(LF 0214)

M.MED.FAMILY MEDICINE **Sub Code: 4003** FIRST YEAR THEORY EXAM-AUGUST 2014

PAPER III - MATERNAL & CHILD HEALTH

O.P. CODE: 434003

TIME: THREE HOURS **MAXIMUM MARKS: 100**

INSTRUCTIONS

- The paper will be for a total of 100 marks.
- Answer **all** the Ouestions.
- 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 EMOs (Extended Matching Ouestions) (**60** marks)
 - \checkmark 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 deconoate
- H. Tab. Risperidone

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

- 3(i) What is the drug of choice for Acute Psychosis?
- 3(ii) What is the drug of choice for Bipolar illness?
- * Match each question to a single best option and write it in your paper in the column provided like this:

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

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

PART – A

DESCRIPTIVE QUESTIONS

(ANSWER ALL QUESTIONS)

1. Mrs. Mala a p	primigarvida	has	come	to	you	at	14	weeks	of	gestation	for	the	first	time	for
Antenatal Check	up.										4X:	5=20) Ma	rks)	

A. Discuss any4 uses of documentation of antenatal care.

(4 marks)

B. Name any 4risk factors, which if you find in Mrs. Mala, you would call it a high risk pregnancy.

(4 marks)

C. What baseline investigations would you do for Mrs. Mala on this 1st antenatal visit.

(4 marks)

- **D.** Mrs. Mala comes again to you at 24 weeks of gestation for her 2nd antenatal visit. You reviewed her investigations done during the 1st antenatal visit and found that she is Rh negative. While questioning, she tells that her husband is Rh positive. How will you manage her now? (4 marks)
- **E.** Name 2 tests that you would suggest during this 2nd antenatal visit. (4 marks)
- 2. Priya's Baby, born by home delivery, is brought to you on the 3rd neonatal day with some minor feeding problems. You as a Family Physician use that opportunity to screen the neonate. With regard to Neonatal Screening, answer the following questions:

(Total 20 Marks)

A. Discuss the importance and benefits of Neonatal Screening

(5 marks)

B. Discuss the existing Neonatal Screening Program in India

(5 marks)

- **C.** Discuss in brief, the following 2 conditions and explain the consequences if these conditions are not screened for. And explain how you will do screening for these conditions for Priya's Baby?
 - 1. Congenital Hypothyroidsm

(5 marks)

2. Congenital Hearing Loss

(5 marks)

PART - B

EXTENDED MATCHING QUESTIONS

(ANSWER ALL QUESTIONS)

1. THEME: VOMITING IN PREGNANCY [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. 5% Dextrose
- **B.** High levels of HCG, oestrogen, progesterone
- C. Blood urea
- **D.** 50ml/kg over 6 hours

- **E.** Molar and twin pregnancies
- **F.** Urine for ketone
- **G.** 70ml/kg over 6 hours
- **H.** 70ml/kg over 8 hours
- I. Normal saline

- J. Ringer lactate
- **K.** Normal pregnancy
- **L.** High levels of prolactin

- M. Low levels of Prolactin
- N. Gestational Diabetes

Questions:

Mrs. Sharada, a primigravida comes to you with complaints of severe vomiting.

1(i). The physiological cause for vomiting in pregnancy is

As you take further history you find that she vomits 10 to 15 times a day and is unable to eat anything. On examination, she looks dehydrated and her Blood Pressure is 100/60 mmHg, pulse 96/min.

