example:

3. THEME –COMMON PSYCHIATRIC PROBLEMS [QUESTIONS. 3(i) – 3(vi)] (6marks)

From the options ‘A to H’ given below, choose the best answer for the questions 3(i) – 3(v)

Options:

- A.** Inj. Haloperidol
- B.** Amitriptyline + counseling
- C.** Tab. Chlorpromazine
- D.** Tab. Trihexyphenidyl
- E.** Tab. Diazepam
- F.** Tab. Lithium
- G.** Inj. Fluphenazine deconate
- H.** Tab. Risperidone

Questions: What is your treatment option in the following cases?

3(i) What is the drug of choice for Acute Psychosis?

3(ii) What is the drug of choice for Bipolar illness?

PART – A
DESCRIPTIVE QUESTIONS

(ANSWER ALL QUESTIONS)

1. You are a family physician and a leader of the primary care team and you plan to make sure all the team members are comfortable with the steps of BLS. Now answer the following questions.

(TOTAL: 20 MARKS)

- A. Define basic life support (BLS). **2 marks**
- B. Describe the three stages after a cardiac arrest. **3 marks**
- C. What are the four-link 'chain of survival' to resuscitate a collapsed victim? **4 marks**
- D. What are the steps involved in BLS? Draw an algorithm for this. **9 marks**
- E. How will you give post resuscitation care? **2 marks**

2. 45 year old Mrs. Thangamma is brought to you with vomiting and distension of abdomen of two days duration. She has not passed flatus or stools for 36 hrs. The pain is colicky and is around the umbilicus. Her pulse rate is 96/min. Abdomen feels soft with no tenderness or rebound. The bowel sounds are exaggerated.

(TOTAL: 20 MARKS)

- A. What is your diagnosis? Justify your answer. **2 marks**
- B. Define acute abdomen. **2 marks**
- C. How will you decide on the level or site of obstruction? **9 marks**
- D. What are the features of gangrenous obstruction? **3 marks**
- E. What are the red flags for referral in a patient with acute abdominal pain? **4 marks**

PART – B
EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

1. THEME:DIAGNOSIS OF NECK SWELLINGS[QUESTIONS 1(i)-1(vi)]

(TOTAL: 6 MARKS)

From the options 'A to L' given below, choose the best answer for the questions 1(i) – 1(vi)

Options :

- | | |
|-------------------------------------|--|
| A. De Quervain's Thyroiditis | G. Secondary hyperthyroidism |
| B. Lymphocytic thyroiditis | H. Branchial cyst |
| C. Graves' disease | I. Thyroglossal cyst |
| D. Hashimoto's thyroiditis | J. Metastases of neoplastic disease |
| E. Ranula | K. TB lymphadenitis |
| F. Dermoid cyst | L. Toxic nodular goiter |

Questions:

Mrs. Janet a 26-year-old woman comes to you with the history of swelling in her neck for the past 2 months. She is unable to sleep, and her appetite is greatly increased. On inspection, the swelling move up on deglutition and is to the right side of the neck. On palpation, it feels like a well-rounded nodule about 2 cm in diameter and is not tender. The rest of the gland is normal. There are no neck nodes. Her pulse rate is 110/min and she has no eye signs.

1. (i) What is your diagnosis?

If Mrs. Janet had a smooth uniform swelling of the thyroid with typical eye signs – exophthalmos, lid lag, diplopia and chemosis of conjunctiva–

1. (ii) What is your possible diagnosis?

25 year old Mr. Ganesh, with a slowly enlarging painless anterior triangle swelling placed at the junction of the upper third and the lower two thirds of the sternomastoid muscle. Microscopic examination of the aspirate from the swelling shows cholesterol crystals under microscope.

1. (iii) What is your diagnosis?

35 year old Mrs. Dhanam has come to you with the history of fever, myalgia and painful thyroid. She had upper respiratory infection recently.

1. (iv) What is your possible diagnosis?

