

FINAL YEAR THEORY EXAM – AUGUST 2016
PAPER I - MEDICINE AND ALLIED SCIENCES

QP .CODE: 434021

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(vi)

Options:

- A. Inj. Haloperidol
- B. Amitriptyline + counseling
- C. Tab. Chlorpromazine
- D. Tab. Trihexyphenidyl
- E. Tab. Diazepam
- F. Tab. Lithium
- G. Inj. Fluphenazinedecanoate
- 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:
- ❖ Each option may be used more than once. Some options may not be used at all.

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

PART – A
DESCRIPTIVE QUESTIONS
(ANSWER ALL QUESTIONS)

- 1. 20 year old Mr. Kannan is diagnosed with asthma. (Total: 20 Marks)**
- A.** What are the salient points in history you would elicit in a patient with suspected asthma? **(2 Marks)**
 - B.** What are the diagnostic findings that suggest and exclude asthma? **(2 Marks)**
 - C.** What are the investigations that help us to demonstrate reversible airway obstruction? Briefly discuss. **(3 Marks)**
 - D.** How will you classify the severity of asthma, based on day/night symptoms and FEV1/PEF variability? **(3 Marks)**
 - E.** What are the 5 steps of pharmacological management of asthma in adults? **(5 Marks)**
 - F.** Discuss briefly about the personal action plan in asthma. **(5 Marks)**
- 2. 35 year old Mr. Ranganathan has come to your clinic with severe epigastric pain for the fourth time in the last two months. You observe that he looks tired and untidy; his eyes are blood shot and there is mild tremor of hands. (Total: 20 Marks)**
- A.** Name 4 screening scales used for screening of problem drinking. What are the symptoms and signs in a patient that suggest screening for problem drinking? **(4 Marks)**
 - B.** Discuss CAGE questionnaire. **(3 Marks)**
 - C.** What are the stages of decision making? As a family physician, how will you specifically support your patient in every stage of decision making? **(5 Marks)**
 - D.** What are the pharmacological agents used in problem drinking? Discuss their indications and doses. **(4 Marks)**
 - E.** What are the clinical features, investigations and management of delirium tremens in primary care? **(4 Marks)**

PART – B
EXTENDED MATCHING QUESTIONS
(ANSWER ALL QUESTIONS)

- 1. THEME: MOVEMENT DISORDERS [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. Myoclonus | F. Athetosis |
| B. Essential Tremor | G. Tics |
| C. Dystonia | H. Functional disorder |
| D. Hemiballismus | I. Tardive dyskinesia |
| E. Chorea | J. Dystonia |

Questions: Identify the movement disorder.

1 (i) . Mr. Roy, a 50 year old retired teacher and a patient with End Stage Renal Disease, complains of occasional brief, involuntary movements involving a muscle or a group of muscles.

1 (ii). Mrs. Sonia, a 45 year old housewife, who was started on antipsychotics, has come after two days with complaints of twisting and repetitive movements and abnormal postures.

1 (iii) . Mr. Krishnan, a 60 year old farmer has come with complaints of bilateral knee pain. On examination, there is involuntary fine rhythmic oscillation of both hands. But Mr. Krishnan says that those movements do not affect his daily activities.

1 (iv). 12 year old Lalitha has come with complaints of abnormal, brief, irregular involuntary dance like movements of both upper and lower limbs. The movements stop during sleep.

1 (v). Mr. Lal is brought to your clinic by his relatives with complaints of frequent falls. He has wild, large amplitude flinging movements of left upper and lower limbs. The MRI report that they have brought along with them shows an infarct in the right sub thalamic area.

1 (vi). Mr. Das, a 30 year old IT professional who is on treatment for his obsessive compulsive disorder has complaints of repetitive stereotyped facial movements.

2. THEME: MANAGEMENT OF DIABETES [QUESTIONS. 2(i) – 2(vi)]

(Total: 6 Marks)

From the options ‘A to I’ given below, choose the best answer for the questions 2(i) – 2(vi):

Options:

A. Acarbose

B. Meglitinides

C. Metformin

D. Glibenclamide

E. Glimpiride

F. Gliptins

G. Gliclazide

H. Pioglitazone

I. Lixisenatide

Questions: Find the correct OHA.

2(i) . 42 year old Mrs. S, a teacher, is a recently diagnosed diabetic. On examination, her blood pressure is 120/80 mm of Hg; Her BMI is 29. You have discussed with her about life style modifications; when she visits you again, her HbA1C is 11 mg/dl and her creatinine is 0.8 mg/dl. What would be the drug of choice for her?

2(ii). Mrs. K is a flower vendor in the market place and she supports her family with her meagre income. She is a recently diagnosed diabetic. On examination, her blood pressure is 120/80 mm of Hg; Her BMI is 23. When she was started on metformin after a period of life style modifications trial, she is not able to tolerate it all because of abdominal distension and loose stools. What will be your next drug?

2(iii). Mr. T needs a sulphonylurea. His serum creatinine is 1.9 mg/dl. What sulphonylurea will you select for him?

2 (iv) . Mr. L is on a sulphonylurea for his control of blood sugars. His blood sugars are not under control in spite of lifestyle modifications and good compliance. You want to add another OHA. What OHA **should not be** added to a sulphonylurea?

2 (v). Mrs. G was started on a OHA by another practitioner. Now she has come with clinical features of pancreatitis. She also tells you that she had persistent headache from the day the drug was started. What is the probable drug?

2 (vi). Mr. E is on three OHAs –Metformin, Gliclazide and pioglitazone. Now he has come with jaundice. The drug you will stop immediately is

3. THEME: PALLIATIVE CARE [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. Paracetamol | F. Diazepam |
| B. Ibuprofen | G. Dexamethasone |
| C. Morphine | H. Hyoscine butyl bromide |
| D. Tramadol | I. Fentanyl |
| E. Amitriptyline | J. Vitamin B6 |

Questions: What does your patient need for palliation?

3 (i) . Mrs. Kamala has burning, shooting pains with altered sensation in both the legs following her chemotherapy with vincristine. The drug you will advise her is

3 (ii) Mr. Srinidhar is diagnosed with an inoperable low rectal carcinoma. He has severe tenesmus. The adjuvant that will help him is

3 (iii) The adjuvant for Ms. Devi, who has inoperable intracranial mass and has evidence of raised intracranial pressure

3 (iv) Mr. Yogesh has cholangiocarcinoma and has right hypochondrial pain. The ideal adjuvant for visceral distension pain is

3 (v) Mr. Mani, a 51 year old taxi driver, recently diagnosed with an inoperable malignancy is not able manage his pain with step 1 drugs in WHO pain ladder. The drug you will advise him next according to WHO analgesic ladder is

3 (vi) After few weeks, Mr. Mani has persisting pain. The drug you will advise him next according to WHO analgesic ladder is

4. THEME: DIARRHOEA IN ADULTS [QUESTIONS. 4(i) – 4(vi)] (Total: 6 Marks)
From the options ‘A to J’ given below, choose the best answer for the questions 4(i) – 4(vi):

Options:

- | | |
|---------------------------------|--------------------------------------|
| A. <u>Vibrio Cholera</u> | F. <u>Giardia lamblia</u> |
| B. <u>Staphylococcus aureus</u> | G. <u>Clostridium difficile</u> |
| C. <u>Escherichia coli</u> | H. <u>Mycobacterium tuberculosis</u> |
| D. <u>Entamoeba histolytica</u> | I. <u>Mycobacterium kansasii</u> |
| E. <u>Entamoeba coli</u> | J. <u>Isospora belli</u> |

Questions: Identify the causative organism.

4 (i). Mr. K and his family had their dinner at a restaurant in the town. Early next morning, they have all developed abdominal cramps, headache, vomiting and diarrhoea. There is no history of similar complaints in the neighbourhood.

4 (ii). Mrs. L who was on co-amoxiclav for her chronic sinusitis, has come with profuse watery diarrhoea with mucoid pus, 10-15 times a day, abdominal cramps and fever.

4 (iii). Mr. J, a tourist from the United States had his first breakfast in a roadside dhaba in the morning. Now, he presents with bloody diarrhoea associated with fever, vomiting and abdominal pain.

4 (iv). Mr. S presents to you with complaints of “stomach upset” for 2-3 months. She has two or more unformed stools in a day with mucus or occasional blood. There is associated abdominal pain. On examination, there is tenderness along the line of colon, more marked over the caecum and pelvic colon.

4 (v). Mrs. D presents with complaints of loose stools for 4 weeks. The stools are greasy, foul smelling and associated with abdominal pain and bloating. There is history of post prandial hurry.

4 (vi). 20 year old Ms. R presents with complaints of loose stools, weight loss and evening rise of temperature for the past 3 weeks. On examination, there is ascites.

5. THEME: SEXUALLY TRANSMITTED DISEASES [QUESTIONS. 5 (i) – 5 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|---|---|
| A. Permethrin 5% | H. Inj. Benzathine Penicillin G 2.4 million units IM weekly for 3 weeks |
| B. Salicylic acid and mild steroid | I. Acyclovir |
| C. Permethrin 1% | J. Cefixime 400 mg single dose |
| D. Azithromycin 1 g single dose | K. Metronidazole 400 mg tid for 7 days |
| E. Trimethoprim- Sulfamethoxazole | L. Inj. Benzathine Penicillin G 2.4 million units IM stat |
| F. Doxycycline 100mg PO twice daily for 21 days | M. Inj. Penicillin G for 10-14 days |
| G. Cefixime 200 mg bd for 5 days | |

Questions: What is the appropriate pharmacological management?

5 (i). Mr. P has complaints of painless ulcer on the penis which started as a painless papule that has eroded and indurated rapidly. On examination, you found discrete, firm, mobile, and painless inguinal lymph nodes without overlying skin changes.

5 (ii). Mrs. G has genital ulcers which are painful, multiple and with undermined edges. Ulcers are seen on the labia majora, labia minora, thighs, and perineum. The inguinal lymph nodes show evidence of suppuration.

5 (iii). Mr. L has come with dysuria and urethral discharge. On examination, you found that he also has tender swelling in the scrotum suggestive of epididymitis.

5 (iv) Mr. Y has complaints of itching and burning of the pubic area which is worse at night. On examination, you can see secondary skin lesions with few lice and nits attached to the pubic hair.

5 (v). Mr. K has painless shallow erosion in the penis on the penile shaft with tender enlarged regional lymphadenopathy.

5 (vi). Mrs. H has come with vaginal discharge and itching in the genitalia. On examination, you find that the discharge is greenish, frothy and has a strong odour. There are no risk factors.

6. THEME: HYPERTENSION [QUESTIONS. 6 (i) – 6 (vi)] (Total: 6 Marks)
From the options ‘A to F’ given below, choose the best answer for questions 6 (i) – 6 (vi):

Options:

- | | |
|------------------------------------|-----------------------------|
| A. ACE Inhibitors | D. Diuretics |
| B. Beta blockers | E. Alpha blockers |
| C. Calcium channel blockers | F. Alpha methyl dopa |

Questions: Choose the appropriate antihypertensive.

- 6 (i).** 60 year old Mr. Harikrishanan who has isolated systolic hypertension
6 (ii). First drug of choice for 50 year old Mr. Giri who has cerebrovascular disease and hypertension
6 (iii). Drug of choice for 45 year old Mr. Kumar who has ischaemic heart disease and hypertension
6 (iv). 25 year old Mrs. Anita who has pregnancy induced hypertension
6 (v). 70 year old Mr. Sami who has hypertension and benign prostatic hyperplasia
6 (vi). 60 year old Mr. Suma with chronic kidney disease

7. THEME: MANAGEMENT IN MENTAL HEALTH [QUESTIONS. 7(i) – 7 (vi)] (Total: 6 Marks)

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

Options

- | | |
|----------------------------|---------------------------|
| A. Lithium | F. Haloperidol |
| B. Sodium valproate | G. Chlorpromazine |
| C. Carbamazepine | H. Fluphenazine |
| D. Risperidone | I. Trihexyphenidyl |
| E. Olanzapine | |

Questions: What is the drug?

