

FIRST YEAR THEORY EXAM – FEBRUARY 2018  
PAPER II - SURGERY AND ALLIED SCIENCES

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
  - ✓ In each set there are **some options** given on the top 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(vi)**

**Options:**

- A. Inj. Haloperidol
- B. Amitriptyline + counseling
- C. Tab. Chlorpromazine
- D. Tab. Trihexyphenidyl
- E. Tab. Diazepam
- F. Tab. Lithium
- G. Inj. Fluphenazine deconoate
- 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)	
3(ii)	
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. **18 year old girl, Akila comes to you with the complaint of mucopurulent discharge from her right ear. She gives a history of 5-6 similar episodes in the past which settled with antibiotics. She also tells you about her recent deterioration in the academic performance. (Total: 20 Marks)**
- A. What is the probable diagnosis? What are the other questions you would ask her? (3 Marks)  
B. What are the findings you will look for in clinical examination? How will you manage? (6 Marks)  
C. What are the Red flags and possible complications of this condition? (4 Marks)
- 5 days later Akila's brother, Arpan, 15 years old came with a history of mucopurulent discharge from the right ear since yesterday.**
- D. What is the probable diagnosis? What are the relevant questions you would ask in history taking? (3 Marks)  
E. What are the possible complications that can occur if not treated properly? (2 Marks)  
F. How will you manage him? (2 Marks)
2. **69 year old Mr. Madhavan presented with complaints of mild to moderate bleeding per rectum while passing stools since few days. He gives a history of intermittent constipation since 8-9 weeks and moderate bleeding per rectum and mass descending per rectum while passing stools. He also complains of increasing weakness and weight loss. (Total: 20 Marks)**
- A. List the differential diagnoses. (4 Marks)  
B. What further questions will you ask Mr. Madhavan? (5 Marks)  
C. What are the findings you will look for while examining Mr. Madhavan? (3 Marks)  
D. As a family physician how will you manage a patient coming with lower G.I. bleeding? (8 Marks)

**PART – B**

**EXTENDED MATCHING QUESTIONS**

**(ANSWER ALL QUESTIONS)**

1. **Theme: Dizziness and Vertigo [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. Vestibular neuronitis              | F. Meniere's disease                |
| B. Acute labyrinthitis                | G. Abnormal ocular input            |
| C. Pseudo vertigo                     | H. BPPV                             |
| D. Abnormal proprioceptor input       | I. Post – concussion or head injury |
| E. Atherosclerosis of cranial vessels | J. Orthostatic hypotension          |

### **Questions:**

**1(i).** 35 year old Mrs. Ruth comes to you with a history of dizziness with nausea. She has come walking on her own. Her vital signs are normal. She tells you that the dizziness is “rotational” and was precipitated by a change in position on walking in the morning. The vertigo lasted for 20-30 seconds. There is no history suggestive of headache, diabetes, cardiac or neurological disease. She gives no history of stress. Romberg test was normal.

**1(ii).** 29 year old Miss Rakhi comes with the complaint of having sensation of unsteadiness on standing or walking for 5-10 minutes immediately after a rollercoaster ride every time.

**1(iii).** 82 year old Mr. Rajshekhar is having sensation of unsteadiness on standing or walking for the past one month. He is not a diabetic, not a hypertensive and he is not on any drugs. No history of fever or ear discharge.

**1(iv).** 41 year old Mr. Bhaskar comes to you with the complaint of having sudden onset of giddiness for the last 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.

**1(v).** 26 year old Mr. Charles 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.

**1(vi).** 43 old Mrs. Mohini comes to you with complaints of a feeling that everything around her is spinning associated with nausea. This feeling lasts for more than thirty minutes; there is fluctuating hearing loss and tinnitus.

