

(LE 0214)

M.MED.FAMILY MEDICINE

Sub. Code: 4003

FIRST YEAR THEORY EXAM– FEB 2014

PAPER III – MATERNAL & CHILD HEALTH

*Q.P. CODE: 434003*

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. 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. 11months old Sumathi is brought by the mother with high fever for 5days duration, cough and rash over face and trunk for 1 day.
- A.** What are all the things will you ask in the history that will help you to arrive at the diagnosis. **(4)**
- B.** What are the characteristic features of the rash in the following conditions
- a. Measles **(2)**
- b. Chicken pox **(2)**
- C.** You have diagnosed this as Measles .How will you treat this child. **(4)**
- D.** Mother says that child was not given Measles vaccination.
- i.At what age the child should have received the measles vaccination? **(1)**
- ii. What type of vaccine is it? **(1)**
- iii. What is the dose? **(1)**
- iv. What is the route of administration? **(1)**
- E.**Define Macule,papule,Pustule and vesicle **(4)**
2. 7 year old Ranjan is brought to you with history of nocturnal increase in cough and shortness of breath for the past 5 days. He had similar attacks 4 months and 10 months ago. There is family history of asthma **20 (5 x 4)**

On examination you find that he has generalized wheeze.

- A.** Discuss the differential diagnoses for recurrent cough in a child.
- B.** What is your diagnosis for Raghu? How did you come to this conclusion?
- C.** Discus the various grades of Raghu's condition. How will you grade Raghu?
- D.** How would you manage him?
- E.** Raghu's mother asks whether this condition will persist for the life time. What will you tell her?

**PART – B**  
**EXTENDED MATCHING QUESTIONS**

(ANSWER ALL QUESTIONS)

**1. THEME: DIARRHOEA IN CHILDREN [QUESTIONS. 1(i)-1(vi)]**

(TOTAL: 6 MARKS)

**From the options ‘A to P’ given below, choose the best answer for the questions**

**1(i) – 1(vi)**

**Options :**

- |                                    |                               |
|------------------------------------|-------------------------------|
| A. Norwalk virus                   | I. Cotrimoxazole 10mg/kg/day  |
| B. Some dehydration                | J. Rotavirus                  |
| C. Zinc sulphate 20 mg od x10 days | K. 600 ml in 4 hours          |
| D. Severe dehydration              | L. As much the baby wants     |
| E. Doxycycline                     | M. Metronidazole 25 mg/kg/day |
| F. Zinc sulphate 10 mg od x10 days | N. No dehydration             |
| G. Giardiasis                      | O. 340 ml in 4hrs             |
| H. Shigella                        | P. 700 ml in 2 ½ hours        |

**Questions**

*1 year old Mona is brought to the clinic with loose stools and vomiting for one day. Examination reveals a irritable baby with sunken eyes and normal pulse who drinks water eagerly when offered. The weight of the baby is 8 kg.*

- 1(i) The degree of dehydration is
- 1(ii) The amount of ORS that has to be given is
- 1(iii) The most common organism causing this illness is
- 1(iv) The drug which can make a difference in the duration and severity of this illness and its dose is

*3 year old Kala is brought with multiple episodes of loose stools which are associated with blood and mucus. There is also some abdominal pain, tenesmus and low grade fever.*

- 1(v) What is the most likely causative organism?
- 1(vi) What is the treatment?

