

M.MED.FAMILY MEDICINE

SECOND YEAR THEORY EXAM– AUGUST 2015

PAPER III – MATERNAL & CHILD HEALTH

Q.P. Code: 434013

TIME: THREE HOURS

MAXIMUM: 100 MARKS

INSTRUCTIONS

- The paper will be for a total of **100 marks**.
- Answer **all** the Questions.
- The Paper has 2 parts – **Part A & Part B**.
- **Part A** will be **descriptive type questions** based on case scenarios (**40 marks**).
- **Part B** will have Objective type **EMQs (Extended Matching Questions)** (**60 marks**).
 - ✓ This will have 10 sets of these questions.
 - ✓ Each set will have 6 questions.
 - ✓ Each question will carry 1 mark.
 - ✓ Each set has a **theme** on the top. Below this, some **options** are given followed by some **questions**. The options are lettered using the English Alphabets **A, B, C, D** and so on.

Example:

3. THEME –COMMON PSYCHIATRIC PROBLEMS [QUESTIONS. 3(i) – 3(vi)] (6marks)

From the options ‘A to H’ given below, choose the best answer for the questions 3(i) – 3(v)

Options:

- A.** Inj. Haloperidol
- B.** Amitriptyline + counseling
- C.** Tab. Chlorpromazine
- D.** Tab. Trihexyphenidyl
- E.** Tab. Diazepam
- F.** Tab. Lithium
- G.** Inj. 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?

PART – A
DESCRIPTIVE QUESTIONS

(ANSWER ALL QUESTIONS)

1. 18 year old Ms.Gita, a college student has come to you with history of 6 months amenorrhea. Answer the following questions regarding amenorrhea.

[TOTAL 20 MARKS]

- A.** What are the types of amenorrhea? How will you differentiate between the types amenorrhea? (5 Marks)
- B.** What are the symptoms of androgen excess and the features of androgen insensitivity? (5 Marks)
- C.** What are the preliminary investigations that you will order in a primary care for Gita? (5 Marks)
- D.** What is exercise induced amenorrhea and how will you treat it? (3 Marks)
- E.** How will you diagnose primary ovarian failure? (2 Marks)

2. A mother brings her 2 year old child for a checkup. She is worried that he is small compared to his peer group

[TOTAL 20 MARKS]

- A.** How would you approach this child? (5 marks)
- B.** What are the criteria to refer this child? (4 marks)
- C.** How would you assess for severe acute malnutrition? (5 marks)
- D.** Classify malnutrition and discuss the management. (6 marks)

PART – B
EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

1. THEME: AMENORRHEA [QUESTIONS. 1(i)-1(vi)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|----------------------------------|---------------------------------------|
| A. Hypothalamic pathology | G. Anorexia nervosa |
| B. Ovulatory cycles | H. Turner's syndrome |
| C. Tertiary | I. Polycystic ovarian syndrome |
| D. Secondary | J. Hypothyroidism |
| E. Pregnancy | K. Primary |
| F. Uterine pathology | L. Anovulatory cycles |

Questions:

- 1(i).** Miss. Pushpa is 15 years old. She has not had menses so far. She has secondary sex characteristics like adult pattern of pubic hair and breast development. What type of amenorrhea does she have?
- 1(ii).** Miss. Shanthi attained menarche at 14 years. She had 3/30-60 days cycle for 1 year. For the past 6 months she did not have her menstrual cycles. What type of amenorrhea is it?
- 1(iii).** The commonest cause of secondary amenorrhoea, which has to be ruled out in any woman presenting with amenorrhoea is:
- 1(iv).** Miss. Rosy attained menarche two years ago. For nearly 18 months she had very few irregular cycles associated with amenorrhoea of varying length of time. The cause of this is
- 1(v).** The commonest cause of pathological amenorrhoea is
- 1(vi).** 26 year old Miss. Kumari has oligomenorrhea, acne, hirsutism. The most likely diagnosis is

