

SECOND YEAR THEORY EXAM- AUGUST 2017
PAPER III – MATERNAL AND CHILD HEALTH

QP .CODE: 434013

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. (60Mmarks)**
 - ✓ 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 deconate
- H. Tab. Risperidone

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

- 3(i) What is the drug of choice for Acute Psychosis?
- 3(ii) What is the drug of choice for Bipolar illness?

❖ 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. 42 year old Mr. Ramesh and his 35 year old wife Malini have been married for 2 years now. They have no children yet and have come to your family medicine practice since they want to have a child. (Total: 20 Marks)

- A. In history taking what will you ask Mrs. Malini about her gynaecological and medical history? (7 Marks)
- B. What will you ask Mr. Ramesh when you take his history? (3 Marks)
- C. What investigations will you recommend this couple in primary and secondary care level? (5 Marks)

After investigations, it is found that, Mr. Ramesh has minor degree of sub fertility and Mrs. Malini has blocked fallopian tubes due to a history of tuberculosis. On recommending tubal microsurgery, the couple is hesitant.

- D. What assisted reproductive technique/techniques can you recommend this couple? (3 Marks)
- E. List the complications you would look for as a family physician, while following up a couple after assisted conceptions? (2 Marks)

2. One year old baby Geetha is brought to you by her parents for regular check-up. (Total: 20 Marks)

- A. How to use growth charts?
- B. What are the benefits of growth monitoring and promotion?
- C. How to involve care givers in maintain growth chart of a child?
- D. What is MUAC? How do you measure the child's MUAC?
- E. What are the recommended intervals and parameters for growth monitoring?

PART – B

EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

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

Options:

- | | |
|------------------------------|-----------------------------|
| A. Infection | F. Sheehan's Syndrome |
| B. Oestrogen withdrawal | G. Primary Amenorrhea |
| C. Trauma | H. Secondary Amenorrhea |
| D. Polycystic Ovary Syndrome | I. Pregnancy |
| E. Asherman's Syndrome | J. Tuberculous Endometritis |

Questions: What is the most appropriate diagnosis?

1(i). Ms. Lukmita, 18 years old, has been brought by her mother with complaints of cessation of her regular periods for 7 months now. Lukmita has been on a diet to lose weight and has been doing rigorous exercises since she wants to be a model.

1(ii). 16 year old Ms. Meena is accompanied by her mother, who complains that Meena has been having lower abdominal pain every month for the past one year but has not attained menarche. On

examination Meena has normal development of secondary sexual characters, and on separating the labia you see a blue-colored bulging membrane.

1(iii). Mrs. Yamuna is a mother of 2, and has come to you with complaints of amenorrhea since the birth of her second child 2 years ago. On questioning she tells you she had a vaginal delivery at home, the labour was difficult and there was severe bleeding. She was so weak that she did not have any breast milk to feed her child. On examination you find that there is involution of both breasts and her pubic and axillary hair is scanty.

1(iv). 15 year old Ms. Jaya is accompanied by her mother, she complains of being overweight and having pimples. She says the excessive hair growth on her upper lip is embarrassing and there is some hair on her chest - between her breasts as well. On taking a detailed history you discover that she also has oligomenorrhea.

1(v). 22 year old Mrs. Vanaja had a vaginal delivery at home 2 days ago, she is very anxious as she complains that she noticed a spot of blood in her baby girl's nappy and the baby also has vaginal discharge which sometimes looks like it has blood in it. What is the likely cause?

1(vi). 23 year old Ms. Rohini has been brought to you by her mother from a nearby village, with complaints of amenorrhea for the past 3 months. Ms. Rohini stays in a hostel in the city and has been visiting her mother once a month. As a family physician you request to speak to Ms. Rohini alone since she looks depressed. What will you investigate her for first?