7 (i) . Mrs. Neela, who was started on this drug for bipolar disorder, complaints of weight gain

7 (ii) .Ideal drug for Mr. James, who has schizophrenia, but without marked agitation.

7 (iii) . Mrs. Lakshmi has schizophrenia. She has sleep disturbances and her husband says she is agitated most of the time when she is awake. Her blood sugar and lipid levels are normal. The antipsychotic drug that will be suitable for Mrs. Lakshmi is

7 (iv) . Ideal drug for 18 year old Raju, who has schizophrenia and refuses to take drugs daily

7 (v) . Mr. Hari was on antipsychotics for several years. Now for the last 2 weeks he has discontinued his medications completely and now he has come in acute psychosis, shouting aloud and violent. Mr. Hari needs this drug immediately.

7(vi). Ideal drug for Mr. Felix, who has developed extra pyramidal symptoms after starting on antipsychotics

8. THEME: DERMATOLOGY [QUESTIONS. 8(i) – 8 (vi)] (Total: 6 Marks)

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

Options

- A. Granuloma annulare
- B. Lichen sclerosus
- C. Pityriasis alba
- D. Pityriasis rosea
- E. Vitiligo
- F. Lichen planus
- G. Acne vulgaris
- H. Rosacea
- I. Chloasma
- J. Atopic dermatitis
- K. Seborrhoeic keratosis

Questions: Identify the skin condition.

8 (i) . Mrs. Asha has come with complaints of itchy lesions in the arms and trunk. The lesions are shiny, flat-topped papules, violaceous in colour. On examining the oral cavity, you see lesions with white lacework pattern.

8 (ii) Mrs. Leela has come with complaints of dark pigmentation both cheeks following her pregnancy. The lesion is not itchy.

8 (iii) 12 year old Gowri is brought by her mother with complaints of small, multiple oval shaped hypo pigmented macular lesions on the face. The sensation over the lesions is normal and there is no itching. There is a recent history of allergic lesions in the same areas.

8 (iv) 24 year old Ms Kala has come with complaints of white macular lesions in the lips and finger tips. The sensation over the lesions is normal and there is no itching.

8 (v) 23 year old Ms. Sonia has come with complaints of intermittent erythematous lesions in the face, sparing of perioral and periorbital areas. There are pustules and papules but there are no open comedones.

8 (vi) 3 year old Sudhakar is brought with dry, ill-defined erythematous scaly lesions both cheeks with severe itching. There are similar lesions in the antecubital fossa.

9. THEME: POISONING [QUESTIONS. 9 (i) – 9 (vi)]

(Total: 6 Marks)

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

Options

- A. Organophosphates
- B. Mushroom poisoning
- C. Methadone
- D. Amphetamines
- E. Tricyclic antidepressants
- F. Alcohol
- G. Oduvanthalai
- H. Difenacoum – rodenticide

Questions: Identify the poison ingested.

9 (i) 16 year old Ms. Madhumidtha has come with history of ingestion of 20-25 tablets prescribed for her mother. On examination, she is delirious and febrile. Pulse rate is around 124/ minute; pupils are dilated. The skin is dry.

9 (ii) 28 year old Mr. Hari is brought by his relatives with history of ingestion of a poison. On admission, you find he has passed loose stools in his dress and he is sweating profusely. His pulse rate is 40 / minute, pupils are constricted.

9 (iii) 18 year old Raju is brought by his relatives to hospital. On examination, he is drowsy, blood pressure is 70/50 mm of hg, breathing is shallow and temperature is 97°F. His pupils are constricted. You are told that both his parents are in Middle East and he is staying with his uncle's family. He has stopped his schooling few months ago, because he didn't feel like going to school.

9 (iv) 22 year old Johnson is brought by his relatives with history of ingestion of some tablets. On examination, his blood pressure is 140/ 100 mm of hg. Pulse rate is 120/ minute, temperature is 101°F. He is agitated and restless; his pupils are dilated.

9 (v) Mrs. Meena is brought to the hospital with history of ingestion of plant paste following a quarrel with her husband. She is complaining of abdominal pain and double vision. Her pulse is irregular and feeble; blood pressure is 80/ 60 mm of hg and respiratory rate is 64/ minute. Chest X-ray after stabilization is suggestive of ARDS.

9 (vi) 16 year old Hassan is brought by his relatives with history of ingestion of a household poison. He has taken the poison the previous day but had told no one. He is brought to you today morning, after he has vomited blood.

10. THEME: HIV AND RELATED INFECTIONS [QUESTIONS. 10(i) – 10 (vi)]

(Total: 6 Marks)

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

Options

- A. Cerebral Lymphoma
- B. Cerebral Toxoplasmosis
- C. Oesophageal Candidiasis
- D. Oral hairy leukoplakia

- E. Drug induced peripheral neuropathy
- F. Herpes Zoster
- G. Lymphoma
- H. Tuberculosis
- I. CMV pneumonia
- J. Pneumocystis carinii infection
- K. Cryptococcal Meningitis
- L. Norwegian Scabies
- M. Seborrhoeic Dermatitis
- N. Kaposi's Sarcoma

Questions: Identify the HIV related infections.

10 (i) 30 year old Mr. T, a farmer, has come with complaints of burning pain and altered sense of taste, painful swallowing, retrosternal pain and weight loss. On examination, he has white curdy plaques on the tongue, inner cheek and palate. His investigations show that he is HIV positive.

10 (ii). 45 year old Mr. J, a teacher, on HAART, has come with complaints of left sided chest pain. On examination, you find vesicular lesions in that area where he complains of pain.

10 (iii). 26 year old Mr. K presents with dry cough and progressively increasing breathlessness for 2 days. On examination, he is tachypnoeic, SPO₂ is 82%. On examination there are fine crepitations bilaterally. Chest x-ray shows ground glass appearance with few small pneumatoceles.

10 (iv). 22 year old Mr. L, diagnosed and started on HAART four months ago, is admitted with high fever and protracted headache. On talking to the relatives, you find that he is not taking tablets for the past two months. His CSF India ink preparation is positive.

10 (v). 25 year old Ms. M who was diagnosed 2 years ago with HIV infection, presents now with seizures. She has not been on regular follow-up. After recovering from seizures, she was noticed to have left hemiparesis.

10 (vi). 22 year old Mr. N, who was diagnosed to have HIV infection, presents with skin lesions, which have fine, loose, waxy scales, involving predominantly face and scalp. There are few lesions in the intertriginous areas.

(LK 0217)

M.MED. FAMILY MEDICINE

(Sub: Code: 4021)

**FINAL YEAR THEORY EXAM – FEBRUARY 2017
PAPER II - MEDICINE AND ALLIED SCIENCES**

QP .CODE: 434021

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Maximum Marks: 100

INSTRUCTIONS

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- **Part A** will be **descriptive type questions** based on case scenarios. **(40 Marks)**
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 - ✓ 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. 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)	
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. **29 year old Mrs. Kamala comes to see you with complaints of a headache for the past 3 weeks.** (Total: 20 Marks)
- A. How will you classify headaches according to the International Headache Society? (2 Marks)
 - B. Which is the most common type of primary headache disorder and list 2 non-pharmacological methods to manage this type of headache? (3 Marks)
 - C. Mention the red flags that you will look out for in the history and physical findings while evaluating a patient with headache? (4 Marks)
 - D. What are the diagnostic criteria for a Migraine headache (3 Marks)
 - E. What are some factors that would prompt you to consider preventive therapy in a patient with migraine headaches? (3 Marks)
 - F. Discuss briefly the treatment of an acute migraine headache according to severity. (5 Marks)
2. **65 year old Mr. Rao has come to your clinic with chest pain of a sudden onset earlier this morning which lasted for about 30 minutes. You observe that he appears fatigued and slightly pale.** (Total: 20 Marks)
- A. Enumerate the common causes of chest pain that we see in practice? (4 Marks)
 - B. Classify and describe briefly the characteristics of Acute Coronary Syndrome. (5 Marks)
 - C. Classify the important drugs used in the treatment of a patient with unstable angina and mention one adverse effect for each. (5 Marks)
 - D. What abnormalities may be noted on an ECG in a patient with an ST Elevation Myocardial Infarction (STEMI) (2 Marks)
 - E. What are the poor prognostic factors in a patient with unstable angina? (4 Marks)

PART – B
EXTENDED MATCHING QUESTIONS
(ANSWER ALL QUESTIONS)

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

Options:

- | | |
|-----------------------------|----------------------|
| A. ACE Inhibitors | D. Diuretics |
| B. Beta blockers | E. Alpha blockers |
| C. Calcium channel blockers | F. Alpha methyl dopa |

Questions: Choose the appropriate antihypertensive.

- 1(i). Drug of choice for 45 year old Mr. Khan who has ischaemic heart disease and hypertension.
1(ii). First drug of choice for 50 year old Mr. Girish who has cerebrovascular disease and hypertension.
1(iii). 60 year old Mr. Hari who has isolated systolic hypertension?
1(iv). 60 year old Mrs. Suma with chronic kidney disease.
1(v). 70 year old Mr. Solomon who has hypertension and benign prostatic hyperplasia.
1(vi). 25 year old Mrs. Asha who has pregnancy induced hypertension.

**2. THEME: DIAGNOSIS OF COMMON SKIN INFECTIONS [(QUESTIONS 2 (i) To 2 (vi)]
(Total: 6 Marks)**

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

Options :

- | | |
|--------------------------|-------------------------------------|
| A. Impetigo | H. Herpes Simplex gingivostomatitis |
| B. Candidiasis | I. Condylomaacuminate |
| C. Scabies | J. Tinea capitis |
| D. Herpes Zoster | K. Tinea cruris |
| E. Pityriasis Versicolor | L. Erythrasma |
| F. Tinea Corporis | M. Trichomycesaxillaris |
| G. Common Wart | |

Questions: Choose the correct diagnosis from the options above for the case scenarios given below:

- 2 (i). 7 year old Sukumar has come with the complaint of itching interdigital regions of both hands and genital area which is more in the night.
2 (ii). 30 year old Mr. Balu presents with oral lesions which are more on the hard palate and resemble curdy precipitates.
2 (iii). 18 year old Mr. Faizal has come with itchy circular lesions in the back which have a central clear area.
2 (iv). 72 year old Govind is presenting with vesicular lesions on one sided chest wall, which are burning and intensely painful.
2 (v). 21 year old Mr. Subhan has a symptomatic, brown scaly well defined macules in both axillae.
2 (vi). 10 year old Babu who lives in a school hostel presents with hypo-pigmented coalesced macules over his chest and upper back. He says that many of his hostel-mates also have similar lesions.

3. THEME: DYSPNEA [QUESTIONS. 3(i) – 3(vi)] (Total: 6 Marks)

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

Options:

- | | |
|------------------------|---------------------------------------|
| A. Right Heart Failure | B. NYHA Class III or IV heart failure |
|------------------------|---------------------------------------|

- C. Mitral Stenosis
- D. Pleuritis
- E. Cardiogenic Pulmonary Edema (CPE)
- F. Aortic Stenosis
- G. Cardiac Tamponade
- H. MI in the past 6 months

- I. Left Heart Failure
- J. NYHA Class I or II heart failure
- K. Cardiomyopathy
- L. Pericarditis
- M. Mitral Regurgitation

Questions: For the following scenarios, find the correct option.