**2. Theme: Diagnosis of Orthopedic Conditions [Questions 2(i) – 2(vi)] (Total: 6 Marks)**  
From options ‘A to L’ given below, choose the best answer for questions 2(i) – 2(vi):

#### **Options:**

- |   |  |
|---|--|
| <b>A.</b> Biceps tendonitis                 | <b>G.</b> Chronic rotator cuff tendinitis        |
| <b>B.</b> Brachio radialis tendonitis       | <b>H.</b> Supraspinatus tendonitis               |
| <b>C.</b> Subluxation of shoulder           | <b>I.</b> Rotator cuff tear                      |
| <b>D.</b> Dislocation of shoulder           | <b>J.</b> Acute calcific rotator cuff tendinitis |
| <b>E.</b> Sub-acute rotator cuff tendinitis | <b>K.</b> Rupture of biceps tendon               |
| <b>F.</b> Supraspinatus tear                | <b>L.</b> Subluxation of shoulder                |

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

**2(i).** 42 year old Mrs. Abigale has come with complaints of recurrent episodes of shoulder pain that comes after a bout of unaccustomed activities. Examination done during these episodes, elicits a painful arc in the shoulder movement (60-120 degrees) on abducting the arm. Pain increases and reaches a peak and eventually, returns to normal.

**2(ii).** 39 year old Mr. Kenneth presented with complaints of recurrent episodes of shoulder pain that comes after a bout of demanding activities. Pain is characteristically worse at night, and patient cannot lie on affected side. Pain and stiffness restrict daily activities.

**2(iii).** 47 years old Mr. Melvin presented with complaints of shoulder pain. Pain is felt along the anterior border of the acromion (that is the place he shows) especially when held in extension. There is also pain on active abduction between 60 and 120 degrees of motion.

**2(iv).** 34 year old Mrs. Jaya presented with complaints of shoulder pain. Pain and tenderness are sharply localized to the bicipital groove.

**2(v).** 29 year old Mr. Bhaskar presented with complaints of right upper arm pain. The pain started suddenly when he was trying to put a heavy box in the top shelf of the cupboard. He says that he heard something snapping in the arm. On examination, prominent swelling was noticed in the lower part of the arm. There is no evidence of bony injuries.

**2(vi).** 23 year old Mr. Aditya presented with complaints of inability to lift the right shoulder following an injury. On examination, there is difficulty in initiating abduction and the abducted arm suddenly drops to the side when it is lowered beyond 45 degree abduction.

**3. Theme: Acute Abdomen [Questions 3(i) – 3(vi)] (Total: 6 Marks)**

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

**Options:**

- |                                      |  |
|--------------------------------------|--|
| <b>A.</b> Pyloric Obstruction        | <b>G.</b> Pancreatic pseudocyst        |
| <b>B.</b> Intestinal obstruction     | <b>H.</b> Abdominal aortic aneurysm    |
| <b>C.</b> Perforated Duodenal ulcer  | <b>I.</b> Acute appendicitis           |
| <b>D.</b> Ureteric colic             | <b>J.</b> Strangulated inguinal hernia |
| <b>E.</b> Ruptured ectopic pregnancy | <b>K.</b> Acute pancreatitis           |
| <b>F.</b> Cholecystitis              |  |

**Questions: What is your diagnosis in the following cases?**

**3(i).** 56 year old Mr. Abdul with a history of intermittent central colicky abdominal pain and distension, nausea, 5-6 episodes of vomiting, constipation. No history of fever. Hyperactive bowel sounds and vitals are stable.

**3(ii).** 47 year old Jaspal, a chronic alcoholic with a tender upper abdominal mass and CT scan showing a round, thick-walled, fluid-filled mass in the lesser sac.

**3(iii).** 39 year old Surya presented with severe colicky pain since 3 hours in the left loin radiating to the groin associated with three episodes of vomiting and stable vital signs.

**3(iv).** 51 year old Mr. Govindraj with past history of Acid peptic disease presented with sudden onset of continuous severe upper abdominal pain. On examination there is rigidity of abdomen, absent bowel sounds, pulse rate is 124b/min., BP of 110/60 mm Hg.

**3(v).** 55 year old Mrs. Sridevi presented with severe right hypochondrial pain radiating to the back of the scapula associated with vomiting. There is past history of similar episodes.