2: THEME: DYSMENORRHOEA[QUESTIONS 2(i)-2(vi)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|---|---------------------------------|
| A. Pelvic inflammatory disease (PID) | D. Carcinoma cervix |
| B. Fibroid uterus | E. Endometriosis |
| C. Secondary dysmenorrhoea | F. Primary dysmenorrhoea |

Questions:

- 2(i).** 30 year old Mrs. Shanthi has dysmenorrhea for the past six months. Her first child is 6 years old and now she has difficulty in conceiving. On pelvic examination she has tenderness. The type of dysmenorrhea she has is
- 2(ii).** 34 years old Mrs. Alice presented with dysmenorrhea. On examination she had lower abdominal pain. Pelvic examination was tender, uterus was retroverted with nodules on the posterior cervix and there was adnexal mass. The most likely cause of dysmenorrhea in her is
- 2(iii).** 35 year old Mrs. Xavier presented with dysmenorrhea and vaginal discharge. On examination she has lower abdominal tenderness and per vaginal examination showed foul smelling discharge from her cervix. The most likely cause of dysmenorrhea in her is
- 2(iv).** 40 year old Mrs. Radha presented with dysmenorrhea and increased menstrual flow. On abdominal examination, her uterus was 14 week size. Per vaginal examination revealed a uterine mass. The most likely cause of dysmenorrhea in her is
- 2(v).** 45 year old Mrs. Narmadha presented with dysmenorrhea and post-coital bleeding for the past 2 months. On per vaginal examination the cervix was unhealthy and abnormal. The most likely cause of dysmenorrhea in her is
- 2(vi).** 14 year old Miss. Menaka attained menarche 18 months ago. Since then she has dysmenorrhea during every cycle. The type of dysmenorrhea she has is

3. THEME: MENSTRUAL IRREGULARITIES - DIAGNOSIS [QUESTIONS 3(i) - 3(vi)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|---------------------------------------|--|
| A. Ectopic pregnancy | H. Maternal oestrogen withdrawal |
| B. Endometrial carcinoma | I. Dysfunctional uterine bleeding |
| C. Pelvic inflammatory disease | J. Ovarian carcinoma |
| D. Uterine fibroid | K. Drug induced problem |
| E. Diabetes mellitus | L. Hypothyroidism |
| F. Bleeding disorder | M. Psychological upset |
| G. Polycystic ovarian disease | N. Chlamydial infection |

Questions:

- 3(i).** 60 year old Mrs. Monica presented to you with bleeding PV. Pelvic examination showed a uniformly enlarged uterus. She is also a diabetic. The most likely diagnosis is
- 3(ii).** 14 year old Sunainawas brought to you with severe bleeding since she attained menarche 3 days ago. You notice that she has some bruises over forearms and legs. The most likely diagnosis is
- 3(iii).** 45 year old Ms. Kannagi was brought to you with menorrhagia. She is not a diabetic or hypertensive. She recently lost her husband in a road traffic accident and has been on some antidepressants recently. The most likely cause of menorrhagia is
- 3(iv).** 29 year old Mrs. Komal presented to you with excessive periods with foul smelling discharge PV. Her previous menstrual period was normal and lasted for 3 days. On examination, cervical motion was tender. The most likely diagnosis is
- 3(v).** 40 year old Mrs. Yasmin presented to you with increased bleeding, loss of weight and appetite for the past 6 months. On examination she had abdominal distension and the pelvic examination showed adnexal mass on the right side. The most likely diagnosis is
- 3(vi).** 36 year old Mrs. Abraham presented to you with regular heavy periods for the past 6 months. Her pelvic examination was normal. Ultrasound abdomen showed normal uterus. The most likely diagnosis is