3 (i). 67 year old Mr. Sushil, a retired policeman presented with complaints of dyspnea, peripheral oedema and fatigue and what diagnosed to have right heart failure. What is the most common cause of right heart failure?

3 (ii). 30 year old Radha presents with exertional dyspnea and orthopnea. On auscultation, there is a loud S1 with a mid-diastolic murmur best heard in the lateral position. What is your diagnosis?

3 (iii). 59 year old Mr. Singh presents with dyspnea, orthopnea and Paroxysmal Nocturnal Dyspnea (PND) and has a history of significant alcohol consumption on a daily basis for many years. What is your likely diagnosis?

3 (iv). Mr. Lokesh is diagnosed with significant congestive heart failure and wants to know if he can continue to remain sexually active. Which of the options is a high risk factor for him?

3 (v). Mr. Varghese presents with acute onset of left sided chest pain and dyspnea. The chest pain is relieved on sitting up and leaning forward. On examination, a scratchy, high pitched sound best heard with the patient sitting up and leaning forward is noted. What is your diagnosis?

3 (vi). Mr. Gopal is brought to the emergency room after sustain a blunt injury to his chest. He is very dyspneic and is also found to be hypotensive, with jugular venous distension. What is your diagnosis?

4. THEME: DIAGNOSIS – GERIATRICS [(QUESTIONS 4 (i) TO 4 (vi)] (Total: 6 Marks)
From the options ‘A to O’ given below, choose the best answers for the questions 4(i) to 4(vi):

Options :

- | | |
|--------------------------------------|------------------------------------|
| A. Delirium | H. Mild Cognitive Impairment (MCI) |
| B. Alzheimer’s dementia | I. Stroke in evolution |
| C. Confusion Assessment Method (CAM) | J. Parkinson’s disease |
| D. Incontinence | K. Falls Assessment |
| E. Wilson’s disease | L. Parkinsonism |
| F. Mini Mental State Exam (MMSE) | M. Late life depression |
| G. Seizure disorder | N. ADL Assessment |
| | O. Age-related memory loss |

Questions:

4. (i) Mr. Anand, an 80-year-old otherwise healthy man developed right sided weakness for which he sought medical attention only after 48 hours. On examination, he was found to have mild right hemiparesis. What is the diagnosis of concern in this patient?

4. (ii) Mr. Suresh, a 74 year old gentleman, has been brought to the clinic by his family as they are concerned about overall health. The family reports that his walk and talk have changed. On exam, he has a blank facial expression and slow voluntary movements. When asked to walk, he had difficulty rising from his chair and his gait was characteristic of small, shuffling steps. What is your diagnosis?

4. (iii) Mrs. Roopadevi, an 84 year old lady, was admitted to the hospital with severe cellulitis of the left lower limb. On day three of admission, she became agitated, pulled out her IV line and was trying to leave the ward. She became very angry with the nurse who tried to help her and said that she was trying to hurt her. What is the likely diagnosis?

Mrs. Prema, a 76 year old lady was brought to the clinic by her daughter with complaints of forgetfulness. The patient denied being forgetful and was angry with her daughter for bringing up this topic. The daughter reported that in the past few weeks, on few occasions, her mother has left the gas stove on after cooking and left the kitchen. Mrs. Pramila also has difficulty recalling the names of her grandchildren whom she sees regularly.

4. (iv) What is the likely diagnosis?

4. (v) What is regarded as the “gold standard” assessment for this condition?

Mr. Raju, 67 year old, a retired engineer, is distressed because he could not remember the name of a friend he met that morning. He has no other functional impairment.

4. (vi) What is his problem?

5. **THEME: FEVER [QUESTIONS. 5(i) – 5(vi)]**

(Total: 6 Marks)

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

Options:

A. Plasmodium vivax

B. Leptospirosis

C. Primaquine

D. Doxycycline

E. Enteric fever

F. Chloroquine

G. Complicated Malaria

H. CURB-65

I. Plasmodium falciparum

J. Aedes aegypti

K. Ceftriaxone

L. PSI Score

M. Widal test

Questions: Pick the best option for each stem

5 (i) . Mrs. Kamala lives in an urban area and is presenting with symptoms that suggest a dengue syndrome. What vector is responsible for the transmission of this virus?

5 (ii) . 33 year old Mr. Murthy presents with fever, headache and myalgia. On examination he has a maculopapular rash on his trunk along with lymphadenopathy and hepatosplenomegaly. A diagnosis of Scrub typhus is made. What is the drug of choice for treatment?

5 (iii). 22 year old Arun comes to see you with fever, chills and an altered sensorium and is diagnosed with cerebral malaria. What is the causative organism?

5 (iv). 27 year old Suma is pregnant with her first child and is in her 10th week of pregnancy. She needs to be on malaria prophylaxis. Which is the best drug to use for her?

5 (v). Mr. Mani, a 51 year old Veterinarian presents with a six day history of fever, headache and photophobia. On examination, there is conjunctival suffusion and hepatomegaly. What is your probable diagnosis?

5 (vi). 65 year old Mr. Mani has high grade fever with severe arthralgia, backache and headache for the past 8 days. He also has oliguria and hypotension. The most likely diagnosis is Chikungunya. What parameter is used to decide on whether Mr. Mani needs to be referred?

6. THEME: COMPLICATIONS IN DIABETES [QUESTIONS. 6(i) – 6(vi)] (Total: 6 Marks)
From the options ‘A to O’ given below, choose the best answer for the questions 6(i) – 6(vi):

Options:

- | | |
|---|---|
| A. Vitreous hemorrhage | H. Stage 3 – Micro albuminuric stage |
| B. Once in 6 months | I. Debridement |
| C. Truncal neuropathy | J. Once every 2 years |
| D. Stage 1 - Glomerular hyper filtration stage | K. Autonomic Neuropathy |
| E. Off-loading the foot with total contact casting | L. Stage 5 - End Stage Renal Disease |
| F. Once a year | M. Wound care |
| G. Small fibre neuropathy | N. Corneal ulcers |
| | O. Hyphema |

Questions: Choose the best option with regards to complications in diabetes.

6 (i). Mr. Karan has had diabetes for the last 15 years and now has indications of diabetic nephropathy. Which is the earliest stage of nephropathy that can be clinically detected?

6 (ii). Mrs. Latha, a known insulin dependent diabetic presents with a superficial ulcer on her right foot which does not appear infected. At this stage of a diabetic ulcer, what is an important treatment recommendation?

6 (iii). Mr. John has mild Non-Proliferative Diabetic Retinopathy. How often does he need to be screened for retinopathy?

6 (iv). Mrs. Syeda, a 70 year old diabetic presented with dyspnea and dyspepsia and was diagnosed to have an acute MI. The reason she did present with the typical chest pain otherwise seen in an MI is due to what diabetic complication?

6 (v). Mr. Dilip has been diagnosed with diabetic retinopathy and is being followed closely by his Family Physician and Ophthalmologist. What is one complication of retinopathy that his physician should monitor for?

6 (vi). 72 year old Mr. Vivek has developed a diabetic foot ulcer which is deep and has a significant amount of necrotic tissue. What is the mainstay of treatment for his ulcer?

7. THEME: PALLIATIVE CARE [QUESTIONS 7 (i) TO 7 (vi)]

(Total: 6 Marks)

From the options 'A to O' given below, choose the best answers for the questions 7 (i) to 7 (vi):

Options

- | | |
|-------------------------------------|---------------------------------|
| A. Oral Morphine | I. Hyoscine Butylbromide |
| B. Move to Step 3 analgesia | J. Anaphylaxis |
| C. Lamotrigine | K. Fluoxetine |
| D. Constipation | L. Metoclopramide |
| E. Stop Morphine | M. Headache |
| F. By the clock | N. Drowsiness |
| G. Optimize Step 2 analgesia | O. By the ladder |
| H. Nausea | |

Questions:

7 (i) Mr. Sridhar, a 66 year old man has rhabdomyosarcoma of thigh which was operated on a few months ago. He was on chemotherapy following the surgery. He has come back with lung secondaries with severe chest pain and cough. His pain is relieved only on taking Tab. Morphine. What is the commonest side effect of morphine?

7 (ii) Mrs. Padma, a known patient of long standing diabetes mellitus associated with hypertension and foot ulcers which are non-healing, comes to you with severe pain of both feet. She is taking pain medication only when the pain is severe but is unable to keep the pain at bay. What principle in the approach to chronic pain will you apply to achieve better control of Mrs. Padma's pain?

7 (iii) Mrs. Shyla has carcinoma breast which was operated. She has returned with severe bone pain due to bone secondaries. She was seen in the palliative care clinic where she was started on a combination of paracetamol and dextropropoxyphene which she is taking every 6 hours. She comes to you with complaints that the pain has not subsided. What is the next step in the management of this patient?

7 (iv) Mr. Babu has large liver secondaries from an unknown primary. He has severe abdominal pain and was started on oral Morphine. This caused excessive nausea. What is your next line of management?

7 (v) Mr. Rao has inoperable colon cancer which has spread to the lungs. He has developed breathlessness which has become frightening for him and his family. How will you treat him?

7 (vi) Mrs. Mariam has end stage carcinoma ovary with multiple metastasis. She is cared for at home by her family. She is terminal now and produces a noise when she breathes. The family is very concerned about this sound and asks what can be done about this as they cannot bear to watch their loved one go through this at the terminal stage. What can be used to help mitigate this symptom?

8. THEME: LIFESTYLE MEDICINE [QUESTIONS. 8(i) – 8 (vi)]

(Total: 6 Marks)

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

Options

- | | |
|----------------------------|---------------------------------------|
| A. Diabetes | C. Oesophageal Candidiasis |
| B. Ask, Advise, Act | D. Wernicke-Korsakoff Syndrome |

- E. Higher birth order
- F. Hypertension
- G. Alcohol use disorder
- H. 10 minutes a day, 5 times/week
- I. Age between siblings
- J. Delirium Tremens
- K. Higher education

- L. 150 minutes of moderate intensity exercise
- M. Ask, Alert, Accomplish
- N. Epilepsy
- O. Ask, Assure, Accept
- P. 150 minutes of high intensity exercise
- Q. 30 minutes a day, 5 times/week

Questions: Choose the best option for each stem.

8 (i) 30 year old Mr. Tarun, an IT professional has decided to quit smoking and asks for a medication to help with this. You decide to start him on bupropion but soon realize that this drug is not an option for him because of his history of which medical condition?

8 (ii) 45 year old Mr. Jaiswal consumes significant amounts of alcohol on a regular basis. Thiamine supplementation is important for him as the deficiency of this essential vitamin can cause which syndrome?

8 (iii) Eight year old Roopa is seen in the clinic and appears malnourished. What is a probable risk factor for malnutrition in this child?

8 (iv) 43 year old Mrs. Namita is obese and at risk for cardiovascular disease and diabetes. What intensity and duration of exercise per week is recommended for her to reduce these risk factors?

8 (v) You decide to use Behavioural support as an adjunct in addition to pharmacological treatment for your patient who wants to quit smoking. The intervention you are going to use has three steps which include.

8 (vi) 29 year old Mrs. Beena had lab tests done recently which reveals a low Vitamin D level. What is the recommendation you will give her concerning sunlight exposure?

9. THEME: MANAGEMENT IN MENTAL HEALTH [QUESTIONS. 9(i) – 9 (vi)]

(Total: 6 Marks)

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

Options

- | | |
|---------------------|--------------------|
| A. Lithium | F. Haloperidol |
| B. Sodium valproate | G. Chlorpromazine |
| C. Carbamazepine | H. Fluphenazine |
| D. Risperidone | I. Trihexyphenidyl |
| E. Olanzapine | |

Questions: What is the drug of choice for the following patients?