2. Theme: Menopause [Questions 2(i) - 2(vi)]

(Total: 6 Marks)

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

Options:

- A.** Vitamin D and Calcium combined tablet
- B.** Oestrogen only hormone replacement therapy
- C.** First degree uterine prolapse
- D.** Combined oral contraceptive pill
- E.** Tibolone
- F.** Second degree uterine prolapsed

- G.** Endometrial Carcinoma
- H.** Pregnancy
- I.** Oral Steroids
- J.** Vaginal cancer
- K.** Transdermal Clonidine
- L.** Bisphosphonates plus Vitamin D and Calcium

Questions:

2(i). 52 year old Mrs. Revathy comes to you with complaints of increased frequency of passing urine and leakage of urine spontaneously when she coughs. Her BMI is 30. On taking a history you find she had 2 vaginal deliveries, the first delivery was at home and was very difficult and traumatic. On examination you find that her cervix has descended up to level of introitus. What is your diagnosis?

2(ii). Mrs. Varsha is 56 years old and is on treatment for chronic obstructive pulmonary disease. She has had a fall and has a fracture of her right forearm bones. What will you prescribe her after managing her fracture?

2(iii). Mrs. Jhansi, 40 years old, has come to you with complaints suggestive of hot flashes. She gives you a history of amenorrhoea for the past 6 months. How will you treat her?

2(iv). Mrs. Jacintha has a history of Breast Cancer; she now comes at 38 years of age with complaints of hot flashes. How will you treat her?

2(v). Mrs. Meena 38 year old mother of two has had both her deliveries at home. She says she has never gone to a hospital except for when she gets a "fever". She gives you a history of amenorrhea for 6 months, she had minimal vaginal bleeding last month for 3 days and now she complains of some spotting, nausea and fatigue for the past 1 week. What will you investigate for first?

2(vi). Ms. Kanaga is a 46 year old nulliparous woman with a history of breast cancer for which mastectomy was done. Her BMI is 32. She now presents with post-menopausal bleeding after a period of 2 years. What will you investigate her for?

3. Theme: Menstrual Irregularities [Questions 3(i) - 3(vi)] (Total: 6 Marks)

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

Options:

- | | |
|--|------------------------------------|
| A. Endometriosis | F. Peri-menopausal symptoms |
| B. Ectopic pregnancy | G. Ovarian cyst torsion |
| C. Hormone Therapy | H. Cancer of Vulva |
| D. Mittelschmerz (Ovulation pain) | I. Ovarian Cancer |
| E. Pre-Menstrual Disorder | J. Primary Dysmenorrhoea |

Questions: What is the likely cause?

3(i). 60 year old Mrs. Savithri has come with complaints of pain in the external genitalia. She says she has lost appetite and may have also lost weight since her neighbours tell her so. On examination you see an ulcer with induration around it.

3(ii). 23 year old Ms. Devika, presents to you with severe lower abdominal pain with bloating, she also has headache and backache. She says she has been restless and not been able to sleep at night. On questioning, she says she is expecting her menstrual periods in 4 days time, she says these symptoms trouble her every month.

3(iii). Ms Chaitanya is rushed to the hospital from college, after having collapsed following a sudden onset of severe lower abdominal pain. On examination, she is hemodynamically stable but there is localized tenderness in left lower quadrant of her abdomen, with guarding and rebound tenderness.

3(iv). Mrs. Geetha comes to you with complaints of dysmenorrhoea since menarche. She was told the pain would disappear after the birth of her first child, but even after delivery her symptoms seem to persist. She also reports having bloating, constipation, low back ache and constant lower abdominal pain for past 7 months. On examination you palpate nodules in the posterior fornix and adnexal masses with pelvic tenderness.

3(v). Mrs. Leela, a 26 year old, had her first delivery 1 year ago. She started taking progesterone only pill for contraception 2 months ago. She now complains of intermenstrual bleeding.

3(vi). Ms. Jeyanthi is 14 years old and is brought by her mother with complaints of lower abdominal cramps and tiredness on the first day of her menstrual cycle. Her mother complains that Jeyanthi is refusing to go to school because of the pain.

4. Theme: Breast Problems [Questions 4 (i) - 4(vi)] (Total: 6 Marks)

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

Options:

- | | |
|---------------------------|---------------------------------|
| A. Fibroadenosis | F. Eczema |
| B. Paget's disease | G. Breast Cancer |
| C. Chloramphenicol | H. Thrush |
| D. Co-amoxiclav | I. Fibroadenoma |
| E. NSAIDS | J. No treatment required |

Questions:

4(i) 15 year old Smita has been brought to you by her mother with complaints of very itchy nipples with dry skin. Her mother says she had similar problems as a young girl and had suffered much, she hopes you can prevent Smita from enduring the same hardships she faced. On questioning you discover a family history of atopy and "skin diseases". What is the likely diagnosis?