4. THEME: DIAGNOSIS OF CAUSE FOR VAGINAL DISCHARGE [QUESTIONS 4(i) -4(iv)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|------------------------------------|--|
| A. Bacterial vaginosis | E. Atrophic Vaginitis |
| B. Vulvovaginal Candidiasis | F. Cancer cervix |
| C. Trichomoniasis | G. Chlamydia Trachomatis |
| D. Cervicitis | H. Gardnerella, anaerobic organisms |

Questions:

- 4(i).** 28 year old MrsDipika presents with complaints of vaginal discharge since two weeks. The discharge is curdy and associated with severe itching. What is the most probable cause of this discharge?
- 4(ii).** 45 Year old MrsSarika presents with complaints of increased vaginal discharge for the past three months, not foul smelling or associated with pruritus. She however has lower abdominal pain, backache and post coital bleeding. What could be the probable cause for this discharge?
- 4(iii).** 32 year old MrsLekha presents with complaints of vaginal discharge and burning sensation while passing urine. There is mucopurulent cervical discharge coming from the cervical os.
- 4(iv).** 28 year old MrsSurekha presents with complaints of vaginal discharge, with no pruritus, lower abdominal pain or dysuria. On examination the cervix is healthy; there is copious thin greyish vaginal discharge with a fishy odour. What could be the probable cause for this discharge?
- 4(v).** 30 year old MrsMenaka presents with profuse vaginal discharge associated with pruritus and dysuria. On examination there is yellow frothy discharge. There is also erythema of vulva and cervix. Whiff test is negative. What could be the probable cause for this discharge?
- 4(vi).** 38 year old MrsMalinipresents with complaints of foul smelling vaginal discharge, with no pruritus, lower abdominal pain or dysuria. She also gives history of post-coital bleeding. On examination the cervix looks unhealthy; there is greyish yellow foul smelling vaginal discharge. What could be the probable cause for this discharge?

5. THEME: BREAST PROBLEMS [QUESTIONS 5(i) - 5(iv)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|-------------------------------|----------------------------------|
| A. Flucloxacillin | I. Mastitis |
| B. Stretch marks | J. Reassurance |
| C. Advise biopsy | K. Topical steroids |
| D. Cyclical Mastalgia | L. Paget's disease of the nipple |
| E. Inflammatory breast cancer | M. Erythromycin |
| F. Eczema | N. Breast Abscess |
| G. Refer the patient | O. Galactorrhea |
| H. Paracetamol | P. Metronidazole |

Questions:

45 years old Mrs. Juliet comes to you with the complaint of pain in the left breast for the past 2 weeks. The breast also feels lumpy to her. On examination the breast looks reddish and swollen and feels warm. The skin of the breast also has a multipledimpled appearance and looks like an orange peel. The left breast does not go up symmetrically with the right one when she raises both her upper limbs.

5(i). What could be your possible diagnosis?

5(ii). How will you treat her?

22 years old Miss. Nathiya, an IT professional, is worried about many things – her increasing weight, loss of hair and lack of sleep. She is also concerned about some changes in her breast. On examination you find reddish and purplish, slightly indented lines, on both breasts which have a different texture from the surrounding skin.

5(iii). What could be your possible diagnosis?

5(iv). How will you treat her?

26 years old Mrs. Lalitha comes to you with the complaint of pain and heaviness in the right breast for the past 2 days. She delivered a baby 4 weeks ago and she is having difficulty in breastfeeding and poor milk drainage. On examination there is engorgement, erythema and nipple excoriation.

5(v). What could be your possible diagnosis?

5(vi). How will you treat her?