**3(vi).** 45 year old Mr. Nelson, presented with colicky abdominal pain and vomiting for the past 48 hours. On examination he is febrile, pulse rate is 130/minute, BP is 110/60 mm Hg. His abdomen is distended, tender, with absent bowel sounds and a localized, 3 x 4 cm sized, tender swelling in the right groin.

**4. Theme: Leg Ulcers [Questions 4(i) – 4 (vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |                             |                            |
|-----------------------------|----------------------------|
| <b>A.</b> Neuropathic ulcer | <b>E.</b> Arterial ulcer   |
| <b>B.</b> Traumatic ulcer   | <b>F.</b> Vasculitic ulcer |
| <b>C.</b> Marjolin's ulcer  | <b>G.</b> Venous ulcer     |
| <b>D.</b> Tropical ulcer    |                            |

**Questions: Identify the ulcer**

**4(i).** 51 year old Mr. Ranbir, a conductor, presented with an ulcer on the medial side of lower leg with sloping edges, brownish pigmentation of the surrounding skin and varicosities

**4(ii).** 37 year old Mr. Jayesh, a smoker, presented with an extremely painful ulcer on the lateral side of the anterior part of the leg with punched out edges. On examination cold, hairless limbs and feeble peripheral pulses are found. He gives a history of rest pain and intermittent claudication.

**4(iii).** 71 year old Mrs. Mayawati, with long standing venous ulcer on the medial side of lower limb developed a recent proliferative growth, rolled-out edges and associated with enlarged inguinal lymphadenopathy.

**4(iv).** 67 years old Mrs. Leelavathi, a diabetic, developed deep punched out deep infected and painless ulcer in the right side of the heel of feet after a trivial trauma.

**4(v).** 24 year old Navya came with a history of recurrent crops of multiple painful ulcers on the lower part of the legs associated with petechiae. She also gives a history of joint pains.

**4(vi).** 35 year old Mr. Devayya a rural labourer presented with an ulcer over the lower part of the right leg. Initially it started with an injury to the skin which later progressed to form an acutely painful ulcer and extended into the muscle. On examination the edges are thickened and raised and the central crater is necrotic and foul-smelling.

**5. Theme: Neck Swellings [Questions 5 (i) – 5 (vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |                                     |   |
|-------------------------------------|---|
| <b>A.</b> Cystic Hygroma            | <b>G.</b> Thyroglossal Cyst                                   |
| <b>B.</b> Plunging Ranula           | <b>H.</b> Ranula  |
| <b>C.</b> TB Lymphadenitis          | <b>I.</b> Cervical rib  |
| <b>D.</b> Sternomastoid tumour      | <b>J.</b> Integrated Child Development Services Scheme (ICDS) |
| <b>E.</b> Haematological Malignancy | <b>K.</b> Branchial cyst                                      |
| <b>F.</b> Ectopic thyroid           |   |

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

**5(i).** 8 year old Master Vaibhav, presented with a bluish, cystic, slowly enlarging, highly transilluminable swelling under the tongue.

**5(ii).** 19 year old Mr. Aditya, presented with a slowly enlarging painless anterior triangle cystic swelling, aspirate of the swelling showing cholesterol crystal under microscope.

**5(iii).** 5 month old Ananya presented with a large, brilliantly translucent soft, compressible mass in the right posterior triangle of the neck

**5(iv).** 5 year old Sonam presented with a 1-cm, spherical, firm swelling which moves with tongue protrusion and frequently gets infected.

**5(v).** 1 month old baby Afreen delivered by forceps with torticollis and firm fibrous mass felt in the left Sternomastoid.

**5(vi).** 15 year old Shabnam presented with history of night sweats, fever, weight loss and multiple smooth, rubbery non- tender masses on both sides of the neck.