9 (i) Mrs. Nithya, who was started on this drug for bipolar disorder, complaints of weight gain

9 (ii) Ideal drug for Mr. Jacob, who has schizophrenia without marked agitation.

9 (iii). Mrs. Lakshmi has a history of schizophrenia with frequent sleep disturbances. Her husband reports that she is agitated most of the time when she is awake. Her blood sugar and lipid levels are normal. The antipsychotic drug that would be best suited for Mrs. Lakshmi is

9 (iv). Ideal drug for 18 year old Raja, who has schizophrenia and refuses to take his medications regularly.

9 (v). Mr. Hari has been on antipsychotics for several years. Over the last 2 weeks he has discontinued his medications completely and now presents with acute psychosis. He is shouting aloud and being violent. Mr. Hari needs this drug immediately.

9 (vi). Ideal drug for Mr. Prasad, who has developed extrapyramidal symptoms after starting antipsychotics.

10. THEME: SLEEP DISORDERS [QUESTIONS. 10(i) - 10(vi)] (Total: 6 Marks)

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

Options:

- A.** Periodic limb movement
- B.** Circadian rhythm disorder
- C.** Diazepam
- D.** Pramipexole
- E.** Anti-depressants
- F.** Clonazepam

- G.** Insomnia
- H.** Secondary Parasomnia
- I.** Restless leg syndrome
- J.** Primary Parasomnia
- K.** Memory loss
- L.** Obstructive sleep apnoea

Questions:

Mr. Jadhav is in your clinic along with his wife. His wife complains that the patient has confusional arousals at night. She has found him doing bizarre things like pulling the flush or switching on the TV.

10. (i). What is the diagnosis?

10. (ii). How will you treat him?

Mr. Karthik complains of painful erections at night that cause him to wake up.

10. (iii). What is the diagnosis?

10. (iv). How will you treat him?

Mrs. Shilpa has the urge to move her legs repeatedly before she falls asleep.

10. (v). What is the diagnosis?

10. (vi). How will you treat her?

(LL 0817)

M.MED. FAMILY MEDICINE

(Sub: Code: 4021)

**FINAL YEAR THEORY EXAM – AUGUST 2017
PAPER I – MEDICINE AND ALLIED SCIENCES**

QP .CODE: 434021

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:

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

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

PART – A

DESCRIPTIVE QUESTIONS

(ANSWER ALL QUESTIONS)

1. 52 year old Mr. Dev is brought to casualty by his family with complaints of inability to move his right sided limbs for the past two hours. On examination, he is conscious, oriented and his blood pressure is 180/ 100 mm of hg. There is left sided facial palsy and the power in right upper limbs is 2/6 and the power in right lower limb is 3/6. Mr. Dev works as a teacher in the local school and his wife is a home maker. His first son is in third year Engineering and his second daughter is in twelfth standard.
(Total: 20 Marks)

- A. What is the three stage assessment for Mr. Dev? (3 Marks)
B. How will you determine the etiology of a cerebrovascular event by the clinical features? (3 Marks)
C. What are the investigations you would do for Mr. Dev if you work in a primary care setting? (3 Marks)
D. What are the principles of management of a patient with cerebrovascular event? (6 Marks)
E. Discuss briefly about home based post CVA rehabilitation of a patient. (5 Marks)

2. 60 Year old Mrs. Yamuna is brought by her relatives with complaints of difficulty in breathing for the past 3 hours. (Total: 20 Marks)

- A. What are the causes of sudden onset of difficulty in breathing in an adult? (4 Marks)
B. If Mrs. Yamuna is a known hypertensive and her clinical findings on examination in casualty are restlessness, mild disorientation, diaphoresis, pulse rate 120/minute, SPO2 is 88 % in room air, blood pressure 190/120mm of Hg, JVP is raised and fine crepitations heard in bases of both lungs, what will be your management? (8 Marks)
C. If Mrs. Yamuna is a known asthmatic and her clinical findings on examination in casualty are restlessness, not able to complete a full sentence, diaphoresis, pulse rate 120/minute, SPO2 is 88 % in room air, blood pressure 140/90 mm of Hg, JVP is not raised and you can hear wheeze bilaterally, what will be your management? (8 Marks)

PART – B

EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

1. Theme: Antidotes for Poisoning [Questions. 1 (i) – 1(vi)] (Total: 6 Marks)
From the options 'A to N' given below, choose the best answer for the questions 1(i) – 1(vi):

Options:

- A. Atropine
B. Dopamine
C. dMSA
D. Flumenazil

- | | |
|-----------------------------|---|
| E. Naloxone | J. Magnesium sulphate |
| F. Pyridoxine | K. Cholestyramine |
| G. Pralidoxime | L. Observation; no antidote needed |
| H. Acetyl cysteine | M. Diazepam |
| I. Calcium gluconate | N. Diphenhydramine Hydrochloride |

Questions: Choose the correct antidote for the following poisoning?

- 1 (i). 3 year old Giri has drunk 100 ml of 250 mg/5 ml paracetamol. His weight is 12 kg.
 1 (ii). 25 year old Mr. Sami has come with endosulfan poisoning.
 1 (iii). Ms. Jansi has come with history of ingesting around 20 grams of mercury.
 1 (iv). Mr. Dasan has taken 25 tablets of diazepam 5 mg tablets.
 1 (v). 17 year old Mr. Mohan has come with opium overdose.
 1 (vi). 3 year old Subha has completely chewed and eaten 10 tablets of 300 mg of isoniazid.

2. Theme : Complications of Diabetes mellitus [Questions. 2(i) – 2(vi)] (Total: 6 Marks)

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

Options

- | | |
|--|--------------------------------------|
| A. Proliferative Diabetic Retinopathy | H. Nephropathy |
| B. Autonomic neuropathy | I. Retinal detachment |
| C. Proximal motor neuropathy | J. Mononeuropathy |
| D. Large fiber neuropathy | K. Glaucoma |
| E. Entrapment syndrome | L. Cataract |
| F. Diffuse symmetrical polyneuropathy | M. Metformin induced diarrhea |
| G. Small fiber neuropathy | |

Questions : What is your clinical diagnosis for the following patients?

- 2 (i) 67 year old Mrs. Revathy is a diabetic for the past 15years. Her compliance with treatment is always unsatisfactory. She complains of pain in both her thighs and difficulty in standing up after squatting.
- 2 (ii) 56 year old Mr. Lal with history of diabetes for 9 years, presents with inability to sleep at night because of burning sensation of both his feet along with tingling and numbness for past 4 months.
- 2 (iii) 56 year old Mrs. Devika with a 12 year history of type II diabetes mellitus on OHAs presents with a three weeks history of severe hypoglycemic episodes. There has been no recent change in her medications, diet or eating habits.
- 2 (iv) 28 year old Mr. Sam, a clerk by profession, is a type I diabetic for 12 years. He has come to you with complaints seeing floaters flashes of light in his field of vision for the past one week. You observe that he is wearing a thick myopic glass.
- 2 (v) 59 year old Mrs. Seema with a 15 year history of type II diabetes mellitus presents with early satiety, abdominal discomfort, bloating and nausea. She has been having episodic diarrhea which is almost always nocturnal.

2(vi). 57 year old Mr. G, a diabetic for 14 years presents to the casualty complaining of right sided facial numbness since the previous night. When he woke up in the morning, he found that he had a right sided facial droop and that he was unable to close the right eye.

3. Theme – Chest Pain [Questions 3 (i) – 3(vi)] (Total: 6 Marks)
From the options ‘A to M’ given below, choose the best answer for the questions 3(i) – 3(vi)

Options:

- | | |
|------------------------|-------------------------|
| A. Dissecting aneurysm | H. Tension Pneumothorax |
| B. Pericarditis | I. STEMI |
| C. Pulmonary embolism | J. NSTEMI |
| D. Pneumonia | K. Tuberculosis |
| E. Unstable angina | L. Pleural effusion |
| F. Cardiac tamponade | M. Fibrosis of lung |
| G. Stable angina | |

Questions: What is the diagnosis?

3(i). Mr. Sabu has presented with fever, right sided pleuritic type of chest pain for the past 2 days. On examination, there is bronchial breathing and few crepitations in the right inter scapular and axillary areas.

3(ii). Mrs. Beena has come with history of chest pain for the past 4 days. The pain gets relieved with sitting up and leaning forward and aggravated by lying supine and change in position. On examination, she is afebrile, her pulse rate is 114/minute and her B.P is 100/70 mm Hg.

3(iii). Mr. Sudhir, who has been receiving palliative care for adenocarcinoma lung has presented to casualty in shock with history of sudden onset of severe difficulty in breathing, chest pain and hemoptysis.

3(iv). Mr. Mahesh, a known patient of COPD has come with sudden onset of left sided chest pain and difficulty in breathing. On examination, he is afebrile, his pulse rate is 128/minute and his respiratory rate is 44 /minute. His trachea is shifted to right side, percussion on reveals hyper resonant note and absent breath sounds left side on auscultation.

3(v). Mrs. Mona is brought to your clinic with complaints of retrosternal chest pain radiating to back, both the thighs and legs. On examination, her blood pressure is 90/70 mm Hg and pulse rate is 120/minute. You find that you are not able to feel her right lower limb pulses.

3 (vi). Mrs. P has come with typical chest pain within 6 hours of onset OF chest pain. Her ECG is normal and troponin levels 1 ng/mL.

4. Theme: Diarrhoea in Adults [Questions. 4(i) – 4(vi)] (Total: 6 Marks)
From the options ‘A to J’ given below, choose the best answer for the questions 4(i) –4(vi)

Options:

- | | |
|---------------------------|-------------------|
| A. Anti Tuberculous Drugs | F. Tetracycline |
| B. Ganciclovir | G. Furazolidone |
| C. Paramomycin | H. Co-trimoxazole |
| D. ORS | I. Amphotericin B |
| E. Ciprofloxacin | J. Metronidazole |

Questions: What is the best management?

4 (i). 30 year old Mr. Sudhakar has come with history of two episodes of vomiting and 4 episodes of watery stools since morning. There was no blood in his stool. On examination, his pulse is 100/min, BP 110/70 mm Hg, he looks tired, but his eyes are not sunken, tongue is moist, and skin looks normal.

4 (ii). 25 year old Mr. Fox from USA presents with the history of diarrhea with blood and mucus since last night. He is on a visit to India for a month.

4 (iii). 30 year old Mr. Velu is unwell for the past two months. He presents with history of loss of weight, low grade fever and appetite for the past 3 months. Diarrhoea is intermittent. On examination he has ascites.

4 (iv). Mr. Thilak has come with chronic Diarrhoea. His ESR is 28 mm/hour. TSH is 4.0 mIU/L and HIV is negative. Your drug of choice when you decide to treat him as a patient with tropical sprue.

4 (v). Treatment for Mrs. Subha with positive HIV serology, and found to have CMV diarrhea.

4 (vi). Treatment for Mr. Das with positive HIV serology and has diarrhea. His stool examination shows cryptococcal oocytes in stool examination.

5. Theme: Diagnosis of Skin Infections [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. Trichomycois axillaris | F. Verrucosa cutis |
| B. Erythrasma | G. Lupus vulgaris |
| C. Acne conglobata | H. Scrofuloderma |
| D. Gram negative folliculitis | I. Pityriasis Versicolor |
| E. Chloracne | J. Tinea Versicolor |

Questions: Choose the correct Diagnosis from the options above for the case scenarios below:

5(i) Mr. Mani has come with brown colored well-defined macules seen in axillae and groins. The lesions are otherwise asymptomatic.

5(ii) 20 years old Giri who was on oral doxycycline for the past two months for acne has developed small multiple pustules on the face.