6. THEME: INCESSANT CRY [QUESTIONS 6(i)-6(vi)] (TOTAL: 6 MARKS)

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

Options:

- | | |
|---------------------------|-----------------------------------|
| A. Intussusception | F. Meningitis |
| B. Evening colic | G. Urinary tract infection |
| C. Nappy rash | H. Sprains and strains |
| D. Pneumonia | I. Warm weather |
| E. Otitis media | |

Questions

- 6(i).** A 4 month baby has been crying for last 1 hour, otherwise has been healthy- eating well and active. Parents are anxious as this has been happening over a week as the day progresses. The baby feels better when he passes gas. What is the likely cause?
- 6(ii).** A 9 month old baby has been brought in with episodes of crying on and off while sitting. The child is eating well and happy. The baby also cries when it has passed stools and while cleaning the area. Mom has noticed some redness in the area. What is the likely cause?
- 6(iii).** A 3 year old child has been crying since 1 day and more so in the night that is waking him from sleep. The child has been having cold and mild cough for last 3 days and has been pulling on his ears very often. What is the likely cause?
- 6(iv).** A 1 year old child has been crying for over last 1 day. It has been seen to be more while passing urine. The child has been irritable, not eating well and having fever for last 2 days. What is the likely cause?
- 6(v).** A child aged 3 years has not been moving around since a day and cries while walking. He had a fall while playing in the morning. What is the likely cause?
- 6(vi).** A 5 month old baby has been brought in being a bit drowsy having vomiting and fever for a day. The child has been unwell for last few days with intermittent crying and passing blood in stools. What is the likely cause?

7. THEME: SEIZURES IN CHILDREN [QUESTIONS 7(i) -7(vi)](TOTAL: 6 MARKS)

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

Options:

- | | |
|-------------------------------------|-----------------------------|
| A. Benign myoclonic epilepsy | C. Grandmal epilepsy |
| B. Breath holding spell | D. Vasovagal syncope |

- E. Absence seizure
- F. Simple febrile seizure

- G. West Syndrome
- H. Atypical febrile seizure

Questions:

- 7(i). A 2 year old child was brought in with episode of tonic clonic seizures that lasted for a few minutes about half an hour ago. The child had fever since morning and is fully conscious. What is the likely diagnosis?
- 7(ii). An infant was brought in with jerky movement of the hand and head nodding. This has been noticed on several occasions earlier. The child's father is on treatment for epilepsy. What is the likely diagnosis?
- 7(iii). A 3 year old child was brought in with history of having had stopped breathing, while he was crying for a toy. The child had gone blue with some twitches and loss of conscious for a few seconds. What is the likely diagnosis?
- 7(iv). An 8 year old girl came in to clinic as she had a fall in the morning while she was standing in her school assembly. There was no loss of consciousness or jerky movements noticed by her teacher. She has had a similar episode 2 months ago. What is the likely diagnosis?
- 7(v). A 3 year old child was brought to A & E with tonic clonic seizures which lasted for 20 mins. This has happened for the second time in the day and child has high fever for last 2 days. What is the likely diagnosis?
- 7(vi). An 8 year old child was brought in with an episode of generalized tonic-clonic seizures an hour ago. He had tongue biting and incontinence during the seizures. Theseizures were not associated with fever and he had 2 similar episodes in last 3 months. His father has been on treatment for epilepsy. What is the likely diagnosis?

8. THEME: JOINT PAIN IN CHILDREN [QUESTIONS 8(i)-8(vi)]

(TOTAL: 6 MARKS)

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

Options :

- A. Reactive arthritis
- B. Viral fever
- C. Septic arthritis
- D. Polyarticular Juvenile Idiopathic Arthritis
- E. Trauma
- F. Leukemia
- G. Sickle cell disease
- H. Acute Rheumatic fever

Questions:

