

(LF 0214)

M.MED. FAMILY MEDICINE
FIRST YEAR THEORY EXAM – AUGUST 2014
PAPER II - SURGERY AND ALLIED SCIENCES

Sub Code: 4002

QP .CODE: 434002

TIME: Three Hours

Maximum Marks: 100

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. Fluphenazinedeconoate
- 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?

- ✓ Match each question to a **single best option** and write it in your paper in the column provided like this:

3 (i)	A
3 (ii)	F
3 (iii)	
3 (iv)	
3 (v)	
3(vi)	

- ✓ Each option may be used more than once. Some options may not be used at all.

PART – A
DESCRIPTIVE QUESTIONS
(ANSWER ALL QUESTIONS)

1. Forty six-year-old Mr. Sundaram, who is working as a traffic policeman has come to you with a problem of recurrent ulceration on his left leg for the past 6 months. **(Total: 20 Marks)**
- A. What are the causes for recurrent leg ulceration? **(4 Marks)**
 - B. What is ABPI? How will you calculate it? Explain its significance. **(4 Marks)**
 - C. How will you treat Mr. Sundaram's condition? **(6 Marks)**
 - D. What advice will you give to prevent recurrence? **(2 Marks)**
 - E. When will you refer him? **(4 Marks)**
2. Mrs. Nalini, a 28 year old, has come to you with the complaint of dizziness that is rotational which lasted for one hour this morning. **(Total: 20 Marks)**
- A. Define vertigo. What is true vertigo and in which conditions can it occur?
What is pseudo vertigo and when does it occur? **(5 Marks)**
 - B. Name the three common conditions causing vertigo? **(3 Marks)**
 - C. What are the classic symptoms of Meniere's disease? **(4 Marks)**
 - D. What are the three conditions that can produce the same symptoms as Meniere's disease and which need to be ruled out for arriving at the diagnosis? **(3 Marks)**
 - E. Diagnosis of Meniere's disease? **(3 Marks)**
 - F. How will you treat a patient with Meniere's disease? **(5 Marks)**

PART – B
EXTENDED MATCHING QUESTIONS
(ANSWER ALL QUESTIONS)

1. **THEME: DIAGNOSIS OF EAR PROBLEMS [QUESTIONS 1(i)-1(vi)]** **(Total: 6 Marks)**
From the options 'A to J' given below, choose the best answer for the questions 1(i) – 1(vi)

Options :

- | | |
|-----------------------------------|-------------------------------------|
| A. Acute Suppurative Otitis Media | E. Chronic Suppurative Otitis Media |
| B. Cholesteatoma | F. Otitis externa |
| C. CSF leakage | G. Barotrauma |
| D. Toxins from infections | H. Otomycosis |

I. Subdural Hematoma

J. Endolymph leakage

Questions:

1. (i) 40 year old Mr. Danapal has come to you with the history of right ear discharge for the past 4 weeks. By definition, he has
1. (ii) Mrs. Kokila has come with right ear pain. On examination, Tragus sign is positive on her. What is your possible diagnosis?
1. (iii) Mrs. Subashini has scanty purulent ear discharge with offensive odour with epithelial debris. This is due to
1. (iv) Mr. Raju has watery discharge from his left ear after he had a head injury. This could be due to
1. (v) Mrs. Shalini was having upper respiratory infection for 2 days. Since this morning, she has Left earpain. The most likely diagnosis is
1. (vi) 30 year old Mrs. Sneha comes to you with the complaint of pain and discharge from both ears since yesterday. On questioning, she was telling that she was diving in the pool yesterday. This could be due to.....

2. THEME: HAEMATEMESIS [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. Gastric
- B. Malignancy
- C. Acute gastric erosion
- D. Tab. Omeprazole and Prochlorperazine
- E. Intravenous omeprazole
- F. Intravenous Pitressin, endoscopic evaluation and variceal ligation
- G. Mallory-Weiss syndrome
- H. Oesophageal varices
- I. Tab. Propranolol 40 mg bd
- J. Portal vein thrombosis
- K. Antacids

Questions:

Mr. Selvam had 6 episodes of vomiting with retching at the end of which he had a small amount of hematemesis.