5(iii) 30 years old Mrs. Jalaja has come with a lesion in the foot. The lesion shows central involution with a central atrophic scar surrounded by papillary excrescence with fissures.

5(iv) Mr. Lal has come with yellow, brown or black concretions on hair shafts in axillae, causing yellow-brown staining of clothes in the area of arm pits.

5(v) 6 year old Karthik has come with multiple annular erythematous itchy plaques with central clearing with edges showing papulovesiculation

5(vi) 12 year old Kala has come with multiple hypo pigmented lesions with coalescing scaly perifollicular macules in the back.

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

(Total: 6 Marks)

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

Options :

- | | |
|---|--------------------------------|
| A. Migraine | F. Tuberculous meningitis |
| B. Cluster headache | G. Subarachnoid hemorrhage |
| C. Tension headache | H. Glosso pharyngeal neuralgia |
| D. Trigeminal neuralgia | I. Hypnic headaches |
| E. Idiopathic Intracranial Hypertension | |

Questions: Choose the most likely diagnosis for the following patients with headache:

6.(i) Mrs. Mala suffers from episodes of very severe unilateral pain which are deep, excruciating, burning or stabbing in nature. The pain is localized to the orbital, supraorbital and temporal region and often awakens her from sleep.

6.(ii) 68 year old Mrs. Tara has developed headache for the past 6 months. The headache occurs in the night times. The imaging and ESR are normal.

6.(iii) Mrs. Fiona has complaints of headache for the past 2 months; it lasts for around 2-3 hours. The headache is bilateral; non-pulsating; not aggravated by routine physical activity and there is no vomiting /nausea or photophobia.

6.(iv) Mrs. Lucy has episodes of headache for the past one year. The headaches are severe, lasts for around 6 hours. Pain is often unilateral, throbbing, worse with exertion, and accompanied by symptoms such as nausea and sensitivity to light, sound, odors.

6.(v) Mrs. Daisy has episodes of right sided facial pain which is sharp and stabbing which usually lasts for less than a minute. There is associated rhinorrhea and congestion of eyes.

6.(vi) Ms. Preethi, aged 24 years presents with progressive diffuse headache, aggravated by straining and cough. On examination her BMI is 30. There is evidence of field defects and sixth nerve palsy. The imaging of brain does not reveal any space occupying lesions.

7. Theme: Investigations in Anemia [Questions 7 (i) to 7 (vi)]

(Total: 6 Marks)

From the options 'A to K' given below, choose the best answers for questions 7 (i) to 7 (vi)

Options:

- | | |
|------------------------------|--------------------------------|
| A. Iron deficiency anemia | G. Anemia in hypothyroidism |
| B. B12 Deficiency | H. Autoimmune Hemolytic anemia |
| C. Anemia of Chronic disease | I. G6PD deficiency |
| D. Sickle cell anemia | J. Elliptocytosis |
| E. Thalassemia | K. Pyruvate kinase deficiency |
| F. Spherocytosis | |

Questions: Choose the correct diagnosis

7(i) 38 year old Mr. Ravi has come with generalized weakness. Investigations done outside are normal except for low hemoglobin. On further investigating him, Direct Coomb's test is found to be positive.

7 (ii) Mr. Raj has brought his 2 year old son with complaints of pallor. His investigations are as follows: MCV: low; serum iron: normal; serum ferritin: normal; total iron binding capacity: normal. In spite of being with iron therapy for 6 months and good compliance, there is no improvement.

7 (iii) Mrs. Sumathy has come to you with a history of tiredness of 2 month's duration. Investigations showed low hemoglobin, normal MCHC but high MCV. Her TSH is normal.

7(iv) Mrs. Thilaka is anemic. Her investigations are as follows: Hb 7 g/dl, MCV high, reticulocyte count normal, B12 level is low, intrinsic factor antibody is positive and folate levels are normal.

7(v) Mrs. Leela is clinically anemic. Her investigations are as follows: Hb 9g/dl, MCV high, B12, folate levels normal, intrinsic factor normal.

7(vi) 8 year old Banu is brought with complaints of pallor. Her investigations are as follows: Hb 8g/dl, reticulocyte count high, osmotic fragility test positive.

8. Theme: Treatment of Psychiatric Illness [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. Risperidone | G. Phenytoin |
| B. Trihexyphenidyl | H. Promethazine |
| C. Olanzapine | I. Valproic acid |
| D. Lithium | J. Mirtazapine |
| E. Carbamazepine | K. Fluoxetine |
| F. Fluphenazine Decanoate | L. Amitriptyline |

Questions: What is the appropriate drug?

8(i) Mr. Iniyar is a 60 year old retired clerk. He is diagnosed to have depression. Though he is depressed, he is able to sleep in the night. What will be the antidepressant of choice if you have to prescribe a drug to him?

8(ii) 25 years old Mr. Kowshik has psychosis and he is very agitated. What is the newer antipsychotic of choice for him?

8(iii) The drug of choice for Mr. Mohan who is diagnosed to have schizophrenia and poor compliance.

8(iv) Antipsychotic of choice in Mrs. Glory who has family history of diabetes and hypercholesterolemia.

8(v) Drug of choice in Mr. Das who had dystonia after anti psychotics and is extremely agitated.

8(vi) Mr. Sekhar is on anti convulsants for her seizure disorder, what is the anticonvulsant that can cause depression .

9. Theme: Hypertension [Questions. 6 (i) –6 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|---|--------------------------|
| A. Calcium Channel Blocker | D. Beta blocker |
| B. Angiotensin Converting Enzyme Inhibitor | E. Spironolactone |
| C. Angiotensin Receptor Blocker | F. Alpha blocker |
| | G. Diuretic |

Questions:

9(i) Antihypertensive of choice for 70 year old Mr. Harikrishnan who has isolated systolic hypertension and features of gout

9(ii) Antihypertensive of choice for 45 year old Mrs. Geetha, who has diabetic nephropathy. She tells you that she has financial difficulties

9(iii) Antihypertensive of choice for 50 year old Mr. Farhan. He had a stroke last month.

9(iv) Antihypertensive of choice for 50 year old Mrs. Keerthi who has unstable angina. She is not tolerating ACEI.

9(v) Antihypertensive of choice for 54 year old Mr. Abraham who has evidence left ventricular hypertrophy by ECG.

9(vi) Mr. Meeran is a known hypertensive for the past 14 years and diabetic for the past 12 years. He is also on a diuretic for the control of CCF. His blood pressure on repeated occasions is more than 140/100 in spite of good compliance. What second drug will you add?

10. Theme: Dyspepsia [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. Cholecystitis | F. GERD |
| B. Malignant gastric ulcer | G. Dyspepsia |
| C. Acid peptic disease | H. Non-ulcer dyspepsia |
| D. Gastric ulcer | I. Irritable bowel syndrome |
| E. Duodenal ulcer | |

Questions: What is the possible diagnosis?

10(i) Mr. Lal has come with complaints of 'chest burn' frequent episodes of 'throat infection' and hoarseness of voice. He was treated as a patient with reactive airway disease but symptoms are not better. Spirometry and ECG are normal.

10 (ii). Mr. Bose has dyspeptic symptoms, normal endoscopy and pellet-like stools and sensation of incomplete rectal evacuation. What is your diagnosis?

- 10 (iii).** 48 year old Mrs. Mala presents with right upper abdominal pain, nausea and frequent belching. Her BMI is 32. What is your diagnosis?
- 10 (iv).** Mr. Rajesh, a 63 year old man presents with loss of weight, loss of appetite and complaints of “acidity”. He has pallor on examination. What is your diagnosis?
- 10 (v).** Mr. Sudhakar, a 39 year old smoker gives a 3 year history of upper abdominal pain which is more at nights and relieved by eating. He has gained weight in the past 3 months. What is your diagnosis?
- 10 (vi)** Mr. David, a 30 year IT professional presents with epigastric pain which is relieved by vomiting and made worse by eating. He gives a history of weight loss over past 2-3 months. What is your diagnosis?

(LM 0218)

M.MED. FAMILY MEDICINE

(Sub: Code: 4021)

**FINAL YEAR THEORY EXAM – FEBRUARY 2018
PAPER I – MEDICINE AND ALLIED SCIENCES**

QP. CODE: 434021

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. Fluphenazinedecanoate
- 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:

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

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

PART – A
DESCRIPTIVE QUESTIONS
(ANSWER ALL QUESTIONS)

1. **Mr. Shankar, 48 years old, is brought to casualty with gripping pain in the centre of the chest since 40 minutes. This is his first episode of chest pain. He has been a smoker for a little over 20 years, and smokes about 8-10 cigarettes a day.**

On examination, he is sweating profusely and appears very anxious. He is mildly obese. His BP is 160/100 mmHg. His cardiac exam reveals tachycardia with normal 1st and 2nd heart sounds. Respiratory examination is normal. There is no hepatomegaly. His wife is a home maker. His only son is 15 years old and facing the class X exam the following week. His son has been nervous about the outcome and Mr. Shankar has been staying up with him to encourage him in his studies, as his wife is not keeping well.

(Total 20 Marks)

- A. Discuss 6 common clinical conditions that present with chest pain and how will you differentiate them by clinical features? **(6 Marks)**
- B. What is the three-stage assessment for Mr. Shankar? **(3 Marks)**
- C. What is the spectrum of acute coronary syndrome? How will you differentiate the conditions with ECG and enzyme studies? **(5 Marks)**
- D. What are the steps of management of NSTEMI if you are working in a secondary care center where anticoagulation is possible? **(3 Marks)**
- E. Mr. Shankar is treated successfully and has come back home well. As his primary care physician, how will you now manage and follow him? **(3 Marks)**
2. **Mr. Samuel, a newly diagnosed diabetic on oral anti-diabetics since 1 week had severe sweating and tremor at work around 1 pm. He is brought to the clinic on the factory campus where you work as a primary care physician.** **(Total 20 Marks)**

- A. What is the most probable cause of his symptoms and how will you manage it? **(4 Marks)**
- B. He was found to be on Glimepiride 2 mg twice a day. His BMI was 37. What will your advice be concerning further management of his diabetes? **(6 Marks)**
- C. How will you teach Mr. Samuel to adopt lifestyle changes and monitor his blood sugars adequately? **(6 Marks)**
- D. How can his family members help him to achieve his treatment goals? **(4 marks)**

PART – B
EXTENDED MATCHING QUESTIONS
(ANSWER ALL QUESTIONS)

1. Theme: Palliative Care [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. Tramadol | F. Diclofenac |
| B. Morphine | G. Bisacodyl |
| C. Ondansetron | H. Lorazepam |
| D. Fluoxetine | I. Metoclopramide |
| E. Gabapentin | J. Amitriptyline |

Questions: Which drug should be added for palliative care?

1(i). Mrs. Saral has been diagnosed to have hepatic secondaries from her gastric carcinoma. She has a dull aching abdominal pain not relieved with over-the-counter analgesics, and disturbing her sleep.

1(ii). Mr. Khan has had surgery for carcinoma rectum and his main complaint is the severe nausea from chemotherapy.

1(iii). Mr. Dixit has just had surgery for recurrence of his skin cancer. He is feeling down most of the time, complains of pain, cannot sleep, and has lost interest in work and socializing since the past few weeks. On detailed evaluation, you feel he is clinically depressed and may benefit from medication.

1(iv). Ms. Nina had modified radical mastectomy for her breast cancer. She has burning pain around the side of the chest and cannot sleep.

1(v). 55 year old Mr. Subhash has multiple myeloma. He is considering the pros and cons of chemotherapy as he recently took voluntary retirement. He requests for some medicines to deal with the dull aching pain in his bones.

1(vi). Mrs. Rita has inoperable carcinoma cervix and has been on painkillers for several months. She is unable to pass stools.