4(ii). 25 year old Mrs. Minu had her first baby 4 weeks ago. She now presents with complaints of pain in the right breast with difficulty breast feeding her baby. She says she does not have enough milk because her baby cries soon after she breast-feeds her. On examination Mrs. Minu is febrile and the outer upper and lower quadrants of the right breast are erythematous and engorged. What antibiotic will you prescribe her?

4(iii). 24 year old Mr. Karthik is a smoker who presents to you with fever and rigors. On examination you find a left nipple piercing with inflammation around the piercing, there is also some discharge. What antibiotic will you give Mr. Karthik?

4(iv). Mrs. Uma has come with complaints of rough skin over her right nipple with itching and bloody discharge. On examination you palpate underlying lumps. What is the likely diagnosis?

4(v). 52 year old Mrs. Jayanthi a nulliparous woman gives you a history of amenorrhoea since the age of 47. Her BMI is 30. She now complains of feeling a lump in her left breast with nipple discharge. Recently she noticed that her left nipple was also inverted. What is the likely diagnosis?

4(vi). 21 year old Ms. Heera is brought to you by her mother with complaints of a small lump in both breasts. On examination you palpate the lesions and find they are both about 1 cm in diameter, round, rubbery consistency, painless and mobile. What is the likely diagnosis?

5. Theme: Vaginal Discharge [Questions 5 (i) -5 (vi)] (Total: 6 Marks)

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

Options:

- | | |
|---------------------------------------|---|
| A. Vulvovaginal candidiasis | F. Desquamative inflammatory vaginitis |
| B. Bacterial vaginosis | G. Normal vaginal discharge |
| C. Secondary vaginal discharge | H. Carcinoma cervix |
| D. Gonorrhoea | |
| E. Trichomoniasis | |

Questions: What is the likely diagnosis?

5(i). Mrs. Subashree has recently had Copper-T placement done for contraception. She now complains of copious thin white discharge with fishy smell. On examination her cervix is healthy. Vaginal pH is less than 4.5 and Whiff test is positive.

5(ii) 58 year old Mrs. Durga is a Diabetic patient who comes to you with complaints of curdy white vaginal discharge, itching and dysuria. You notice that she has had an amputation of her right 1st toe. On examination you find white clumpy curdy discharge, edema and erythema of the vagina and vulva. Whiff test is Negative.

5(iii). 35 year old Ms. Gayathree is a commercial sex worker who complains of severe vaginal pruritus and dysuria. On examination there is profuse yellow frothy vaginal discharge and the cervix is erythematous – “Strawberry cervix”. Whiff test is Negative.

5(iv). 32 year old Mrs. Mangalam presents with complaints of vaginal discharge, dysuria and lower abdominal pain. On examination there is tenderness in the vaginal fornices and per speculum the cervix is congested and has a mucopurulent discharge.

5(v). 28 year old Mrs. Shoba has come with complaints of vaginal discharge for past few days. Per speculum examination reveals a displaced IUCD in the vagina.

5(vi). 58 year old Mrs. Raji, a mother of 3, was married at the age of 16 and had her first child at 17 years of age. Her husband died when she was 25 years old. She was forced by her relatives to remarry a 35 year old man. She now complains of heavy postmenopausal bleeding and lower abdominal pain and offensive vaginal discharge. On examination she is pale, has pedal edema and per speculum examination shows a crater shaped ulcer with everted edges.

6. Theme: Fever with rash in Children [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. Kawasaki disease | C. Erythema infectiosum |
| B. Scarlet fever | D. Erythema multiforme |

- E. Measles
- F. Staphylococcal Scalded Skin Syndrome

- G. Varicella
- H. Rubella
- I. Roseola

Questions: What is the diagnosis?