2. (i) The most likely diagnosis is
2. (ii) The treatment of choice for this condition is:

Mrs. Kannamal a 60 year old lady has severe osteoarthritis in the left knee and has been taking over-the-counter medicine for the last 20 days. Last night she had hematemesis of around 50 ml. On examination she has severe epigastric tenderness, however there is no guarding or rigidity.

2. (iii) The most likely diagnosis is

2. (iv) The treatment of choice is

50 year old Mr. Sankar who has been taking alcohol for the past 15 years has been brought with complaints of hematemesis – around 500 ml of blood, half an hour ago.

2. (v) The most likely cause of the bleed is

2. (vi) The treatment of choice for Mr.Sankar is

3. THEME: LOWER GASTRO INTESTINAL BLEEDING [QUESTIONS. 3(i) - 3(vi)]

(Total: 6 Marks)

From the options ‘A to J’ given below, choose the best answer for the questions 3(i) - 3(vi)
Options :

A. Hemorrhoids

B. Injection sclerotherapy

C. Acute anal fissure

D. Intestinal polyposis

E. High fibre diet

F. Intussusception

G. Diverticulitis

H. WASH regimen

I. Ischemic colitis

J. Haemorrhoidectomy

Questions:

35 year old Mrs. Palaniammal presents to you with history of severe burning pain while passing stools for the past 1 week with bright red blood appearing on the surface of stool.

3. (i) The most likely diagnosis is:

3. (ii) The treatment for Mrs. Palaniammal would be:

40 year old Mr. Joshua presents to you with history of having bleeding per rectum on and off over the past 2 weeks which is painless. On further questioning he says that he has constipation but did not feel any lump at the anal verge.

3. (iii) The most likely diagnosis for Mr. Joshua is:

3. (iv) The treatment for Mr. Joshua would be:

70 year old Mr. Moorthy comes to you with a history of pain in the left lower quadrant of the abdomen. He has a low grade temperature and has been more constipated for 2 days. He is slightly obese but in good health otherwise. However one month ago he had some bleeding per rectum mixed with stool, which the patient attributed to “piles”.

3. (v) What is the possible diagnosis for Mr. Moorthy?

73 year old Mr. Meganathan comes to you with a history of crampy abdominal pain and passage of 15ml or so of bright red blood (enough to fill a cupped palm). Alarmed he decided to see you immediately. He gives no history of anorexia or dyspepsia. He has not lost weight. He does not smoke and gives no prior history of bleeding except some 40 years ago when he had a hemorrhoidectomy. He had coronary angioplasty some 2 years ago.

3. (vi) What is the likely diagnosis?

4. THEME – LEG ULCERS [QUESTIONS 4(i) - 4 (vi)] (Total: 6 Marks)

From the options ‘A to L’ given below, choose the best answer for the questions 4 (i) – 4 (vi)

Options:

- | | |
|-------------------------|--|
| A. Atrophie blanche | H. Topical antibiotics |
| B. Neuropathic ulcer | I. Vaseline gauze dressing |
| C. Pregangrene | J. Systemic antibiotics |
| D. Malignant ulcer | K. Advise limb elevation while resting and pain killers. |
| E. Venous ulcers | L. To continue walking while on pain killers and refer |
| F. Arterial ulcers | |
| G. Lipodermatosclerosis | |

Questions:

Mr. Murugan comes to your clinic with superficial ulcer on the dorsum of his right big toe of four weeks duration. He says that for the past six months he has had severe pain in his right calf after walking for about three miles. The pain improves when he stops to rest but recurs again after walking a short distance. He is a chronic smoker.

4. (i) These symptoms and signs are characteristic of which type of ulcer?

On doing a Doppler scan for Mr. Murugan, the ABPI is found to be 0.6

4. (ii) How will you manage him?