2. Theme: Common Infectious Skin Conditions Questions 2(i) – 2(vi)] (Total: 6 Marks)

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

Options:

- | | |
|------------------------------------|---------------------------|
| A. Tinea cruris | G. Chicken pox |
| B. Carbuncle | H. Folliculitis |
| C. Vulvovaginal Candidiasis | I. Cutaneous tuberculosis |
| D. Malignant Molluscum Contagiosum | J. Impetigo |
| E. Viral warts | K. Cellulitis |
| F. Herpes Zoster | L. Herpes Simplex |

Questions: What is your diagnosis in the following patients?

2(i). 70 year old Mrs. Pai is a known diabetic since 20 years who has had trouble with walking since 2 years due to her osteoarthritis, which is ruining her blood glucose control. She has developed a swelling on her back since 3 days which has begun discharging pus.

2(ii). Mrs. Leela, 24 years old, had delivered a baby 5 months ago. She has itching in her genitalia and complains of burning micturition since one week.

2(iii). 45 year old Mr. Das has acquired immunodeficiency and was started on ART 3 months ago. He complains of burning pain across his left chest and has noticed redness and blisters in the same area, the day before.

2(iv). 5 year old Salma has skin lesions around her nostrils since 3 days with yellow discharge.

2(v). 58 year old Mr. Shankar, a construction worker from a slum area, has noticed a dry thickening on the outer border of his right foot which is slowly growing bigger and thickening. He is concerned that it might be cancer.

2(vi). 15 year old Surya has developed nodular, irregular growths on three fingers of his right hand since 2 months.

3. Theme: Shock [Questions 3(i) – 3(vi)]

(Total: 6 Marks)

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

Options:

A. Inflammatory shock

B. Non-hemorrhagic shock

C. Compressive shock

D. Neurogenic shock

E. Intravascular obstructive shock

F. Hemorrhagic shock

G. Cardiogenic shock

Questions: What is the probable type of shock in this patient?

3(i). Mrs. Selvi, 22 years old with a history of irregular periods has come with feeling of faintness and right-sided abdominal pain. Her pulse is low volume and rapid and her BP is 80/60mmHg.

3(ii). Mr. Velu, 35 years, a diabetic, has sudden onset of breathlessness during work in the morning. He has no past history of similar symptoms. On examination, his JVP is raised, fourth heart sound is heard and he has fine basal crepitations.

3(iii). 50 year old Mr. Sudhir has clinical features of tension pneumothorax and he is in shock.

3(iv). Mr. Mahesh, 25 years old, had a crush injury of his right hand 2 weeks ago and was treated as an outpatient for one week. He stopped his antibiotics after one week due to diarrhea and resumed work. He developed fever 2 days ago with increased discharge from the wound and was brought to OPD with giddiness on trying to stand. His temperature is 102°F and his BP is 80/50 mmHg.

3(v). 6 year old David is brought with complaints of difficulty in breathing after eating shell fish. His pulse rate is 160/minute and his blood pressure is 70/40 mm of Hg.

3(vi). Mrs. Jasmine, who fractured her right femur in a road traffic accident has had intra-operative fixation one week ago. She develops sudden onset of breathlessness and cough in hospital. Her BP is 86/50 mmHg.

4. Theme: Jaundice in Adults [Questions 4(i) – 4(vi)]

(Total: 6 Marks)

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

Options:

- | | |
|--|---------------------------------|
| A. Hemolytic jaundice | E. Hepatic secondaries |
| B. Viral hepatitis | F. Drug-induced jaundice |
| C. Blood-borne hepatitis | G. Gilbert’s syndrome |
| D. Primary hepatocellular carcinoma | H. Chronic liver disease |

Questions: What is the cause of jaundice?

4(i). Mr. Ravi, 30 years old, is a construction worker who was diagnosed to have sputum-positive pulmonary tuberculosis 5 weeks ago. He has been started on anti-tuberculous treatment and since then has been regular with all his medicines. He does not consume alcohol. He comes to you with loss of appetite since a week and yellow discoloration of his eyes and urine since 2 days with recurrent vomiting.

4(ii). Mr. Sridhar, 65 years, was diagnosed to have localized gastric carcinoma one year ago. He underwent total gastrectomy, but refused chemotherapy as he felt the treatment would make him “feel sick”. He comes with constant nausea, yellow discoloration of his eyes and a dull pain in the right upper quadrant.

4(iii). 18year old Selvan has been in hostel pursuing his engineering course and developed fever, nausea and vomiting with yellow discoloration of his eyes and urine on the third day. This is the first time this has occurred.

4(iv). Mr. Abdul, 40 years old, had injections given by a compounder near his house for “building his strength” for 6 months a year ago. He developed gradual onset of jaundice over few weeks with no other symptoms.

4(v). 62 year old Mrs. Sreemathi, with no risk factors for liver disease, developed pain in the right upper abdomen with loss of appetite, weight loss of 8 kg in 2 months, yellowness of the eyes and fever on and off.

4(vi). Mr. Bhushan, a 33-year-old bank employee from Jharkhand developed high fever and jaundice. His blood investigations showed unconjugated hyperbilirubinemia.

5. Theme: Edema [Questions 5 (i) – 5 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|--------------------------------------|---------------------------------|
| A. Acute Kidney Injury | E. Idiopathic edema |
| B. Glomerulonephritis | F. Myxedema |
| C. Chronic Kidney Disease | G. Lymphedema |
| D. Congestive Cardiac Failure | H. Premenstrual syndrome |

Questions: Choose the most probable diagnosis for the case scenarios below:

5(i). Ms. Tina, 18 years’ old, has been finding it difficult to concentrate on her studies and her family says, “She has become very slow”. She noticed that her periods are more frequent since 6 months with increased flow. She is also concerned about gradually increasing weight and swelling of the feet.

5(ii). Mrs. Girija, 51 years, has been obese since her teens. She has swelling of her feet, which is more in the evening and on sitting for prolonged periods in the bus. She has impaired glucose

tolerance and is concerned because her uncle has end-stage renal disease. Her other investigations for cardiac, thyroid and renal function are normal.

5(iii). Mr. Ashok, 55 years, is neither diabetic nor hypertensive. He has been having disturbed sleep with breathlessness which comes on suddenly at night and decreases when he sits up. He has also noticed that he gets breathless on climbing one flight of stairs and has swelling of the feet, which decreases in the morning.

5(iv). Mr. Uday is diabetic since 25 years and has been fairly regular with his medicines and checkups. However, he does not like to do self-blood glucose monitoring. He has noticed swelling of his feet which is progressive since 3 months. He has also been getting tremor of his hands just before mealtimes.

5(v). 12 year old Amala had vomiting and diarrhea after eating out with her friends. She could not be taken to the nursing home as her mother took some time to come back from work. Doctors said her BP was low and that she had come late. However, fluid resuscitation was done and treatment given for the gastroenteritis. On the third day in hospital, she developed breathlessness with swelling of the whole body.

5(vi). Ms. Veena, 15 years, had a sore throat since 2 weeks and finally went to the doctor for treatment. After starting the treatment, she notices puffiness around the eyelids and swelling of the feet along with reddish-brown discoloration of her urine.

6. Theme: Substance Abuse [Questions 6(i) – 6(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. Cannabis
- B. Cocaine
- C. Alcohol
- D. Tobacco

- E. Opium
- F. Amphetamines
- G. Sedatives
- H. LSD

Questions: Which substance is being abused?

6(i). Mr. Paul is a 30-year-old man from Manipur. He has been feeling down as his marriage is not working out and has been consuming excess amounts of a substance. Whenever he attempts to stop, he has severe body ache, excessive sweating, rhinorrhea, tremors, suicidal feelings, and fits of anger.

6(ii). Mr. Pereira from Goa has been abusing this substance for 18 years and has developed jaundice three times in the past. He has developed distension of his abdomen since 9 months. Last week, he vomited blood for the first time.

6(iii). Mrs. Samantha, a well-to-do business woman, admits to using recreational drugs when she is not at business conferences. During her annual holiday, she overdid her usual dose and was brought to casualty with high fever. On examination, she has fresh IV needle marks in her left cubital fossa.

6(iv). Sharath has been smoking cigarettes since the age of 16. He was an exceptional student in school, but did not get the grades he expected in the class X board exam. He lost interest in studies after that and became even more addicted to smoking. His friends report that his cigarettes “smell different”. He is friendly and talks a lot and feels “life has been good”, in spite of the fact that he is not pursuing his studies. His anxious father seeks your help.

6(v). Ms. Preethi, has been working as a publication designer for a reputed company with a good salary. Of late, she has been found coming late to work, very groggy. The quality of her work has

been deteriorating and she has been found sleeping on the job. Her supervisor is concerned about her and coaxes her to seek help.

6(vi). Mr. Bharath. 40 years, suffers from repeated chest infections and has required 3 courses of antibiotics for respiratory illness in the past 5 months. He complains of decreased ability to walk up the stairs and gets breathless.

7. Theme: Emergencies in family medicine [Questions 7(i) – 7(vi)] (Total: 6 Marks)
From the options 'A to J' given below, choose the best answers for questions 7(i) - 7(vi):

Options:

- | | |
|-------------------------------|-------------------------|
| A. Hypoglycemia | F. Oleander poisoning |
| B. Organophosphorus poisoning | G. Diazepam overdose |
| C. Cobra bite | H. Corrosive ingestion |
| D. Compartment syndrome | I. Viper bite |
| E. Anaphylaxis | J. Deep Vein Thrombosis |

Questions: Choose the correct diagnosis

7(i). 28 year old Mrs. Ratna from a rural background, has been brought by her family who fears she has ingested some poison in the fields as her in-laws were harassing her. She is weak and answers in monosyllables. Her pulse is 54/min and is irregular.

7(ii). 10 year old Sumanth was playing in the fields with his friends. He complained of weakness on coming back to the house and his eyelids were seen to be drooping. He was brought to the hospital in this condition.

7(iii). 38 year old Sr. Thilaga was working in theatre and mixed IV Penicillin for a patient and administered the same. She complained of a blocking feeling in her throat and fainted in theatre soon after. Her pulse was low volume and rapid and her BP low.

7(iv). 7 year old Shyam fractured his left tibia. He developed increased swelling of the left leg with numbness in the distal part with increased pain.

7(v). Ms. Roopa was brought to hospital with history of being found in a semi-conscious state with frothing at the mouth. She had vomited once and an odour of kerosene was apparent. Her pupils were constricted. She was upset with her results in the Std IX exam.

7(vi). 20 year old Sumathi presented with severe vomiting. On examination, you find whitish plaques on the lips and oral cavity.

8. Theme: Differential diagnosis of altered consciousness [Questions 8(i) – 8(vi)] (Total: 6 Marks)

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

Options:

- | | |
|---------------------------------|-------------------------------|
| A. True generalized seizure | G. Transient ischemic attack |
| B. Breath holding spell | H. Complicated migraine |
| C. Syncope | I. Vestibular dysfunction |
| D. True complex partial seizure | J. Narcolepsy |
| E. True simple partial seizure | K. Alcohol withdrawal seizure |
| F. Pseudo-seizure | L. Delirium |

Questions: Choose the best answer for each of the following clinical scenarios:

8(i). Mr. Dhanraj is a 28 year old farmer from a village in Bihar. He has been toiling in the fields all day and suddenly felt giddy, tired, nauseated and his vision became tunneled, after which he collapsed to the ground. His brother nearby ran to him immediately and noticed only a few small, irregular, uncoordinated jerky movements of his hands which lasted only for a few seconds. He recovered in a few minutes, and felt relieved after having a glass of water.