Mr. Ragavan is a 32-year-old man who has come to you with a swelling in the cervical region which he noticed 3 weeks ago. He is having weight loss and low grade fever.

1. (v) What is your possible diagnosis?

16 year old Mr. Surendran has a bluish, slowly enlarging, highly trans-illuminable swelling under the tongue.

1. (vi) What is your possible diagnosis?

2. THEME: MANAGEMENT OF NECK SWELLINGS[QUESTIONS. 2(i) - 2(vi)]
(TOTAL: 6 MARKS)

From the options 'A to J' given below, choose the best answer for the questions 2(i) – 2(vi)

Options:

- | | |
|-----------------------------|-----------------------------|
| A. Surgery | F. 70% |
| B. Antithyroid drugs | G. Propylthiouracil |
| C. Radio-active Iodine | H. Propranolol 10-20 mg/day |
| D. 20% | I. 50% |
| E. Propranolol 40-80 mg/day | J. Carbimazole |

Questions:

Mrs. Kokila a young woman has come with the thyroid swelling which is uniformly enlarged and non-tender. She is unable to sleep, and her appetite is greatly increased. She has lost weight and has excessive sweating, intolerance to heat, anxiety, irritability, palpitations and fine tremor of the hand. She also has pre-tibial edema and eye signs.

2. (i) Which modality of treatment you will choose for her?
2. (ii) How will you control her adrenergic symptoms?

Mr. Durai has come to you with a large goitre and hoarseness of voice and dysphagia.

2. (iii) Which modality of treatment you will prefer for him?

Mrs. Latha, a pregnant lady comes to you with the thyroid swelling and after hearing a detailed history and examination, you decided to start treatment for her.

2. (iv) Which modality of treatment is contraindicated in young women in their reproductive age group and in those who are lactating?
2. (v) What is the drug of choice for anti-thyroid therapy in pregnancy?
2. (vi) What is the recurrence rate of thyrotoxicosis after medical treatment?

3. THEME: ORTHOPEDIC EXAMINATION [QUESTIONS. 3(i) - 3(vi)]
(TOTAL: 6 MARKS)

From the options 'A to H' given below, choose the best answer for the questions 3(i) – 3(vi)

Options

- A. Finkelstein test
- B. Tinel's test
- C. Adson's test
- D. Touch down test
- E. Sparling test
- F. Callaway's test
- G. Bryant's test
- H. Neer's test

Questions: What is the test called?

- 3. (i)** Mr. Subhani has come with shoulder pain. When the family physician examining him elevates the internally rotated arm forward above 90 degree, there is pain.
- 3. (ii)** Mrs. Suguna has come with chronic neck pain. On examination, the physician presses down on the top of Mrs. Suguna's head, with her neck in neutral position. As soon as this is done, Mrs. Suguna gets pain over her neck which radiates to the medial side of the arm.
- 3. (iii)** Mrs. Seema has chronic right shoulder pain which becomes more pronounced when she does the overhead activities. He is asking her to shrug a shoulder and take a deep breath when the head and neck are positioned in extension and ipsilateral rotation to the same side while observing her pulse.
- 3. (iv)** Mr. Rajan has come with shoulder pain. The Physician examines Mr. Rajan for the smoothness of the movement, the degree of discomfort, and the ability to complete the maneuver when he raises both arms directly overhead
- 3. (v)** Mrs. Meena has come with pain wrist. When her hand is held with thumb held in abduction and is deviated to the ulnar side, she gets severe pain.
- 3. (vi)** Mr. Harikrishnan has come with ankle pain. He is not able to say whether the pain is from the foot or ankle. When you tap his ankle just anterior to medial malleolus, he gets pain and tingling sensation.

4. THEME: ORTHOPEDIC CONDITIONS [QUESTIONS. 4(i) - 4(vi)]

(TOTAL: 6 MARKS)

From the options 'A to G' given below, choose the best answer for the questions 4(i) – 4(vi)

Options

- A. Chondromalacia patella
- B. Pre-patellar bursitis
- C. Trochanteric bursitis
- D. Iliopsoas bursitis
- E. Adductor tendinitis
- F. Ischiogluteal bursitis
- G. Patellar tendinitis

Questions: What is the clinical condition?