- 6(i).** One year old Swetha is brought with high grade fever of 5 days duration, cough and rash over face and trunk of one day. On examination, child is slightly irritable with mild congestion of both eyes. Oral mucosa is normal except for mild congestion of the pharynx.
- 6(ii).** 12 year old Mohan with history of fever with body ache and malaise for a week and a pruritic rash on the trunk of 3 days duration; On examination, he is febrile and has erythematous rash on trunk mainly back with multiple, vesicles and pustules on an erythematous base, pustules with central umbilication and crusted erosions.
- 6(iii).** 7 year old Manish had two days of low grade fever and pharyngitis and today morning he has developed bright red erythema over the cheeks, which is oedematous.
- 6(iv).** Sekar had sudden onset of fever associated with sore throat, headache, nausea, vomiting, abdominal pain, myalgia, and malaise and followed by erythematous patches below ear, chest and axilla and now it is disseminating to trunk and extremities.
- 6(v).** 1 day old baby of Rani has developed diffuse erythematous rash and bullae which ruptures with easy peeling of skin. There is facial edema, and the child cries even it is touched.
- 6(vi).** Abdullah, a six year old child is brought with fever for more than 8 days and with erythematous rash on hands and feet; morbilliform, scarlatiniform rash on trunk and perineum; hyperemic lips and cervical lymphadenopathy.

- 7. From the Theme: Seizures in Children[Questions. 7(i) – 7(vi)] (Total: 6 Marks)**
From the options ‘A to J’ given below, select the best answer for the questions 7(i) – 7(vi)

Options:

- A. Simple partial seizure
- B. Simple febrile seizure
- C. Complex partial seizure
- D. Atypical febrile seizure
- E. Absence seizure
- F. Benign myoclonic epilepsy
- G. Generalized Tonic Clonic Seizures
- H. Confusional arousals
- I. Parasomnias
- J. Apnoeic spells

Questions: what is the type of seizure?

- 7(i).** 7 year old Mani was brought with tonic clonic seizures of his left upper limb which lasted for 5 minutes with no loss of consciousness.
- 7(ii).** 9 months old Paru had come with complaints of sudden jerks and twitching of the body and she is now well controlled with sodium valproate
- 7(iii).** 18 months old Kala was brought to your clinic as she has got two episodes of tonic seizures in the past one month. The ‘seizures’ started after a cry. After the cry her lips and tongue became blue; she stopped breathing with tonic posturing of the limbs and vacant stare. Within few seconds the respiration resumed and she became normal. Physical examination was normal except mild anaemia.
- 7(iv).** 9 months old Raju is brought on the first day of fever with complaints of generalized tonic clonic convulsions which lasted for few minutes before 3 hours. Now the child is oriented conscious and there are no neurological deficits.
- 7(v).** 4 year old Faizal has come with complaints of fever and seizures on the second day of fever. The seizures were generalized tonic clonic convulsions which lasted for 15 minutes.

Following seizures, the child had inability to move right sided lower limb for few minutes. Now, after three days he is totally fine and all his investigations are normal.

7(vi). 7 year old Gladwin has episodes of confusional behaviour and slow, meaningless speech during speech. He does not have any memory of the attacks on waking the following morning.

8. Theme: Incessant Cry [Questions 8(i) – 8(vi)] (Total: 6 Marks)
From options 'A to L' given below, choose the best answer for questions 8(i) –8(vi)

Options:

- | | |
|-----------------------------------|---|
| A. Evening Colic | H. Acute Suppurative Otitis Media (ASOM) |
| B. Intussusception | I. Osgood Schlatters disease |
| C. Urinary tract infection | J. Scorpion sting |
| D. Wet napkin | K. Bee sting |
| E. Osteomyelitis | L. Bacillary dysentery |
| F. Septic arthritis | |
| G. Pseudo tumor cerebri | |

Questions: What is the diagnosis?

8(i). Sujatha's baby is 4 month old well-infant; he is brought to you with complaints of crying in the evenings. Child is active, alert, gaining weight well and there is no focus of infection or injury.

8(ii). 6 months old Raju is brought with complaints of incessant cry. On examination child is febrile, irritable and keeps pulling the right ear frequently.

8(iii). 7 months old Reena was treated with nalidixic acid for her UTI. Now after a week of antibiotic, she has come with incessant cry.

8(iv). 9 months old Evan is brought by his parents with complaints of incessant cry. He has just passed stool which resembles red currant jelly.