8(ii). 24 year old Mrs. Koushalya had several episodes of altered behavior over the past three years. Each time, she would suddenly stop what she was doing, start screaming, and repetitively clench and open her left fist. Her left eye would also blink rapidly, but she never lost consciousness. This would last a few minutes, and she would remember nothing of the episode once it was over.

8(iii). 60 year old Mr. Kamal is a chronic alcoholic, who is also diabetic and hypertensive. He suddenly became unconscious and was rushed to the casualty. He regained his consciousness within half an hour, but had weakness of the right upper limb, and his speech was slurred. Three hours later his movement and speech were completely normal. His wife said he had been drunk the same day, with his last drink just two hours before this event.

8(iv). Ms. Tanya is a 23 year old nursing student who has been stressed about her exams. She has episodes of suddenly losing consciousness, sometimes up to twice daily. She remembers only a strange feeling in her chest and a vague sense that something is going to happen just before she loses consciousness. After regaining consciousness, she takes at least half an hour to recognize where she is and what she is doing. She often finds she has injured herself, and that she has soiled her clothes while she was unconsciousness.

8(v). Mrs. Rita is a 29 year old housewife. She has two children in kindergarten and her husband is frequently away due to work. She has frequent headaches and difficulty sleeping, and feels tired, disinterested in taking care of her children and lethargic over the past few weeks. Since then, she has been having repeated episodes of loss of consciousness associated with violent thrashing movements of all four limbs and shouting. The movements are not regular, but go on for nearly an hour after which they gradually subside. She has no difficulty recognizing where she is and who she is with, from the moment the episode finishes.

8(vi). 5 year old Ravi has episodes of repeated jerky movements of his left upper limb. He does not lose consciousness, and he responds when he is spoken to during the episodes.

9. Theme: Fever [Questions 9(i) – 9(vi)]

(Total: 6 Marks)

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

Options:

A. Chest X-Ray

B. ESR

C. Urine culture and sensitivity

D. Total and differential WBC count

E. Cerebrospinal fluid exam

F. Peripheral smear

G. ELISA

H. Blood culture and sensitivity

Questions: Choose one appropriate investigation that will help clinch the diagnosis

9(i). 30 year old Raman has fever since 2 days which is now high grade with accompanying cough and left-sided chest pain which increases with deep breathing.

9(ii). Gomathi, 26 years, who is working in North-East India has high-grade fever with chills and headache.

9(iii). 36 year old Raj with fever on and off and weight loss of 8 kg in six months, comes to you with florid oro-esophageal candidiasis.

9(iv). 1 month old Hamsa is brought with refusal to feed, high fever, and slight abdominal distension for 1 day.

9(v). Mrs. Geetha has fever with chills, nausea, dysuria and pain in the right lumbar area and back.

9(vi). Raj, an 18 year old from Chennai, has been brought with gradual onset of fever, headache, altered sensorium and vomiting since 1 week.

10. Theme: Loose stools [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. Abdominal tuberculosis

F. HIV

B. Cholera

G. Giardiasis

C. Enteric fever

H. Irritable Bowel Syndrome

D. Amoebic colitis

I. Carcinoma of descending colon

E. Autonomic neuropathy

Questions: What is the possible diagnosis?

10(i). Anita, 12 years old, has fever with jaundice since 10 days with greenish coloured stools of moderate quantity.

10(ii). Mr. Das, 66 years old, has diarrhea alternating with loose stools since 2 months now and he is puzzled by it as he doesn't eat outside.

10(iii). 15 year old Satya has been losing weight, but gaining abdominal girth. She has also been having low-grade fever on and off which she attributes to stress of exams. She has also been having loose stools without mucus or blood, 4 times a day.

10(iv). Sandhya and her brother, Sharath, have both been having vomiting and loose stools since 1 day, after attending a schoolmate's birthday party. Both had to be admitted for IV fluids and treatment as they were unable to take orally and got dehydrated.

10(v). 10 year old Susan has been having large volume, foul-smelling, fatty stools. She has an urgency to pass motion every time she eats anything.

10(vi). Chandan, 34 years old has been having loose stools on and off which seem to be recurrent. He also complains that he has lost 7 kg of weight and now weighs only 48 kg. He is unable to eat well, because of ulcers in the mouth.

(LO 0219)

M.MED. FAMILY MEDICINE

(Sub: Code: 4021)

FINAL YEAR THEORY EXAM - FEBRUARY 2019

PAPER I – MEDICINE AND ALLIED SCIENCES

QP. CODE: 434021

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 G’ 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 deconoate |
| 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. **70 year old Mr. Ahamed has come to your clinic. He has clinical features of parkinsonism. (Total 20 Marks)**
- A. Mention and explain the clinical and cardinal features of parkinsonism. (5 Marks)
 - B. How will you treat Mr. Ahamed? Draw a stepwise algorithm for the pharmacological management of parkinsonism patients above 60 years. (5 Marks)
 - C. Discuss the side effects of any three drugs used in parkinsonism. (3 Marks)
 - D. Discuss three stage assessment for Mr. Ahamed. (3 Marks)
 - E. What will you explain to Mr. Ahamed's family about the illness? (2 Marks)
 - F. What are the indications of surgery in a patient with parkinsonism? (2 Marks)
2. **24 year old Kavitha, presents to your clinic with history of breathlessness after moderate exertion for the past 2 months. Her husband is a landless laborer and they have two children – aged 3 years and 1 year. She works along with her husband in the fields. She looks very pale and her hemoglobin is 3.5 gm/dl. (Total 20 Marks)**
- A. What questions will you ask for in history? (4 Marks)
 - B. What are the findings you will specifically look for in the physical examination? (4 Marks)
 - C. What are the initial, relevant investigations you will ask for in this patient? (3 Marks)
 - D. How will you treat any patient with iron deficiency anaemia? (4 Marks)
 - E. What are the indications of blood transfusion in a patient with anemia? (3 Marks)
 - F. How will you follow up this patient? (2 Marks)

PART – B

EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

1. **Theme: Diagnosis of skin infections [Questions 1(i) – 1(vi)] (Total: 6 Marks)**

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

Options:

- | | |
|--------------------------------------|----------------------------|
| A. Herpes Zoster | I. Pityriasis Versicolor |
| B. Herpes Simplex gingivo stomatitis | J. Erythrasma |
| C. Oral Candidiasis | K. Tinea Corporis |
| D. Alopecia areata | L. Trichomycosis axillaris |
| E. Scabies | M. Perianal Warts |
| F. Tinea capitis | N. Leucoplakia |
| G. Impetigo | O. Condyloma lata |
| H. Tinea cruris | |

Questions: Choose the correct diagnosis for the case scenarios given below:

1(i). 5 year old Chintu is brought by her mother with complaints of patchy hair loss in the scalp noticed for the past two weeks. On examination, the child is continuously scratching the head. The lesions in the scalp are pale pink, annular shaped plaques with raised scaly borders with central clearance.

1(ii). 6 year old Suman is brought by his mother with crusted skin lesions on neck and face for the past 2 days. He is febrile. The lesions are multiple superficial erosions with adherent golden yellow crusts and there is regional tender lymphadenopathy.

1(iii). 12 year old Gopi, studying in IX standard, presents with a hypo-pigmented coalesced macules over his chest and upper back. He is staying in the school hostel.

1(iv). 28 year old Mr. Kamal, a lorry driver, has come with complaints of multiple tiny growths around the anal sphincter. There are no other complaints except for occasional itching. On examination, there are multiple flesh coloured growths, most of the lesions are small as the head of a pin but few of the lesions are big and has a cauliflower like appearance.

1(v). 31 year old Mr. Thomas is on chemotherapy for lymphoma. He has come with complaints of burning sensation in the oral cavity and not able to eat any food. On examination, there are white patches which are easily removed to reveal erythematous patches with bleeding points underneath.

1(vi). 42 year old Mr. Suresh has come with painful lesions confined to the right upper limb of two days duration. His HIV serology is positive.

2. Theme: Toxidromes [Questions 2(i) – 2(vi)]

(Total: 6 Marks)

From options ‘A to G’ given below, choose the best answer for questions 2(i) – 2(vi):

Options:

- | | |
|--|---|
| A. Kerosene poisoning | E. Substance Withdrawal Syndrome |
| B. Organophosphorus poisoning | F. Theophylline toxicity |
| C. Amphetamine poisoning | G. Amoxicillin toxicity |
| D. Tricyclic antidepressant poisoning | |

Questions: Choose the most probable poisoning agent for each of these scenarios

2(i). Mr. Manickam, is brought to your clinic after being found unconscious in the paddy field. On examination, there is excessive salivation, overflowing of tears and his pulse rate is 32/minute. He has vomited, passed urine and motion in his dress.

2(ii). Mr. Atheesh, a 24 year college student is brought to your clinic by his friends after being found unresponsive in his class room. Now, on examination, he is disoriented, agitated, has dilated pupils, BP 160/100, Pulse 110/minute and his Temperature is 99.2° F.

2(iii). Mrs. Subha, a mother of two children, recently divorced, is brought with history of consumption of some drugs. On examination, she is drowsy. Her temperature is 101.3°F, BP is 90/50 mm of hg, pulse rate is 112/ minute and pupils are dilated bilaterally. Her bladder is distended and felt up to umbilicus.

2(iv). Kumar, a 10th grade student, was depressed when he failed his board exams and had consumed 10 of the tablets that his father was taking. Now he is brought now with agitation, tachycardia and diaphoresis.

2(v). 8 month old Baby of Devi is brought to causality with complaints of seizures. The child had respiratory infection and was treated by syrups prescribed to her sibling and also by the drugs prescribed to this child, because the mother wanted the infection to go away quickly. Now child is restless, tachycardic and diaphoretic.

2(vi). 1 year old Sumathy is brought by her parents with complaints of difficulty in breathing and cough. The child has a peculiar smell. Her pulse, blood pressure and pupil are normal.

3. Theme: Movement Disorders [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. Cerebellar dysfunction
- B. Parkinson’s disease
- C. Huntington’s disease
- D. Sydenham’s chorea
- E. Tardive dyskinesia

- F. Tourette’s syndrome
- G. Generalized dystonia
- H. Segmental dystonia
- I. Essential tremor

Questions: Choose the most probable diagnosis for each of patient descriptions given below:

3(i). 8-year-old Dhanya has come with complaints of irregular jerking movements of the hands. On examination, she is irritable, restless and not able to control her movements. Her mother gives history of fever and sore throat two weeks ago.

3(ii). 48-year-old Mr. Anwar is brought by his wife with a history of irregular jerky movements and problems of balancing while walking since the past 3 years. He also has a history of talking to himself, and has become increasingly forgetful. He had a sister who had died after having similar complaints.

3(iii). 7-year-old Koushik frequently gets punished in the class for making loud funny noises and gestures in the class. But he tearfully tells you that he is not being naughty, but he is not able to control them and worsens when he is tensed about something. His academic performance in the class is above average.

3(iv). 35-year-old Mr. Shravan has tremors of one hand and around the mouth. His family says he has been on some medications for several years now.

3(v). 54- year- old Mr. Logaswamy has come to your clinic for the first time for the evaluation of his hypertension. He has tremors of both hands and head. On enquiring, he says smilingly that it does not bother him and all his brothers and sisters have the same tremors.

3(vi). 65-year-old Mr. Raju has complaints of tremor of both hands and difficulty in walking. The tremor is mostly noticed when he is trying to something with his hands. On examination, there is nystagmus and Romberg’s sign is positive.

4. Theme: Hypertension [Questions 4(i) – 4 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|-----------------------------------|-----------------------------|
| A. Beta blocker | E. Clonidine |
| B. Calcium channel blocker | F. Thiazides |
| C. ACE inhibitor | G. Alpha methyl dopa |
| D. Alpha blocker | H. Spironolactone |

Questions: Choose the most suitable drug for each of patient descriptions given below:

4(i). 56 year old Mr. Felix is diagnosed with hypertension. On examination, his BP is 160/94 mm of hg and there is pedal edema. His creatinine is 1.8 mg/dl.