4. (i) 45 year old Mr. Louis has come with left sided hip and thigh pain. When he walked inside, you observed that he walks with a limp. He says that the pain increases with activities such as walking, squatting, climbing stairs and when lying on their ipsilateral side; pain typically decreases at rest. There is no history of injury.

4. (ii) 52 year old Mrs. Devi has come with complaints of pain over the gluteal region. Pain is aggravated by sitting and lying down. There is no history of injury.

4. (iii) 28 year old Mr. Raju has come with complaints of pain in the groin and the inner aspect of the thigh. He works a jockey in horse race. On examination, there is tenderness on palpation of the adductor muscles in front of the pelvis and there is increase in pain on passive abduction of the thighs and active adduction against resistance. There is no history of injury.

4. (iv) 68 year old Mrs.Gowri usually comes with bilateral knee pain due to her osteoarthritis. Now she has come with pain in front of the thigh and the lower back. There is no history of injury.

4. (v) 30 year old Mrs.Malini has come with acute onset pain in the right knee. There is no history of injury. The anterior aspect of the knee is warm, tender and erythematous. On examination, there is increase in pain during knee flexion and there is no increase in pain during knee extension. There is no history of injury.

4. (vi) 28 year old Mr. Ram has come with complaints of pain in the knee during activities such as climbing stairs, running, and jumping. The place he shows as the site of pain is the inferior pole of patella. There is no history of injury.

5. THEME: LEG ULCERS [QUESTIONS. 5(i) - 5(vi)]

(TOTAL: 6 MARKS)

From the options 'A to G' given below, choose the best answer for the questions 5(i) – 5(vi)

Options

- A. Neuropathic ulcer
- B. Arterial ulcer
- C. Marjolin's ulcer
- D. Tropical ulcer
- E. Venous ulcer
- F. Perforating ulcer
- G. Vasculitic ulcer

Questions: What is the type of ulcer?

5.(i). Mr. Rajan, a 50 year old teacher has come with an ulcer. The ulcer is on the sole of left foot and is totally painless. On examination the ulcer deep, foul smelling with necrotic slough and purulent discharge. He is on treatment for diabetes for the past 7 years.

5. (ii). 52 year old Mr. Kumar, a bus driver has come with complaints an ulcer above the medial malleolus in the right leg on and off for the past one year. On examination the ulcer is shallow with ragged bluish edges. The surrounding area is pigmented and hardened. The Ankle Brachial Pressure index is 0.9.

5. (iii). Mrs. Meena, who works as a housemaid has come with a very painful ulcer in her right leg. She says it started as a tiny pustule, then progressed into acutely painful ulcer over the weeks. On examination the ulcer is 5 cm in size with raised, thickened and slightly undermined edge, bloody discharge covering the grey slough on its floor, skin around is dark and swollen. Peripheral pulses are palpable.

5. (iv). 32 years old Mr. Goutham, a smoker for 15 years has come to you with superficial ulcer on his left big toe of a month's duration. You can see that he is very severe pain. There is history of claudication. On examination, left dorsalispedis and popliteal pulses are not palpable.

5. (v). Mr. Hari, a manual laborer has come with complaints of an ulcer in the right leg for the past one year but has recently begun to bleed easily on contact. The edges of the ulcer are rolled out and irregular.

5. (vi). 22 year old Ms. Lucy has come with complaints of multiple painful ulcers in both the feet. The ulcers are small and very painful. Peripheral pulses are palpable. She is on treatment for rheumatoid arthritis for the past 3 years.

