

(LO 0219)

M.MED. FAMILY MEDICINE

(Sub Code: 4012)

**SECOND YEAR THEORY EXAM FEBRUARY 2019**

**PAPER II – SURGERY AND ALLIED SCIENCES**

*QP .CODE: 434012*

**Time: Three Hours**

**Maximum Marks: 100**

**INSTRUCTIONS**

- The paper is for a total of **100 Marks**.
- All questions are mandatory. **Answer ALL** the questions.
- The Paper has 2 parts – **Part A & Part B**.
- **Part A** has **Descriptive Type Questions (40 Marks)**.
  - There are **2** questions in this part.
- **Part B** has Objective type **Extended Matching Questions- EMQs (60 Marks)**.
  - There are **10** sets of these questions.
  - Each set has **6** questions.
  - Each question carries 1 mark.
  - The **theme** of each set is mentioned at the beginning.
  - In each set there are **options** 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)] (Total: 6 marks)**

**From options ‘A to I’ given below, choose the best answer for the questions 3(i) –3(vi):**

**Options:**

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

**Questions: What is your treatment option in the following scenarios?**

**3(i).** Mr. P feels sad all the time and he has lost interest in meeting with friends...

**3(ii).** Mr. A has a fluctuating mood. Sometimes he is very enthusiastic and sometimes he is ...

- Match each question to a **single best option** and write it in your answer paper like this:
- Each option may be used more than once. Some options may not be used at all.

3(i)	B
3(ii)	C
3(iii)	B
3(iv)	D
3(v)	A
3(vi)	G

**PART – A**

**DESCRIPTIVE QUESTIONS**

**(ANSWER ALL QUESTIONS)**

1. **32-year-old Mr. Suresh has an inguinoscrotal swelling since one year. (Total:20 Marks)**
- A. As a primary care physician, what are the differential diagnoses you will consider for a inguinoscrotal swelling? **(4 Marks)**
  - B. What are the salient points you will ask in history for a patient with an inguinoscrotal swelling? **(5 Marks)**
  - C. What are the inspection findings you would look for in a inguinoscrotal swelling? **(5 Marks)**
  - D. What are the four important questions you will ask to arrive at the diagnosis of an inguino scrotal swelling? Draw an algorithm for diagnosis of inguinoscrotal swelling based on these questions. **(6 Marks)**
2. **You are a family physician with an office practice in a semi urban area. You had to perform minor surgical procedures in your practice time to time. (Total 20 Marks)**
- A. What are the types of anesthesia? **(5 Marks)**
  - B. What are the commonly used local anesthetic agents? Discuss briefly. **(5 Marks)**
  - C. What are the common sedative agents we use in office practice for procedures? Discuss briefly. **(5 Marks)**
  - D. Mrs. Tina as come with paronychia right index finger and need to rain it. How will you give digital anesthesia? **(5 Marks)**

**PART – B**

**EXTENDED MATCHING QUESTIONS**

**(ANSWER ALL QUESTIONS)**

1. **THEME: HEAD INJURY [Questions 1(i) – 1(vi)]** **(Total: 6 Marks)**  
From the options 'A to J' given below, choose the best answer for questions 1(i) –1(vi):

**Options:**

- |                                  |                                 |
|----------------------------------|---------------------------------|
| A. Inadequate cerebral perfusion | F. Acute extradural hematoma    |
| B. Pontine injury                | G. Chronic subdural hematoma    |
| C. Traumatic optic nerve injury  | H. Chronic extra dural hematoma |
| D. Inadequate cerebral perfusion | I. Transtentorial herniation    |
| E. Acute subdural hematoma       | J. Horner's syndrome            |

**Questions: What is the clinical diagnosis?**

- 1(i). Mahesh is a 17-year-old college student who is brought to the hospital after an accident. While examining him, you find that one of his pupils does not constrict when light is directed at it but constricts when light is directed into the contralateral pupil.

**1(ii).** Mr. Mohan was riding his bike without a helmet. He was hit by a lorry and was resuscitated and intubated in the site because there was a hospital near the accident site. Now he is on a ventilator. Examination now shows bilateral dilated pupil that does not react to light.