8(v). 2 year old Munna is brought by his parents with complaints of incessant cry. His peripheries are cold; pulse rate is 150/ minute and there is a sting mark in the thigh. You also observe the child has priapism.

8(vi). Vani's baby has come with incessant cry, high grade fever and there is no passive or active movement possible in right hip.

9. Theme: Common Paediatric Problems -1 [Questions. 9(i)-9 (vi)] (Total: 6 Marks)
From the options 'A to O' given below, choose the best answer for the questions 9(i) – 9(vi)

Options:

- | | |
|-----------------------------------|--|
| A. Bronchial asthma | I. Croup |
| B. Bronchiolitis | J. Acute epiglottitis |
| C. Pneumonia | K. Rheumatic heart disease |
| D. Failure to thrive | L. Hypertrophic cardiomyopathy |
| E. Retropharyngeal abscess | M. Mitral valve prolapse |
| F. Grade I PEM | N. Otitis media - attic antral type |
| G. Infantile syncope | O. Otitis media – Tubotympanic type |
| H. Physiological anorexia | |

Questions: What does the child have?

9(i). 10 year old Meena has come with complaints of palpitation on and off. She particularly feels it whenever she squats. There are no other complaints. On examination, she is not anaemic and has a midsystolic click at the apex of the left ventricle over the mitral area which

is transient. The blood pressure is always normal.

9(ii). 6 months old Menaka has come with complaints of cough and difficulty in breathing. The illness started with runny nose 2 days ago. On examination, her respiratory rate is 52/minute with chest retractions and nasal flaring. There is bilateral wheeze on auscultation. But she is active and taking feeds well. This is her first episode and there is no family history.

9(iii). 8 months old Sudan is brought with complaints of sudden onset of torticollis. He also has symptoms of fever, irritability, dysphagia, drooling, odynophagia, tachypnea and stridor.

9(iv). 14 year old Ravi has come with complaints of syncopal episodes. There is family history of cardiac disease. On examination, there is a systolic murmur in the aortic area.

9(v). 5 year old Neha has complaints of ear discharge for the past 6 months. The discharge is intermittent watery scanty and foul smelling.

9(vi). 18 months old Jeevan is brought by his mother for immunization. His birth weight was 2.8 kg; his present weight is 11 kg. His mother is worried about his poor appetite and weight gain.

10. Theme: Common Paediatric Problems -2 [Questions 10(i)-10(vi)] (Total: 6 Marks)

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

Options:

- | | |
|---|---|
| A. 50 ml/kg of ORS over 6 hours | H. 120 ml/kg of ORS over 6 hours |
| B. Cloxacillin 50 mg/kg/day given in 4 doses | I. IV correction of dehydration |
| C. Non-steroidal anti-inflammatory agents | J. Inj Ceftriaxone and Amikacin |
| D. Dulcolax oral preparation | K. Vitamin D 6,00,000 IU stat and calcium |
| E. Vitamin D 60, 000 IU stat and calcium | L. Vitamin A 1 lakh IU on day 0, 1 and 14. |
| F. Lactulose | M. Vitamin A 2 lakh IU on day 0, 1 and 14. |
| G. 75ml/kg of ORS over 4 hours | |

Questions: How will you treat the child?

10(i). 1 year old Ramu has come with complaints of loose stool. On examination, child is restless and irritable. The eyes are sunken and he is drinking eagerly and tolerating.

10(ii). 12 year old Geetha has come with her parents with complaints of sharp localised pain at 2nd left costochondral junctions; there is a tender, non-fluctuant mass of size 3-4 cm in the same area. The swelling is not warm.

10(iii). 9 year old Hari is admitted with complaints of severe pain abdomen. On examination, he is severely dehydrated, acidotic and febrile. His blood sugar is 520 mg/dl and urine acetones are positive. This is the first step in management.

10(iv). 4 year old Manish has habitual constipation. You have tried high fibre diet and other life style modifications. This pharmacological agent will help him.

10(v). 2 year old Heera has come with complaints of recent onset bowing of legs. X-ray of the wrist shows widening, cupping and fraying of the epiphyses. Her alkaline phosphatase is elevated.

10(vi). 2 year old Balu has Bitot's spots.