- 8(i).** A 10 year old girl has come in with runny nose, cough, fever, body aches and joint pains since 2 days. She has decreased appetite and feeling very tired. There is no swelling of joints. What is the likely diagnosis?
- 8(ii).** A 5 year old child has come with high fever and looking very unwell. He also complains of pain and swelling of the right elbow joint which is making him unable to move his arm. His WBC count is high. What is the likely diagnosis?
- 8(iii).** A 9 year old child has come in with pain and swelling of the right knee joint and unable to bear weight. This has started a few hours ago post fall from the cycle. He has some abrasions on the knee but no fever. What is the likely diagnosis?
- 8(iv).** A 12 year old girl complains of low grade fever and rash on and off for last 3 months. She also complains of joint pains and swelling that has affected almost 5 joints. The RA factor is negative. What is the likely diagnosis?
- 8(v).** A 1 year old baby girl has been brought by her mother as she noticed swelling of small joints of the hand and feet. The child is pale and lethargic with some breathing difficulty. Similar problem has been noted in the family. What is the likely diagnosis?
- 8(vi).** A 10 year old boy has come in with joint pain and swelling which has been moving from joint to joint. He has high grade fever and a macular rash on the trunk and limbs. He was treated for sore throat in the past. What is the likely diagnosis?

9. THEME: COUGH IN CHILDREN [QUESTIONS 9(i)-9(vi)] (TOTAL: 6 MARKS)

From the options 'A to P' given below, choose the best answers for the questions 9(i)-9(vi):

Options:

- | | |
|-----------------------------------|------------------------------|
| A. Clinical evaluation | E. Chest X ray |
| B. Bronchoscopy | F. Airway fluoroscopy |
| C. Trial of antihistamines | G. Endoscopy |
| D. Sweat chloride test | H. Sputum AFB test |

Questions: What is the initial diagnostic approach for the following?

- 9(i).** A 5 month old baby has been having running nose, cough and difficulty breathing. On examination the child is tachypneic, wheezing and has recessions. There is no fever.
- 9(ii).** A 10 month old baby is brought in with history of choking and continuous cough. The mother thinks the child has swallowed a part of his toy that he was playing with.
- 9(iii).** A 2 year old child has been having recurrent chest infections along with chronic diarrhea. The child is also not growing well.

- 9(iv).** A 4 year old child comes in with cough for more than 3 weeks. It started with mild URTI and has now progressed to paroxysmal cough with frequent vomiting post cough.
- 9(v).** A 9 year old child comes with headache, itchy eyes, sore throat, pale nasal turbinate's, cobble stoning of posterior oropharynx and night time cough.
- 9(vi).** A 10 year old child comes in with history of persistent barky cough, mainly at day time at school. She does not cough while playing or at home. There is no fever or other symptoms.

10. THEME: FEVER WITH RASH[QUESTIONS 10(i)-10(vi)] (TOTAL: 6 MARKS)

From the options 'A to H' given below, choose the best answers for the questions 10(i)-10(vi)

Options:

- | | |
|--------------------------------------|--|
| A. Chickenpox | E. Dengue |
| B. Measles | F. Systemic lupus erythematosus |
| C. Fifth disease | G. Sixth disease |
| D. Inflammatory bowel disease | H. Kawasaki disease |

Questions: Choose the correct diagnosis for the following scenarios

- 10(i).** A 6 year old boy has had cold, cough and fever for 3 days. This has been followed by an erythematous maculopapular rash that started from the head and behind ears now affecting the trunk?
- 10(ii).** A child aged 9 years has developed vesicular rash of the body with fever. The rash has been appearing in crops and is very itchy.
- 10(iii).** A 3 year old girl has been having fever for 5 days and looks unwell. On examination she has maculopapular rash, lymphadenopathy, edema of the hands and foot, peeling of the skin, conjunctivitis and red tongue.
- 10(iv).** A 12 year old child has been having high grade fever, cold and body and joint pains for 5 last days which has now resolved. The child now has developed a maculopapular rash with few petechiae. The platelet count has been low.
- 10(v).** A 5 year old child has had low grade fever, cold and headache for 4 days. This is followed by a maculopapular rash over the body which is predominant over the cheeks.
- 10(vi).** A 6 month old baby has been having high grade fever for 3 days. This has been followed by red rash starting from trunk to limbs. The rash is not itching and has not involved the face. The child has had an episode of seizure on day 2 of fever.