Mr. Murugan has been inconsistent with the treatment given to him by you and has continued to smoke. He now finds no relief with the initial pain killers you gave and has noticed swelling of feet with blackish mottling over the toes and a feeling of numbness and paresthesia. He gets some relief of pain by hanging his leg from bed while sleeping. He comes back to you for relief of pain.

4. (iii) What is this condition called?

48 years old Mr. Pandian, a manual laborer, has come with an ulcer on the sole of the right foot. He gives history of trauma with a splinter of wood one month ago but did not feel much pain at that time or later, till he noticed the foul smelling discharge from the ulcer for the past two weeks. On examination, he has a deep ulcer under the ball of big toe with slough, necrotic material, and purulent discharge.

4. (iv) These symptoms and signs are characteristic of which type of ulcer?

Mr. Rakesh, a bus conductor, has a vexing problem of recurrent ulceration on his left leg for the past one year. He has no history of trauma preceding it but complains of vague discomfort and dull ache in his legs more towards the end of the day with mild swelling of left leg. On examination, he has an ulcer 2 X 3 cm just above the left medial malleoli and brownish pigmentation of surrounding skin with hardening. A wound swab taken for gram staining and culture revealed the presence of bacteria in ulcer.

4. (v) What is the name for pigmentation and hardening of skin seen in this patient?

4. (vi) How will you manage his ulcer?

5. **THEME –DIAGNOSIS OF ACUTE ABDOMEN [QUESTIONS. 5(i) -5(vi)]**

(Total: 6 Marks)

From the options ‘A to P’ given below, choose the best answer for the questions. 5 (i) – 5 (vi)

Options :

- | | |
|---------------------------------|--------------------------------|
| A. Murphy’s sign | I. Sentinel loop sign |
| B. Cullen’s sign | J. Retroperitoneal haemorrhage |
| C. Acute appendicitis | K. Kehr’s sign |
| D. Acute gastritis | L. Ruptured duodenal ulcer |
| E. Iliopsoas sign | M. Rovsing’s sign |
| F. McBurney’s sign | N. Splenic rupture |
| G. Grey Turner’s sign | O. Obturator sign |
| H. Acute intestinal obstruction | P. Acute Cholecystitis |

Questions:

66 year old Mr. Mani comes to you with the complaint of abdominal pain since yesterday evening. On examination, you have noticed bluish discoloration in the periumbilical region.

5. (i) What is the name of this sign?
5. (ii) What is your possible diagnosis?

Mr. Rahul had come to you with the complaint of abdominal pain for the past 2 days. He also has severe left shoulder pain. He gives you the history of a fall while riding on a motor bike 2 days ago.

5. (iii) What is the name of the sign?
5. (iv) What is your possible diagnosis?

16 year old Malathi had come to you with the complaint of severe abdominal pain since morning. On examination, tenderness elicited at the junction of medial 2/3rd and lateral 1/3rd of the line connecting anterior superior iliac spine and umbilicus on the right side.

- 5. (v) What is the name of this sign?
- 5. (vi) What is your possible diagnosis?

6. THEME – NECK LUMPS [QUESTIONS. 6 (i) – 6 (vi)] (Total: 6 Marks)

From the options ‘A to Q’ given below, choose the best answer for the questions 6(i) – 6(vi)

Options:

- | | |
|-----------------------|---------------------------|
| A. Stage I | J. Fair |
| B. Stage IIA | K. Non-Hodgkin’s lymphoma |
| C. Hodgkin’s lymphoma | L. Stage IIB |
| D. Radiotherapy | M. Stage III |
| E. Chemotherapy | N. Stage IV |
| F. TB lymphadenitis | O. ABVD regime |
| G. Good | P. MOPP regime |
| H. Very good | Q. MVPP regime |
| I. Poor | |

Questions:

Mrs. Devaki, 35yrs old woman, presents to you with enlarged right cervical glands and intermittent fever. She has night sweats and feels fatigued. On examination, she has discrete enlarged, non-tender, right cervical nodes and large right axillary nodes. There are no other significant findings. On biopsy of the cervical node, typical Reed-Steinberg giant cells were seen and there were a lot of fibrous bands histologically.