**2. THEME: IMMUNIZATION [QUESTIONS. 2(i) – 2(vi)] (TOTAL: 6 MARKS)**

**From the options ‘A to H’ given below, choose the best answer for the questions**

**2(i) –2( vi)**

**Options**

- |                              |                    |
|------------------------------|--------------------|
| A. Vaccinate as per schedule | E. MMR             |
| B. Delay vaccine             | F. Measles         |
| C. Don't vaccinate           | G. Hib             |
| D. DTaP(acellular pertussis) | H. INH 10mg/kg/day |

**Questions**

- 2(i)** A three and half month old Mala's baby is brought to you for vaccination. He has mild fever and runny nose. What will be your advice regarding vaccination?
- 2(ii)** A baby who is due for 3rd dose of DPT has fever, respiratory rate of 66/min and chest retraction. What will be your advice regarding vaccination?
- 2(iii)** A infant is brought for routine vaccination at 14 weeks. Other than DPT and OPV, what other optional vaccine can he receive?
- 2(iv)** A 18 month old with cerebral palsy is brought for immunization. What will be your advice regarding vaccination?
- 2(v)** A baby who had persistent cry for 4hours after the last DPT vaccine is due for the next one - What will be your advice regarding vaccination?
- 2(vi)** An infant who is on Beclomethasone inhaler is due for MMR - What will be your advice regarding vaccination?

**3.THEME: INCESSANT CRY – DIAGNOSIS (QUESTIONS. 3(i) - 3(vi))**

**(TOTAL: 6 MARKS)**

**From the options ‘A to K’ given below, choose the best answer for the questions**

**‘3(i) – 3(vi)**

**Options :**

- |                                   |                     |
|-----------------------------------|---------------------|
| <b>A.</b> Evening Colic           | <b>G.</b> > 60/min  |
| <b>B.</b> Intussusception         | <b>H.</b> > 40/ min |
| <b>C.</b> Urinary tract infection | <b>I.</b> 2         |
| <b>D.</b> Wet napkin              | <b>J.</b> 3         |
| <b>E.</b> Bronchiolitis           | <b>K.</b> 4         |
| <b>F.</b> > 50/min                |                     |

**Questions:**

**3(i)**.....is a common cause of incessant cry without major disease.

**3(ii) Child** with “sausage” like mass in abdomen. What is your diagnosis?

**3(iii)** 4 month well fed infant crying in the evenings. What could be the cause?

**3(iv)** Incessant cry is defined as continuous crying for .....hours or more.

**3(v)** Respiratory rate more than .....is considered as tachypnea in a 2 months old

Child

**3(vi)** Respiratory rate more than .....is considered as tachypnea in a 10 months old

Child

**4. THEME: TREATMENT IN INCESSANT CRY (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. Inj. Cefotaxime 50mg/Kg/dose Q6H
- B. Tab.Nitrofurantoin 5-7 mg/Kg/day Q6H
- C. Syp.Amoxycillin 50mg/Kg/day for 7-10 days
- D. Syp.Amoxycillin 100mg/Kg/day for 7-10 days
- E. Steam inhalation, Nebulised Salbutamol
- F. Soothing throat, Paracetamol for fever
- G. Docusate Sodium Ear drops 2 drops Q2H, then syringing.
- H. Gentamicin ear drops 2 drops Q8H

**Questions:**

**What is the treatment for the following conditions?**

- 4.(i) Otitis media
- 4.(ii) Ear wax
- 4.(iii) Bronchiolitis
- 4.(iv) Urinary tract infection
- 4.(v) Viral pharyngitis
- 4.(vi) Pyogenic meningitis

**5.THEME: SEIZURES IN CHILDREN [QUESTIONS. 5(i) – 5(vi)]**

**(TOTAL:6 MARKS)**

**From the options ‘A to N’ given below, choose the best answer for the questions**

**5(i) –5(vi):**

**Options:**

- A. Atypical febrile seizure
- B. Syncope
- C. Simple febrile seizure
- D. Anti epileptic drugs
- E. Seizure disorder
- F. Complex partial seizure
- G. 20-40mg/kg/day
- H. Breath holding spell
- I. Acute CNS infection
- J. 10-15mg/kg/day
- K. Avoiding triggers
- L. Diazepam
- M. 5-6mg/kg/day
- N. Clobazam

**Questions:**

*10month old Prasanth is brought to your clinic with two episodes of seizure since morning. He has been febrile for the past 3 days and has also vomited several times. On examination he is drowsy, irritable and not sucking at the breast adequately.*