4(ii). Mrs. Lavanya is a primi at her 28 weeks of pregnancy. Her BP is 160/100mm hg on repeated measurements. Her urine albumin is 1+, there is mild pedal edema. Her serum uric acid is 3 mg/dl.

4(iii). Mr. Govind, after starting on this drug, has developed significant gynecomastia.

4(iv). 58 year old Mr. Sunder has obstructive symptoms secondary to benign prostatic hypertrophy and now diagnosed as a hypertensive.

4(v). 54 year old Mr. Aaron, a known COPD patient, is diagnosed with hypertension now. He also gives history suggestive of transient ischemic attack in the past.

4(vi). Mr. David, after starting on this drug, has developed bilateral pedal edema. He does not have any other symptoms, His X-ray chest, ECG, serum creatinine and TSH are normal.

5. Theme: Chest Pain [Questions 5(i) – 5(vi)]

(Total: 6 Marks)

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

Options:

- | | |
|-------------------------------|------------------------|
| A. Pericarditis | E. Pneumothorax |
| B. Pulmonary embolism | F. STEMI |
| C. Unstable angina | G. Pneumonia |
| D. Dissecting aneurysm | H. NSTEMI |

Questions: Choose the most probable diagnosis for each of patient descriptions given below:

5(i). Mr. Srinivas has come with fever and chest pain. The chest pain is right sided, pleuritic in type. On examination, there is dullness on percussion and crepitations and bronchial breathing on auscultation.

5(ii). Mrs. Pamela has come with chest pain for the past 1 week. There is no fever. The pain is pleuritic in type, gets relieved with sitting up and leaning forward and aggravated by lying supine and change in position.

5(iii). Mr. Sunil is on palliative care for his inoperable carcinoma lung. He has presented to causality with sudden onset of severe dyspnoea, chest pain and hemoptysis.

5(iv). 42 year old Mr. Malik, a smoker for 23 years is brought to casualty with sudden onset of dyspnoea and left sided chest pain. On examination, his trachea shifted to right side, with left sided hyper resonance and absent breath sounds.

5(v). 43 year old Mrs. Mona is brought to emergency with complaints of retrosternal chest pain radiating to back, both the thighs and legs. Her pulse rate is 120/minute, right lower limb pulses are absent and her blood pressure is 90/70mmHg. Her ECG and cardiac enzymes are normal.

5(vi). 62 year old Mrs. Parvathi has come with typical chest pain. Her ECG is normal and troponin I level is 1.12.

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

(Total: 6 Marks)

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

Options:

- A.** Intracranial space occupying lesion
- B.** Cluster headache
- C.** Trigeminal neuralgia
- D.** Tension headache

- E.** Sinusitis
- F.** Acute CNS infections
- G.** Classic migraine
- H.** Migraine
- I.** Hypnic headache

Questions: Choose the most probable diagnosis for each of patient descriptions given below:

6(i). 32 year old Mrs. Kavitha has come to your OPD with continuous headache for the last 1 week. The pain, is all over the head, radiates to neck and shoulders and it is more in the evening. There is no history of nausea, fever or loss of consciousness. Her BP and neurological examination are normal.

6(ii). 65 year old Mr. Ashok who is a chronic smoker comes to you with new onset progressive headache which is worse early in the morning and associated with vomiting. There is no fever.

6(iii). 23 year old Ms. Susan has come with complaints of headache for the past 1 year. The headache is severe, one sided, pulsating and associated with nausea which lasts for around 12 hours at times with a frequency of 1-2 episodes per month; she often has nausea at the peak of the headache.

6(iv). 35 year old Mrs. Jacintha has come with episodes of severe, shooting pain in right side of the face like electric shock, which are triggered by things such as touching the face, chewing, speaking or brushing teeth with bouts of pain lasting from a few seconds to several minutes. The complaints started around 3 weeks ago, but the episodes are becoming progressively more frequent and intense.

6(v). 18 year old Tharun, a college student has come with complaints of headache for the past 1 year. The headache is severe, one sided, pulsating and associated with nausea which lasts for around 12 hours at times with a frequency of 1-2 episodes per month; Just before the onset of headache, he says that he sees coloured spots, sparkles flashing lights and zig zag lines before the eyes. He often has nausea and cannot tolerate even a small noise at the peak of the headache.

6(vi). 64 year old Mr. Ravi has complaints of headache for the past 3 months. The headaches are severe, episodic, occur mostly in the nights and wake him up from sleep. There is no history of nausea or visual disturbances. On examination, there is no papilledema; both superficial temporal arteries are palpable. His ESR is 22 mm/ hour and CT scan is normal.

7. Theme: Dyspepsia [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:

- | | |
|--------------------------------------|------------------------------------|
| A. Inflammatory bowel disease | E. Irritable bowel syndrome |
| B. Hyperthyroidism | F. Chronic pancreatitis |
| C. Autonomic neuropathy | G. Hyperadrenalism |
| D. Malignancy | H. Chronic cholecystitis |

Question: Choose the most probable diagnosis from the above options for each of patient descriptions given below:

7(i). Mr. Mani, a 28 year old business man presents with abdominal pain with or without nausea on waking in the morning for the past 3 months. He has also noticed that his stools have become pellet-like and frequently there is sensation of incomplete rectal evacuation after passing stools. He looks otherwise well.

7(ii). Mrs. Jhansi is diabetic for the past 7 years and has dyspeptic symptoms; she has episodes of nocturnal diarrhea and occasional giddiness.

7(iii). Mr. Ganesh has dyspeptic symptoms with vomiting more pronounced. He has lost weight around 5 Kgs in the last 2 months and Virchow's node is palpable.

7(iv). Mrs. Felicita presents with increased appetite, dyspepsia and anxiety. Her pulse rate is 102/ minute.

7(v). 30 year old Mr. Gokul presents with dyspepsia, with persistent abdominal pain and steatorrhea. He has lost weight and his fasting blood sugar taken today is 220 mg/dl.

7(vi). Mrs. Miranda has come with recurrent attacks of upper abdominal pain, often at night and after a heavy or fatty meal.

8. Theme: Diabetes Mellitus [(Questions 8 (i) –8 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|-----------------------------------|------------------------------------|
| A. Sulphonyl ureas | E. Calcium channel blockers |
| B. Life style modification | F. Acarbose |
| C. Insulin therapy | G. Metformin |
| D. ACE Inhibitors | |

Question: Choose the most suitable treatment option – (can be a new drug or an addition)

8(i). 40 year old Mrs. Sheena is a newly diagnosed diabetic with no complications. Her blood pressure is 120/80 mm of hg; BMI is 32. Her investigations are as follows: FBS 183 mg %; PPBS 384 mg % ; urine acetone is negative.

8(ii). 18 year old Mr. Suleiman is a newly diagnosed diabetic with no complications. His BMI is 15. His investigations are as follows: FBS: 233 mg%; PPBS: 483 mg%. Urinary Acetone: Negative.

8(iii). 47 year old Mr. Agarwal was diagnosed to have diabetes a month ago with no complications. His BMI is 21. He was advised 1800 kilo calories diet and walking for 45 minutes a day; He followed his diet and exercise plan meticulously. After one month, his investigations are as follows: FBS: 186 mg% ; PPBS: 376 mg%.

8(iv). 51 year old Mr. Ramachandran is a diabetic on metformin for the past two years; his compliance with drug treatment is not satisfactory. His BMI is 35. Now he has come with cellulitis of right leg extending to the knees and needs inpatient care and surgical intervention. His investigations are as follows: FBS 180 mg% ; PPBS: 294 mg%. Creatinine 1.2 mg/dl.

8(v). 24 year old Mrs. Keerthana, a primigravida with 6 months amenorrhea, was found to have gestational diabetes in GTT. Fasting sugar after 2 weeks of diet and exercise is 154 mg%. She is not willing for insulin at all.

8(vi). 48 year old Mr. Monish is a diabetic for 6 years on glibenclamide. His compliance with drug treatment is quite satisfactory. On examination, his BMI 21 and his BP 140/ 90 in repeated occasions. His investigations are as follows: FBS 100 mg%; PPBS: 148 mg%; creatinine normal; urine micro albumin 145 µg/minute.

9. Theme: Mental Health [Questions 9 (i) –9(vi)]

(Total: 6 Marks)

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

Options:

- | | |
|----------------------------------|----------------------------|
| A. Risperidone | G. Phenytoin |
| B. Trihexyphenidyl | H. Promethazine |
| C. Olanzapine | I. Sodium valproate |
| D. Lithium | J. Haloperidol |
| E. Amitriptyline | K. Mirtazapine |
| F. Fluphenazine decanoate | L. Fluoxetine |

Questions: Choose the correct answer for the patient scenarios given below:

9(i). Mr. Naveen has signs and symptoms of depression. Three stage assessment does not show any cause. You are suspecting that the anticonvulsant he is on for the past one year can be the reason.

9(ii). Mr. Avinash is a diabetic for 3 years and his recent lipid levels are not under control. He is diagnosed with psychosis now. This is the antipsychotic you should avoid in this condition.

9(iii). Mr. Krishnan was started on antipsychotics 15 days ago. Now he has presented with dystonia and extreme agitation.

9(iv). Mrs. Saritha is diagnosed with bipolar disorder. She is on thyroxin for her hypothyroidism for the past 3 years. What is your drug of choice for Mrs. Saritha?

9(v). Mrs. Jhansi is a 42 year old housewife. She is diagnosed to have depression and you made a clinical decision of starting her on antidepressants. When asked about the night sleep, she says she is able to sleep for around 7 hours in the night without disturbance. You would choose this antidepressant for her.

9(vi). Mr. Leon is diagnosed to have psychosis and he is very agitated. You would prefer this newer antipsychotic over the other drugs.

10. Theme: Diarrhoea in Adults [Questions [10 (i) –10 (vi)]

(Total: 6 Marks)

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

Options:

- | | |
|----------------------------------|--------------------------|
| A. Azithromycin | F. Kaolin |
| B. Oral rehydration | G. Doxycycline |
| C. Tetracycline | H. Loperamide |
| D. Metronidazole | I. Co-trimoxazole |
| E. Parenteral rehydration | |

Questions: Choose the most suitable drug for each of patient descriptions given below:

10(i). 18 year old Mahesh has come with acute onset of watery stools with consistency of rice water.

10(ii). Mr. Smith from the US, now travelling India has developed loose stools with occasional blood in it. He says he is allergic to quinolones.

10(iii). Mr. Paul presents with complaints of loose stools for the past 3 weeks. The stools are small quantity, two or more unformed stools a day with mucus and sometimes with streaks of blood; Stools have an offensive odour. He has not lost weight and he looks well otherwise. There is tenderness along the line of the colon, usually more marked over the caecum and pelvic colon.

10(iv). Mr. Joseph has developed profuse watery diarrhoea; up to 10 to 15 times per day with blood in the stool following a course of amoxicillin. He is dehydrated, febrile and there is abdominal tenderness and cramping.

10(v). Mrs. Seetha has come with complaints of loose stools for the past 2 months. There is associated abdominal pain and cramps. She looks anaemic and there is glossitis, stomatitis and the knuckles are hyper pigmented. Her HIV status is negative and MCV is 105 Fl.

10(vi). 32 year old Mr. Hari is brought with complaints of sudden onset of fever, abdominal pain, and watery diarrhoea for the past 2 days. On clinical suspicion, you did a HIV serology and it is positive; stool examination detected large oocysts with modified acid-fast staining.