**1(iii).** 68-year-old Mr. Sultan, who is on regular medications for his unstable angina had a fall in the bathroom. He was unconscious for several minutes and then when there was no sign of him, his wife pushed open the bathroom door and found him sitting dazed. The history is that he was confused for about 10 minutes and then was his normal self again. However, after about 4 hours, he began to feel drowsy and confused again. He is brought to you and you find his GCS is 12.

**1(iv).** Mr. Anand was hit by a vehicle from the back when he was riding a bike without a helmet. In the casualty, he was resuscitated and intubated because his GCS was 6/15. Now, after 2 hours, he is hyperpyrexia and pupils are pin point.

**1(v).** 70-year-old Mrs. Radha comes to you with a history of acute onset of headache, confusion and some gait disturbances for the last one week. She is not a known diabetic or a hypertensive. On examination, she is afebrile, power in the right lower limb is 3/5 and in the right upper limb is 4/5. In the left eye, there is papilloedema and the pupil is unreactive and dilated.

**1(vi).** The CT scan of Mrs. Tina who sustained a head injury before 6 hours, shows a hypo dense area which is convex toward the brain.

**2. THEME: SITES FOR ANAESTHESIA [Questions 2(i) – 2(vi)] (Total: 6 Marks)**

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

**Options:**

- |  |   |
|--|---|
| <b>A.</b> Web space at the base of the finger, just distal to the MCP joint                      | <b>H.</b> Between the medial malleolus and the calcaneum, 2 cm lateral to the posterior tibial artery |
| <b>B.</b> At the junction of proximal and middle phalanx, in the lateral aspect                  | <b>I.</b> Between the lateral malleolus and the calcaneum, 2 cm medial to the posterior tibial artery |
| <b>C.</b> At the junction of proximal and middle phalanx, in the dorsal crease                   | <b>J.</b> Medial to the Palmaris tendon, in distal wrist crease.                                      |
| <b>D.</b> Lateral to the Palmaris tendon, in proximal wrist crease.                              | <b>K.</b> Medial to the Palmaris tendon, in proximal wrist crease.                                    |
| <b>E.</b> 6'O clock and 12 'O clock position   | <b>L.</b> Intervertebral space between L 4- L 5   |
| <b>F.</b> 1'O clock and 11 'O clock position   | <b>M.</b> Intervertebral space between L 2 – L3   |
| <b>G.</b> Between the medial malleolus and the calcaneum just behind the posterior tibial artery |   |

**Questions: What is the site of the anaesthesia?**

**2(i).** Mr. Sam has come with a paraphimosis and you need to reduce it. The sites for penile block are-

**2(ii).** You want to give a wrist block for a procedure. The site is-

**2(iii).** Mrs. Kala, a diabetic for 10 years needs an amputation of right big toe and the second toe. The sites for block are-

**2(iv).** Mr. Dayalan has come with a felon in the right index finger. The site for block is-

**2(v).** The site for anaesthesia for Mrs. Geetha who is posted for emergency LSCS is-

**2(vi).** Mr. Kumar has come with an injury in the proximal phalanx of the right second finger. You need to do suturing.

**3. THEME DIAGNOSIS OF RED EYE [Questions 3(i) – 3(vi)] (Total: 6 Marks)**

**From options ‘A to M’ given below, choose the best answer for the questions 3(i) –3(vi):**

**Options:**

- |  |                                   |
|--|-----------------------------------|
| <b>A.</b> Endophthalmitis                | <b>H.</b> Keratitis               |
| <b>B.</b> Hordeolum externum             | <b>I.</b> Episcleritis            |
| <b>C.</b> Acute bacterial conjunctivitis | <b>J.</b> Pterygium               |
| <b>D.</b> Uveitis                        | <b>K.</b> Vernal conjunctivitis   |
| <b>E.</b> Seborrhoeic blepharitis        | <b>L.</b> Seborrhoeic blepharitis |
| <b>F.</b> Viral conjunctivitis           | <b>M.</b> Scleritis               |
| <b>G.</b> Ulcerative blepharitis         |                                   |

**Questions: What is the clinical diagnosis?**

**3(i).** 27-year-old Mr. Samuel has come with painful eyes and photophobia for the past 2 weeks. On questioning further, you realize there is pain in the brow and continuous ocular pain which is worse on eye movements. There is no relief with analgesics. On examination there is a scleral nodule with bluish discoloration.