**6. Theme: CPR [Questions 6(i) – 6 (vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |   |                                      |
|---|--------------------------------------|
| <b>A.</b> Get all the previous records of the patient and a detailed history. | <b>F.</b> Keep in recovery position. |
| <b>B.</b> 5 – 10 seconds  | <b>G.</b> Check the response.        |
| <b>C.</b> Elicit a quick history from the bystanders.                         | <b>H.</b> 30 compressions: 2 breaths |
| <b>D.</b> Try to make her sit up.   | <b>I.</b> 15 compressions: 2 breaths |
| <b>E.</b> Transfer to the critical care unit.                                 | <b>J.</b> Start chest compressions.  |
|   | <b>K.</b> Call for help.             |
|   | <b>L.</b> 15 – 20 seconds            |

**Questions:**

*47 year old Shilpa, was found unconscious in the waiting area of your OPD. You were called.*

**6(i).** What would you do first?

**6(ii).** What would be your next step?

*You check the carotid pulse and cannot localize it.*

**6(iii).** How much time you can spend for checking the pulse?

**6(iv).** What would your response be once you are unable to localize the carotid pulse?

**6(v).** What is the frequency of cycles advised?

**6(vi).** If she responds to your efforts, what would you do?

**7. Theme: Diagnosis of Acute Abdomen [Questions 7 (i) –7 (vi)]**

**(Total: 6 Marks)**

From options 'A to N' given below, choose the best answer for questions 7(i) – 7(vi):

**Options:**

- |  |                                       |
|--|---------------------------------------|
| <b>A.</b> Murphy's sign                | <b>H.</b> Sentinel loop sign          |
| <b>B.</b> Cullen's sign                | <b>I.</b> Retroperitoneal haemorrhage |
| <b>C.</b> Acute intestinal obstruction | <b>J.</b> Kehr's sign                 |
| <b>D.</b> McBurney's sign              | <b>K.</b> Ruptured duodenal ulcer     |
| <b>E.</b> Iliopsoas sign               | <b>L.</b> Rovsing's sign              |
| <b>F.</b> Acute appendicitis           | <b>M.</b> Splenic rupture             |
| <b>G.</b> Grey Turner's sign           | <b>N.</b> Obturator Sign              |

**Question:**

*55 year old Mr. Mohan comes to you with the complaints of abdominal pain since yesterday evening. On examination, you have noticed bluish discoloration in the periumbilical region.*

7(i). What is the name of this sign?

7(ii). What is your possible diagnosis?

*29 year old Mr. Jaisingh presented with complaints of abdominal pain for the past 2 days. He also has severe left shoulder pain and gives history of fall while riding a motorbike 2 days ago.*

7(iii). What is the name of the sign?

7(iv). What is your possible diagnosis?

*14 year old Seema presented to you with the complaints 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.*

7(v). What is the name of this sign?

7(vi). What is your possible diagnosis?

**8. Theme: Haematemesis [(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. Cirrhosis of liver

B. Oesophagitis

C. Gastric malignancy

D. Peptic ulcer

E. Necrotising enterocolitis

F. Oesophageal varices

G. Acute gastric erosion

H. Mallory-Weiss syndrome

I. Portal vein thrombosis

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

**8(i).** 49 year old Mr. Kumar had an alcohol party. He ended up binge drinking which resulted in 6 episodes of vomiting with retching at the end of which he had a small amount of hematemesis.

**8(ii).** 37 year old Mr. Ramraj, comes to you with epigastric pain of about one month duration. He gives a past history of dyspepsia 3 years. For the last 20 years, he had, on an average, smoked one packet of cigarettes a day and had indulged in social drinking, about twice a month. He takes 1 or 2 painkillers twice or once daily, for his knee pain. Last night his epigastric pain increased and he vomited blood about 30 ml of fresh blood.

**8(iii).** 52 year old Mrs. Sheetal has severe osteoarthritis in the left knee and has been taking over-the-counter medicine for the last 5 days. Last night she had hematemesis of around 50 ml. On examination she has severe epigastric tenderness, however there is no guarding or rigidity.

**8(iv).** 44 year old Mr. Rajalingam, presented to you with history of postprandial fullness of abdomen and few episodes of vomiting since 2 months which now has become coffee ground coloured since the past 1 week. He also gives history of severe anorexia and loss of weight for the last 4 months. He is a smoker since 20 years and not an alcoholic. There is no past history of jaundice or hepatitis B infection or NSAID usage.