**6. THEME: DIABETIC LEG ULCER MANAGEMENT [QUESTIONS. 6(i) - 6(vi)]
(TOTAL: 6 MARKS)**

From the options 'A to G' given below, choose the best answer for the questions 6(i) – 6(vi)

Options

- A. Patient education, proper footwear
- B. Offloading or decreasing pressure and antibiotics
- C. Debridement, Antibiotics, Offloading
- D. Debridement, Amputation, Offloading
- E. Noninvasive vascular investigations
- F. Vascular consultation
- G. Major amputation, vascular consultation

Questions: What is the management?

- 6. (i). Mrs. Janaki is a diabetic for 7 years. She has a deep ulcer exposing tendon, joints in the right foot.
- 6. (ii). Mr. Deepak, a diabetic on irregular medications has a complete foot gangrene
- 6. (iii). Mr. Kuppuswasmy has come with complaints of extensive ulceration of left leg and abscess
- 6. (iv). Mrs. Leela, a diabetic for the past 3 years has come with complaints of superficial ulcer right foot.
- 6. (v). Mr. Faizal is a diabetic. During his routine annual screening you find that he has a high risk for ulcer foot.
- 6. (vi). Mrs. Devi is a diabetic for 4 years. Her both feet show evidence of ischemia. But there is no gangrenous changes.

7. THEME: PATIENT WITH DIZZINESS [QUESTIONS. 7(i) - 7(vi)] (TOTAL: 6 MARKS)

From the options 'A to H' given below, choose the best answer for the questions 6(i) – 6(vi)

Options

- A. Acoustic Neuroma
- B. CSOM with labyrinthine fistula
- C. Postural hypotension
- D. Meniere's disease
- E. Ototoxicity
- F. Cervical vertigo
- G. Posterior fossa tumour
- H. Vertebro Basilar Insufficiency

Questions: What is the clinical condition?

- 7. (i). Mrs. Kala, a 40 year old teacher has come with episodic dizziness with poor hearing
- 7. (ii). 32 year old Mr. Jacob has come with complaints of dizziness which lasts for few seconds. He also complains of neck pain.
- 7. (iii). 8 year old Pamela has come with complaints of torticollis noticed for the past 1 week. She also complains of constant dizziness without ear symptoms.
- 7. (iv). 50 year old Mr. Sudheep has come with complaints of dizziness which is constant. There is also tinnitus associated with right sided sensorineural hearing loss
- 7. (v). Mrs. Hema has complaints of episodic dizziness without ear symptoms. She is hypertensive, diagnosed recently and has been started on ACEI.
- 7. (vi). 60 year old Mr. Gregory has come with complaints of frequent episodes of dizziness which lasts for few seconds. He is a diabetic for 6 years and hypertensive for 5 years.

8. THEME: CAUSES OF UPPER GI BLEEDING [QUESTIONS. 8(i) -8(vi)]

(TOTAL: 6 MARKS)

From the options 'A to F' given below, choose the best answer for the questions. 8(i) – 8(vi)

Options :

- | | |
|-----------------------------|-------------------------------|
| A. Peptic ulcer | D. Gastric malignancy |
| B. Drug induced hematemesis | E. Carcinoma oesophagus |
| C. Mallory Weiss syndrome | F. Gastro-oesophageal varices |

Questions:

8. (i) 60 year old Mr. Santosh has bilateral osteoarthritis knees. He used to get tablets for his knee pain from medical shops for the past 6 years. Today he came with severe upper abdominal pain with hematemesis. The most likely cause of hematemesis in him is
8. (ii) Mr. Rajan has been vomiting 10-12 times since last night. This morning after a bout of vomiting, there was blood in the vomitus. He is hemodynamically stable. The most likely cause of hematemesis in him is
8. (iii) Mr. Sadayan presented to you with hematemesis. An upper GI endoscopy was done and a test for Helicobacter pylori was positive. He also gave history that his epigastric pain subsided after taking food. The most likely cause of hematemesis in him is
8. (iv) Mrs. Govindammal has Nephrotic syndrome and she is on T. Prednisolone for that. Today morning she had upper abdominal pain and vomiting and there was blood in the vomitus. The most likely cause of hematemesis in her is
8. (v) Mr. Ganesan has cirrhosis with portal hypertension. He had a bout of hematemesis ½ an hour back and has been brought to you. The most likely cause of hematemesis in him is
8. (vi) 55 year old Mr. Rakesh, a smoker, has been having upper abdominal pain with anorexia for the past 3 months. This morning he had hematemesis and was brought to you. He has lost 6 kgs over the past 3 months. His left supraclavicular node was enlarged. The most likely cause of hematemesis in him is