**3(ii).** 33-year-old Mrs. Lakshmi has a nodule in the right eye with sectoral congestion. The lesion is triangular, fleshy and asymptomatic.

**3(iii).** 10-year-old Meena has come with complaints of itchy eyes. On examination, there is bilateral redness of eye and watery discharge. There are no red flags. Preauricular lymph nodes are palpable bilaterally.

**3(iv).** 21-year-old Faizal has come with red eye. On examination, there is gelatinous thickened accumulation of tissue around limbus and presence of discrete whitish raised dots along the limbus.

**3(v).** 24-year-old Ms. Swati has come with complaints of itching of both eyes. On examination, both the eyes are red and there is crusting in the lid margin. On removing the crusts, there is bleeding.

**3(vi).** 50-year-old Mrs. Kanaka has come with sudden onset of severe photophobia, head ache, pain and diminished vision. There is ciliary congestion and pupil is constricted and irregular.

**4. THEME: TREATMENT FOR RED EYE [Questions 4(i) – 4 (vi)] (Total: 6 Marks)**

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

**Options:**

- |  |  |
|--|--|
| <b>A.</b> Tab. Doxycycline 100 mg od for 6 weeks       | <b>E.</b> Tab. Ciprofloxacin 500 mg OD for six weeks |
| <b>B.</b> Tarsal injection of gentamicin OD for a week | <b>F.</b> Ciprofloxacin ointment bd for 6 weeks      |
| <b>C.</b> Ketorolac 0.5%, drops                        |  |
| <b>D.</b> Excision                                     |  |

**G.** Taping the lateral canthal skin supero-temporally with adhesive plaster

**H.** Tape the lid to the skin of the cheek with adhesive plaster

**I.** Topical steroids

**Questions: What is the management in the following conditions?**

**4(i).** 10-year-old Kavitha has simple allergic conjunctivitis of moderate severity.

**4(ii).** 34-year-old Mr. Ayush has persistent posterior blepharitis.

**4(iii).** Mrs. Douloth has ectropion in both eyes due to post burns facial scarring. She is not willing for surgery. This is the temporary method of treating her condition.

**4(iv).** 8-year-old Aby has chronic dacryocystitis. This is the definitive treatment for him.

**4(v).** Mrs. Gowri, a 70-year-old retired clerk has entropion in both the eyes. She is not willing for surgery. This is the temporary method of treating her condition.

**4(vi).** 26-year-old Mr. Bhasker has chronic internal hordeolum. This is the definitive treatment for him.

**5. THEME: DIAGNOSIS OF ORTHOPAEDIC CONDITIONS [Questions 5(i)– 5(vi)]**

**(Total:6 Marks)**

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

**Options:**

**A.** Pulled elbow

**B.** Colles’ fracture

**C.** Rib fracture

**D.** Fracture clavicle

**E.** Fracture humerus

**F.** Compartment syndrome

**G.** Carpal tunnel syndrome

**H.** Supracondylar fracture

**I.** Scaphoid fracture

**J.** Lunate fracture

**Questions: What is the most probable diagnosis?**

**5(i).** 34-year-old Mrs. Geeta has come with restriction of right thumb movement and pain over the area of anatomical snuffbox, after a fall.

**5(ii).** 5-year-old Felicita has come with severe pain in the left elbow after a fall. On examination, there is significant swelling around the elbow with a ‘S’ shaped deformity, with ecchymosis in the antecubital fossa. Radial pulse is absent.

**5(iii).** 62-year-old Mrs. Meena has come with pain in the left wrist following a fall. On examination, there is swelling of wrist and there is a dinner fork deformity.

**5(iv).** 4-year-old Vignesh is brought by his mother with a history of not being able to move the right arm. The child is holding the arm still at his side and refusing to bend the elbow. There is no history of fall, but the pain started when his father was trying to leave him in his LKG class despite of Vignesh’s refusal to go inside.