- 5. (i) The clinical diagnosis is
- 5. (ii) The CSF examination turns out normal. The child is not drowsy and is taking feeds after one hour of observation. Now your diagnosis is
- 5. (iii) If this child develops recurrent febrile seizures and has delayed developmental milestones the next step in management would be

*7 year old Bunty has had 3 episodes of generalized tonic clonic convulsions in the last 6 months. Episodes are during afebrile periods. His uncle has epilepsy.*

- 5. (iv) What is the next step in treatment
- 5. (v) The dose of sodium valproate is

*1 ½ year old Anju turns rigid and loses her consciousness transiently and occasionally turns blue following loud crying episodes*

- 5. (vi) The treatment is

**6. THEME: DIABETES IN PREGNANCY [QUESTIONS. 6(i) – 6(vi)]**

**(TOTAL:6 MARKS)**

**From the options ‘A to M’ given below, choose the best answer for the questions**

**6(i) – 6(vi)**

**Options:**

- A. 24-28 weeks
- B. Glipizide
- C. Metformin
- D. Glibenclamide
- E. Insulin
- F. 16 weeks
- G. 36 weeks
- H. Less than 155mg%
- I. Less than 95mg%
- J. Less than 120mg%
- K. Less than 140mg%
- L. 8 weeks
- M. 32 weeks

**Questions**

*30 year old Mrs.Sadhana comes to you for antenatal checkup. Her previous baby was weighing 4kg at birth.*

- 6. (i) When do you want to screen for GDM?
- 6. (ii) You have done the oral glucose tolerance test(GTT). The 2hour value is 165 mg%. What is the normal value?
- 6. (iii) In the management of Mrs.Sadhana,what should the target fasting blood sugar levels be?
- 6. (iv) Which is the preferred oral hypoglycemic drug in pregnancy?

*32 year old Mrs.Komala has been a diabetic for 12 years and her fundus showed mild retinopathic changes 4 months ago. She is now 12 weeks pregnant.*

- 6. (v) What drug should be used in the management of diabetes for this patient?
- 6. (vi) The ideal time for induction of delivery in a diabetic is

**7. THEME: INVESTIGATION OF THE FEBRILE CHILD [QUESTIONS.**

**7(i)–7(vi)] (TOTAL: 6 MARKS)**

**From the options ‘A to Q’ given below, choose the single best answer for the questions**

**7 (i) – 7(vi )**

**Options:**

- |           |                           |           |                   |
|-----------|---------------------------|-----------|-------------------|
| <b>A.</b> | Blood culture             | <b>I.</b> | EEG               |
| <b>B.</b> | Urine culture             | <b>J.</b> | Lumbar puncture   |
| <b>C.</b> | ASO titre                 | <b>K.</b> | Throat swab       |
| <b>D.</b> | Total WBC count           | <b>L.</b> | ECG               |
| <b>E.</b> | Stool culture             | <b>M.</b> | ANA               |
| <b>F.</b> | Chest x-ray               | <b>N.</b> | X-ray of the limb |
| <b>G.</b> | Culture of joint aspirate | <b>O.</b> | ALT/AST           |
| <b>H.</b> | CT brain                  | <b>P.</b> | Platelets         |
|           |                           | <b>Q.</b> | MRI brain         |

**Questions:**

**What is the most appropriate investigation for the following patients?**

- 7. (i)** A 4 year old girl is febrile and has been unwell for 2 days. She complains of a headache and is drowsy but there are no neurological deficits.
- 7. (ii)** A 3 month old infant has high grade fever & cough for 3 days. He is tachypnoeic, has nasal flaring and decreased breath sounds.
- 7. (iii)** An 8 year old child has developed a painful, swollen knee over the last 1 day. On examination, there is a tender, warm effusion of the left knee. She also has a temperature of 102° F.
- 7. (iv)** A 9 year old has fever, joint pain and swelling of the right knee joint. His mother reports that 4days ago the left elbow joint was swollen. Examination reveals a systolic heart murmur. Which blood investigation given in the options would you order for this child?
- 7. (v)** A 12 year old who has sickle cell disease presents with fever and pain of the left leg. Clinical examination reveals mild swelling, warmth and tenderness of the upper one third of the limb. Name a simple blood investigation you will do to confirm your clinical diagnosis:
- 7. (vi)** A 5year old presents with high grade fever for 3 days, rash, body pain and bleeding from the gums on brushing.