**8(v).** 41 year old Mr. Ramprasad presented for the first time with a bout of haematemesis. He has had attacks of jaundice in the past two years. His hepatitis B serology is positive. On examination he has ascites.

**8(vi).** 40 year old Mr. Nathan complaints of recurrent episodes of retrosternal pain precipitated by oily spicy food, associated with water brash and cough for few months. Today he had one episode of scanty blood stained vomitus.

**9. Theme: Management of Leg Ulcers [Questions 9 (i) – 9(vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |                                |                                   |
|--------------------------------|-----------------------------------|
| <b>A.</b> Normal saline        | <b>H.</b> Povidone iodine         |
| <b>B.</b> Topical antiseptics  | <b>I.</b> Debridement             |
| <b>C.</b> Saline dressing      | <b>J.</b> Vaseline gauze dressing |
| <b>D.</b> Fluticasone          | <b>K.</b> Clobetasol              |
| <b>E.</b> Non-elastic bandages | <b>L.</b> Head end elevation      |
| <b>F.</b> Hydrogen peroxide    | <b>M.</b> White petroleum jelly   |
| <b>G.</b> Tap water            | <b>N.</b> Compression bandaging   |

**Questions:**

*53 years old Mr. Qureshi came to you with the complaint of ulcer on his right leg for the past 1 year. On examination, you found that varicose veins are present on the right lower limb. He has an ulcer 2×3 cm just above the right medial malleoli and brownish pigmentation of the surrounding skin.*

**9(i).** While giving the ulcer care, which solution will you use to cleanse the ulcer area?

**9(ii).** What type of dressing you will prefer to apply for his ulcer?

**9(iii).** What advice will you give him to prevent recurrence?

*After few weeks, Mr. Qureshi came to you saying he is regularly following your advice and his ulcer is now healing well, but he has itchy sensation over the surrounding skin of the ulcer. On examination you saw erythema, weeping and scaling in the surrounding skin of the ulcer area.*

**9(iv).** What is the skin ointment you will give for him?

*41 year old Menon a teacher presented with complaints of an ulcer on the dorsum of his foot with rest pain. Pain is more in the night and interferes with his sleep. He is a chronic smoker*

**9(v).** What advice will you give to prevent his symptoms?

*37 year old Mrs. Anushka presented with complaints of a deep, painless, and infected ulcer on the heel of the foot.*

**9(vi).** What ulcer care will you give?

**10. Theme: Neck Lumps [Questions 10 (i) – 10 (vi)]**

**(Total: 6 Marks)**

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

**Options:**

- |  |                                       |
|--|---------------------------------------|
| <b>A.</b> Thyroid cyst                     | <b>H.</b> Growth hormone deficiency   |
| <b>B.</b> Subacute Lymphocytic Thyroiditis | <b>I.</b> Ectopic undescended thyroid |
| <b>C.</b> Metastases of neoplastic disease | <b>J.</b> Graves' disease             |
| <b>D.</b> De Quervain Thyroiditis          | <b>K.</b> Papillary carcinoma         |
| <b>E.</b> Multinodular goitre              | <b>L.</b> Hashimoto's Thyroiditis     |
| <b>F.</b> Simple goitre                    |                                       |
| <b>G.</b> Anaplastic carcinoma             |                                       |

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

**10(i).** 39 year old Mrs. Laxmibai 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).** 19 year old Miss Radha presents with a thyroid swelling 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).** 41 year old Mrs. Gunwanti presented with enlargement of thyroid gland with evidence of hypothyroidism and positive result for thyroid antibodies.

**10(iv).** 33 year old Mrs. Oswald presented with painful thyroid swelling, fever and malaise for the past 2 weeks which started along with what looked like a viral fever.

**10(v).** 29 year old Mrs Disha a type 1 diabetic who is three months postpartum presents with new onset thyroid swelling.

**10(vi).** 36 year old Mrs. Ashisha presented 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.

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