**5(v).** 45 years old Mr. Khanna has come with history of fall on outstretched hand. On examination, there is severe pain in the upper arm and there is wrist drop.

**5(vi).** 23-year-old Mr. Rao is brought with very severe pain, by his relatives, 6 hours after application of cast for right forearm fracture. On examination, right radial pulse is not palpable and there is paraesthesia of the right hand.

**6. THEME: MANAGEMENT OF ORTHOPEDIC CONDITIONS [Questions [6(i)–6 (vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |                             |                  |
|-----------------------------|------------------|
| <b>A.</b> Traction          | <b>D.</b> Cast   |
| <b>B.</b> Internal fixation | <b>E.</b> Sling  |
| <b>C.</b> External fixation | <b>F.</b> Splint |

**Questions:**

**6(i).** 70-year-old Mr. Siva has a left acetabular fracture. The type of fracture management that can be done in the primary management of his condition is -

**6(ii).** 34-year-old Mr. David had injury of right shoulder 2 weeks ago. But he has come only today because the shoulder pain is still persisting. His X-ray shows a mal-aligned fracture right clavicle. The type of definitive fracture management for Mr. David is -

**6(iii).** 30-year-old Mrs. Kamala has had an internal fixation for her fracture humerus. The additional type of fracture management she needs is -

**6(iv).** 44-year-old Mr. John has sustained fracture of right femur in a road traffic accident. The type of fracture management that should be done in the primary management of his condition during transfer is -

**6(v).** Mr. Giri has a contaminated grade 3c fracture right humerus. The type of fracture management he needs is-

**6(vi).** 9-year-old Munna has a simple fracture of right ulna. It happened yesterday and the right forearm is badly swollen. The type of fracture management that should **not** be done in the primary management of his condition is –

**7. THEME: DIAGNOSIS OF HERNIA [Questions [7 (i)–7 (vi)]**

**(Total: 6 Marks)**

**From options ‘A to H’ given below, choose the best answer for questions 7(i) –7(vi):**

**Options:**

- |                               |                                 |
|-------------------------------|---------------------------------|
| <b>A.</b> Strangulated hernia | <b>E.</b> Incarcerated hernia   |
| <b>B.</b> Richter’s hernia    | <b>F.</b> Diaphragmatic hernia  |
| <b>C.</b> Epigastric hernia   | <b>G.</b> Para umbilical Hernia |
| <b>D.</b> Spigelian hernia    | <b>H.</b> Umbilical hernia      |

**Questions: What is the diagnosis?**

**7(i).** 2-year-old Dinesh has features of hypothyroidism. This is the common hernia found in children with hypothyroidism.

**7(ii).** 41-year-old Mrs. Kavitha has come with abdominal pain suggestive of acid peptic disease. But on examination, you find a small button like swelling midway between the xiphisternum and the umbilicus.

**7(iii).** Mr. Gowtham presented with irreducible hernia. On surgery, only antimesenteric border of the intestine was found to be strangulated through a small defect in the abdomen.

**7(iv).** Mrs. Devi has come with a swelling above the umbilicus with cough impulse positive.

7(v). 3 hours old Monika's baby has presented with complaints of difficulty in breathing and grunting. On examination, abdomen is scaphoid and bowel sounds are heard in the right hemithorax.

7(vi). 43-year-old Mr. John has come with vomiting and abdominal pain. On examination, he is febrile, toxic, his pulse rate is rapid, feeble, 128 / minute and his BP is 90/70 mm of Hg. On examination of abdomen, he has a tender, irreducible hernia; there is generalized distension and tenderness.

**8. Theme: ORAL HEALTH [(Questions [8 (i) –8 (vi)] (Total: 6 Marks)**

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

**Options:**

- |                    |                           |
|--------------------|---------------------------|
| A. Malignant ulcer | F. Dental abscess         |
| B. Aphthous ulcer  | G. Leukoplakia            |
| C. Herpetic ulcer  | H. Oral candidiasis       |
| D. Gum hypertrophy | I. Oral hairy leukoplakia |
| E. Dental plaques  |                           |

**Question: Choose the right diagnosis for the patients described below:**

8(i). 30-year-old Mr. Paul has come with repeated episodes of small, round painful ulcers inside the mouth. He is otherwise healthy. On examination the ulcers are round, yellowish, elevated spots surrounded by a red halo.