- 6. (i) What is the diagnosis?
- 6. (ii) What would be the clinical staging for her?
- 6. (iii) What will be the treatment available for her at this stage?
- 6. (iv) What will be the prognosis for this patient?
- 6. (v) Which regime is considered as gold standard therapy?
- 6. (vi) Bone marrow involvement is frequent in -----

7. THEME: DIAGNOSIS OF DIZZINESS [QUESTIONS 7(i) -7(vi)] (Total: 6 Marks)
From the options 'A to L' given below, choose the best answer for the questions 7(i) – 7(vi)

Options

- | | |
|--------------------------|---------------------------------------|
| A. Pseudo vertigo | G. Conductive hearing loss |
| B. Vestibular neuronitis | H. Post – concussion or head injury |
| C. Acute labyrinthitis | I. Orthostatic Hypotension |
| D. Meniere's disease | J. Abnormal ocular input |
| E. Vestibular migraine | K. Abnormal proprioceptor input |
| F. BPPV | L. Atherosclerosis of cranial vessels |

Questions:

30 year old lady comes to you with the complaint of having sensation of unsteadiness on standing or walking for 5- 10 minutes immediately after a rollercoaster ride every time.

7. (i) What could be the reason for her unsteadiness?

22 year old newly married lady comes to you with the complaint of having sensation of floating or spinning inside her head whenever she is going outside in public places. She is not having any other significant history.

7. (ii) What could be the reason for her illness?

80 year old Mr. Subburaj is having sensation of unsteadiness on standing or walking for the past 1 month. He is not a diabetic, not a hypertensive and he is not on any drugs. No history of fever or ear discharge.

7. (iii) What could be the reason for his unsteadiness?

70 year old Mr. Andrew who is a hypertensive complains of recurrent lightheadedness as soon as he stands up from sitting or lying position.

7. (iv) He most likely has

37 year old Mr. Babu comes to you with the complaint of having sudden onset of giddiness for 2 days. Giddiness is rotational. He is able to walk straight in spite of his giddiness. He has no tinnitus and does not complain of hearing loss. He gives a history of "flu" about 2 weeks ago. His BP is 130/90 mmHg and has no history of diabetes or headache.

7. (v) What is the likely cause?

28 year old Mr. Chandran comes to you with the complaint of dizziness and headache for the last 10 days. There is no true rotation. It is episodic and comes on without any particular position of the head. He gives no history of "flu" and has no hearing loss, tinnitus or fullness of the ear. He is not a known hypertensive and gives no history of cardiac disease. You however notice that his left forearm and hand are in a plaster cast.

7. (vi) What is the likely cause?

8. THEME –MANAGEMENT OF ACUTE ABDOMEN [QUESTIONS. 8(i) -8(vi)]

(Total: 6 Marks)

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

Options :

- | | |
|-----------------------------|----------------------------|
| A. Morphine | H. Inserting flatus tube |
| B. Diclofenac injection | I. Serum proteins |
| C. Meperidine | J. Laxatives |
| D. CT scan abdomen | K. Ultrasound scan abdomen |
| E. Contrast enema | L. IVP |
| F. MRI abdomen | |
| G. Serum amylase and lipase | |

Questions:

Seventy two year old Mr. Tharun has been brought to you with severe lower abdominal pain, gross distension of the abdomen and constipation. His abdomen on examination is soft.

8. (i) What investigation will you do to confirm the diagnosis?
8. (ii) What is the management of this condition?

60 year old Mr. Arunan comes to you with severe abdominal pain often radiating to the back. The pain is more while lying down and often he prefers to sit up and lean forwards. He also has 5-6 episodes of vomiting. On examination, tenderness is maximum just above the umbilicus. While there is no board like rigidity, some guarding of the upper abdominal muscles felt. You have advised plain X-ray abdomen for him.