**8. THEME: ROUTE OF ADMINISTRATION OF VACCINES [QUESTIONS**

**8(i) – 8(vi)] (TOTAL 6 MARKS)**

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

- A. Intramuscular
- B. Subcutaneous
- C. Intradermal
- D. Oral

**Questions:**

**8(i).** BCG

**8(ii).**DPT

**8(iii).**Measles

**8(iv).**Live Polio vaccine

**8(v).**Hepatitis B

**8(vi).**Varicella

**9. THEME: EDEMA IN CHILDREN [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. Kwashiorkor
- B. Pneumococcal vaccine
- C. Marasmus
- D. Indian childhood cirrhosis
- E. 52 weeks
- F. Nutritional rehabilitation
- G. Broad spectrum antibiotics
- H. Nephrotic syndrome
- I. 28 weeks
- J. Glomerulo nephritis
- K. Meningococcal vaccine
- L. Methotrexate
- M. Cyclophosphamide
- N. Steroids
- O. 36 weeks

**Questions :**

*Bintu, a 20 months old baby is brought by her mother with complaints of swelling all over the body with apathetic and dull look .Her blood pressure is 80/50 mm of hg. She also has bitot's spots, angular stomatitis, glossitis and cheilitis. Bintu's younger brother is 7 months old; her father is a daily laborer in the fields and mother stays at home because she falls sick very often. Her urine albumin is 1+*

**9.(i)** What is the most likely diagnosis for Bintu?

**9.(ii)** How will you treat her?

*Mamta, a 2 year old has come with complaints of swelling all over the body. Her blood pressure is 80/50 mm of hg. Her urine albumin is 3+ (repeated twice). Her serum albumin is 2.5 gm%and serum cholesterol is 312 mg%*

**9.(iii)**What is the diagnosis

**9.(iv)**What is the first line of management

**9.(v)** If she is responding to the treatment, what is the duration of treatment .

*3 year old Selvi has steroid dependent Nephrotic syndrome.*

**9.(vi)** Which is the next recommended drug for Selvi?

**10. THEME: TREATMENT FOR DIARRHOEA IN CHILDREN [QUESTIONS 10(i) – 10(vi)]**

**(TOTAL: 6 MARKS)**

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

**Options:**

- |  |                          |
|--|--------------------------|
| A. 50 to 100ml of fluid after each loose stool.    | F. ORS.                  |
| B. No dehydration.                                 | G. 180 microdrops/min.   |
| C. 60 microdrops/min.                              | H. 750 ml over 4 hours . |
| D. Some dehydration.                               | I. Ringer lactate.       |
| E. 180ml over 1 hour and 420 ml over next 5 hours. | J. 450 ml over 4 hours.  |
|  | K. Severe dehydration    |

**10 (i).** 7months old Sneha has been brought with history of loose stools and vomiting for the past 2 days.On examination,she is unconscious and not able to drink.The degree of dehydration is

**10 (ii).** She weighs 6kg.The amount of fluid she requires is

**10 (iii).** The ideal fluid for Sneha is

**10 (iv).** 1.5year old Ravichand has been brought with history of loose stools and vomiting for the past 2 days.On examination,he is alert and active and he drinks normally.The degree of dehydration is

**10 (v).** He is weighing 10kg.The fluid he requires

**10 (vi).** A child needs to be given 180ml of IV fluid over 60minutes.The drip rate would be

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