8(ii). Mr. Raghav has come with complaints of burning sensation of oral cavity. On examination, there are white patches on gums, tongue and inside the mouth that can be peeled off leaving a raw area.

8(iii). Mrs. Leela, an epileptic on phenytoin has come with these oral lesions.

8(iv). 45 year old Mr. Somnath has come with irregular non-painful white patches on the sides of the tongue, with corrugated appearance. He is HIV positive.

8(v). Mr. Raju, a smoker for 20 years, has come with a slightly elevated, grey coloured, single well-defined lesion inside the right cheek.

8(vi). Mrs. Kalpana has come with severe, continuous facial pain for the past 2 days. On examination, right side of her face is swollen and there is severe pain in the left second upper molar on tapping with a spatula.

**9. THEME: HEAD INJURY [(Questions [9 (i) –9(vi)] (Total: 6 Marks)**

**From options 'A to C' given below, choose the best answer for the questions 9(i) –9(vi):**

**Options:**

- |                                 |                                  |
|---------------------------------|----------------------------------|
| A. No need for CT scan          | C. Needs CT scan and observation |
| B. Protect his airway, CT scan. |                                  |

**Questions: Does this patient need a CT scan?**

9(i). 34-year-old Mr. Vasu had a motor bike accident on his way home from work. He was not wearing a helmet. After the accident he cannot remember leaving his office. His neurological examination is normal.

**9(ii).** 41-year-old Mr. Hari hit his head on a doorframe 20 minutes ago. He feels a bit dizzy. He is taking 'heart tablets', not sure what. On examination there is a big bruise on his forehead. His neurological examination is normal.

**9(iii).** 23-year-old Mr. Farhan is hit by a car. He has a fractured tibia. He is making moaning noises. When you press on the fingernail, he opens his eyes and pulls his hand away.

**9(iv).** 16-year-old Ratheesh fell backwards off a wall and hit his head. His friend said he was 'knocked out' for 2-3 seconds. He walked into the clinic and seems fine now after 2 hours.

**9(v).** 32-year-old Mr. John is involved in a RTA. When you talk to him, he opens his eyes, but he seems a bit confused when he talks. He does not lift his arms when you ask him. When you pinch his skin on his chest he moves his arms but does not grab your hand. If you press his fingernails he withdraws his arm.

**9(vi).** 7-year-old Harini fell off a tree and hit her head 3 hours ago. She has vomited 4 times, including just now in the clinic.

**10. THEME: DIMINISHED VISION [Questions 10 (i) –10 (vi)] (Total: 6 Marks)**

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

**Options:**

**A.** Myopia

**B.** Cataract

**C.** Giant cell arteritis

**D.** Cerebrovascular accident

**E.** Presbyopia

**F.** Retinal detachment

**G.** Multiple sclerosis

**H.** Migraine

**Questions: What is the diagnosis?**

**10(i).** 80-year-old Mrs. Meera presents with sudden loss of vision on left side. She has been troubled by unilateral left sided headache on and off for 1 week.

**10(ii).** 50-year-old Mr. Mani is not able to read the newspaper, but can see objects at a distance without difficulty.

**10(iii).** 68-year-old Mr. Rajesh presents with gradual progressive loss of vision. Now he is only able to count fingers in the left eye and tell light from dark in the right eye. Lenses seem cloudy.

**10(iv).** 8-year-old Chintu is not doing well at school and misbehaving in class. Snellen chart shows 6/18 in left and 6/12 in right eye. Pin hole improves to 6/9 and 6/12.

**10(v).** 29-year-old Mrs. Neela presents with blurred vision in left eye on and off for a few months.

**10(vi).** 47-year-old Mr. Manickam presents with sudden painless loss of vision in left eye. He had complaints of some flashes and floaters.

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