9. THEME – DIAGNOSIS AND MANAGEMENT OF LOWER GI BLEEDING

[QUESTIONS. 9(i) – 9(vi)]

(TOTAL: 6 MARKS)

From the options ‘A to J’ given below, choose the best answer for the questions 9(i) – 9(vi)

Options:

- | | |
|-------------------------------------|--|
| A. 2nd degree hemorrhoids | F. Injection of botulinum toxin |
| B. Surgical hemorrhoidectomy | G. 1st degree hemorrhoids |
| C. 3rd degree hemorrhoids | H. WASH regimen |
| D. Fissure-in-ano | I. Laxatives |
| E. 4th degree hemorrhoids | J. Local anesthetic gel |

Questions:

Mr. Rohit presented with bleeding per rectum. While examining, you asked him to strain. There was a mass prolapsing per rectum which needed manual reduction.

- 9. (i)** What is your diagnosis?
- 9. (ii)** The treatment for Mr. Rohit is

Mrs. Saranya an antenatal woman presented to you with bleeding per rectum. When you asked her to strain, there was mild bleeding per rectum, but there was no prolapse of any mass.

- 9. (iii)** What is your diagnosis?

Mr. Kumar presented to you with mass per rectum with severe pain in the anal region. On examination, there was a prolapsed mass which was strangulated.

- 9. (iv)** What is your diagnosis?

Mrs. Betsy presented to you with painful bleeding per rectum for the past 1 week. By gentle separation of the buttocks and examination of the anus, you found a linear separation of the anoderm.

- 9. (v)** What is your diagnosis?
- 9. (vi)** The treatment of choice for Mrs. Betsy is

**10. THEME: DIAGNOSING EAR PROBLEMS[QUESTIONS 10 (i) - 10 (vi)]
(TOTAL: 6 MARKS)**

From the options 'A to I' given below, choose the best answer for the questions 10 (i) – 10(vi)

Options:

- | | |
|------------------------------------|---|
| A. Furuncle | F. Tympanic membrane Perforation |
| B. Otomycosis | G. Unsafe ear |
| C. Malignant otitis externa | H. Tympanosclerosis |
| D. ASOM | I. Meniere's disease |
| E. CSOM | |

Questions: Mark the most likely diagnosis for the following scenarios:

- 10. (i)** Mrs. Shanthi presented to you with left ear pain and reduced hearing on the same ear. On examination you found that there was a clean perforation of the tympanic membrane on that side. She gave you the history that her husband slapped her 2 days ago.
- 10. (ii)** 5 year old Sandhya was brought to you with fever and runny nose for 2 days with severe right ear pain since last night. On otoscopic examination, there was congestion and bulging of the right tympanic membrane.
- 10. (iii)** 40 year old Mr. Rohit came with history of intensive itching and discomfort of his right ear. On examination, there was musty odour from the ear. Otoscopic examination showed a brown black filter paper like material in the external canal.
- 10. (iv)** 15 year old Sekar presented with severe left ear pain .On examination you noticed that he has a painful local swelling in the left external ear canal. The pain was so severe that you could not insert the Otoscope into his ear.
- 10. (v)** 56 year old Mr. Manohar a known diabetic for the last 10 years presented to you with severe pain over his left ear. On examination, there was a granulation in the external auditory canal.
- 10. (vi)** 10 year old Suresh was brought with profuse, mucopurulent, non-foul smelling right ear discharge on and off for the past 2 years.