8. (iii) To confirm the diagnosis what other blood investigation you will do for Mr. Arunan?
8.(iv) What drug treatment you will give to him to relieve his abdominal pain?

37 year old gentleman comes to you with the severe abdominal pain and the pain was radiating from loin to groin and onto testes. He also had vomiting 4 times and passed smoky urine.

8. (v) To confirm the diagnosis what investigation you will do?
8. (vi) How will you treat his pain?

9. THEME – HAEMATEMESIS [QUESTIONS. 9(i) – 9(vi)]

(Total: 6 Marks)

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

Options:

- | | |
|-----------------------------|------------------------------------|
| A. 250 – 300 ml | I. Omeprazole and Prochlorperazine |
| B. 400 ml | J. Somatostatin |
| C. Terry's nails | K. Ethanolamine oleate |
| D. Mallory – Weiss syndrome | L. Altered sex hormone metabolism |
| E. Oesophageal varices | M. Muehrcke's nails |
| F. Bleeding disorder | N. Hypoalbuminemia |
| G. Reflux Oesophagitis | O. 1000 ml |
| H. Carcinoma of stomach | P. Increased palmar circulation |

Questions:

49 year old Mr. Earnest who has been taking alcohol for the past 20 years has been brought to you with the complaint of massive amount of hematemesis.

9. (i) What could be the most common cause of torrential hematemesis in general practice?

On examination, Mr. Earnest is having exaggerations of normal speckled mottling of the palm called as palmar erythema.

9. (ii) What is the reason for palmar erythema?

Mr. Earnest is also having gynecomastia, spider angiomas, clubbing and nail changes. Proximal two thirds of the nail plate appears white with distal one-third red.

9. (iii) What is the name for this kind of nail changes?
9. (iv) What is the reason for nail changes?

After a bout of hematemesis, Mr. Earnest has giddiness, cold clammy skin, increased sweating and confusion. His pulse rate is 120/minute and BP is 80/50 mmHg.

9. (v) What will be the amount of blood loss for signs of collapse to occur?

After stabilising his vital parameters, you are planning to send him for endoscopy. But endoscopy facility is not available nearby.

9. (vi) You will treat him with:

10. THEME –NECK LUMPS[QUESTIONS 10 (i) - 10 (vi)] (Total: 6 Marks)

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

Options:

- | | |
|-------------------------------------|------------------------------|
| A. Hashimoto's Thyroiditis | F. Graves' disease |
| B. Subacute Lymphocytic Thyroiditis | G. Simple goitre |
| C. Submandibular lymph node | H. Anaplastic carcinoma |
| D. Multinodular goitre | I. Growth hormone deficiency |
| E. Papillary carcinoma | J. Thyroid cyst |

K. De Quervain Thyroiditis

M. TB lymphadenitis

L. Metastases of neoplastic disease

N. Ectopic undescended thyroid

Questions: Mark the correct diagnosis:

- 10. (i)** 45 year old Mrs. Meena comes to you with the complaint of having diffuse midline lump. It moves up with swallowing and not with tongue protrusion. She has anxiety, palpitations, tremor and exophthalmos for the past seven months.
- 10. (ii)** 21 year old college student presents with a swelling of her neck which has been rapidly increasing in size. On examination, there is a 2 x 1.5 cm nodule felt on the left side, which moves up with swallowing. There are some enlarged lymph nodes on the same side.
- 10. (iii)** 46 year old Mrs. Mary with enlargement of thyroid gland with evidence of hypothyroidism and positive result for thyroid antibodies.
- 10. (iv)** 35 year old Mrs. Faridha with painful thyroid swelling, fever and malaise for the past 2 weeks which started along with what looked like a viral fever.
- 10. (v)** 24 year old Megala, a type 1 diabetic who is three months postpartum presents with new onset thyroid swelling
- 10. (vi)** 38 year old woman presents with a swelling in the front of the neck, which has been present for several years. On examination, the thyroid is grossly and asymmetrically enlarged. It is non-tender and nodular on palpation.