- **1(ii).** You suspect that this could be Hyperemesis gravidarum. This is one of the symptoms of:
- **1(iii).** What test will you order which will help you in determining the management for Mrs. Sharada?
- **1(iv).** She has moderate dehydration. The amount of fluid correction she needs is:
- 1(v). The fluid recommended for correction of dehydration in Mrs. Sharada is
- 1(vi). The intravenous fluid, which is not usually used for the correction of dehydration but is used in the management of hyperemesis gravidarum is
- 2. THEME: DIABETES COMPLICATING PREGNENCY [QUESTIONS 2(i) 2(vi)]

(Total: 6 Marks)

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

Options:

- **A.** She has overt diabetes in pregnancy
- **B.** She has gestational diabetes
- C. Normal value of 75 gm oral glucose tolerance test in pregnancy
- **D.** Abnormal value of 75 gm oral glucose tolerance test in pregnancy
- **E.** She does not have gestational diabetes

Questions:

- **2(i).** Mrs. Lakshmi, a 2ndgravida at 20 weeks gestation, brings you the result of her fasting blood sugar. It is 90 mg%. What is your conclusion?
- **2(ii).** You review Mrs. Shantanu's blood reports who is pregnant with her 3rd child and find that her fasting blood sugar which is 100mg%. What is your conclusion?
- **2(iii).** Mrs. Anbu who is pregnant has done her 75 gm glucose tolerancretest(GTT).Her fasting sugar is 95 mg%. What do you infer?
- **2(iv).** 32 year old Gravida 2, Para 1, Living 1, Mrs. Bharathi,at 18 weeks of gestation has taken her 75 gm glucose tolerancre test(GTT).Her 2 hour blood sugar value is 160 mg%. What do you infer?

2(iv). Mrs. Chandra, one of your antenatal patients, has taken her 75 gm glucose tolerancre test(GTT).Her 1 hour blood sugar value is 160mg mg%. What is your inference?

2(vi). 16 weeks pregnant Mrs.Devi, with a family history of Diabetes, has done her fasting blood sugar. It is 130mg%. What is your conclusion?

3. THEME: STAGES&PHASES OF LABOUR [QUESTIONS 3(i) – 3(vi)] (Total 6 Marks)

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

- **A.** Latent 1st stage of Labour
- **B.** Early 2nd stage of Labour
- C. False labour

- **D.** Active 1st stage of Labour
- **E.** Late 2nd stage of Labour
- **F.** 3rd stage of Labour

Questions:

You are posted in the labour room and Mrs. Subbulakshmi comes to you with lower abdomen pain at 40 weeks gestation. You examine her abdomen and do a Per-Vaginal exam on her:

- 3(i) If her cervix is 6 cm dilated and there is fetal descent, she is in
- 3(ii) If her cervix is not dilated and there is no fetal descent, she is in
- **3(iii)** If her cervix is fully dilated and she has urge to push, she is in
- **3(iv)** If her cervix is 3 cm dilated and there is no fetal descent, she is in
- 3(v) If she has delivered but the placenta is not yet expelled, she is in
- **3(vi)** Her cervix is fully dilated and there is no urge to push, she is in

4. THEME: FEVER DURING POSTPARTUM PERIOD [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. Metritis
- **B.** Pelvic abscess
- C. Breast abscess
- **D.** Mastitis
- **E.** Cystitis

- F. Acute pyelonephritis
- **G.** Deep vein thrombosis
- **H.** Uncomplicated malaria
- I. Complicated Malaria
- **J.** Peritonit

Questions:

4(i). Today is the 13th postpartum day for Mrs. Alice. She presented with right sided breast pain. On examination, she has a reddened wedge shaped area on the right breast, which is also warm and tender to touch Mrs. Alice has

- **4(ii).** Today is the 7th postpartum day for Mrs. Bhuvana. She has spiking fever despite antibiotics. On examination she has calf muscle tenderness. Mrs. Bhuvana has
- **4(iii).** Today is the 4th postpartum day for Mrs. Chandra. She has fever with chills with lower abdominal pain. On examination she has purulent foul smelling lochia and tender uterus. Mrs. Chandra has
- **4(iv).** Mrs. Devi is in her postnatal period. She has fever with chills with increased frequency and urgency of micturition. On examination, she has suprapubic pain and tenderness and there is no loin pain/tenderness. Mrs. Devi has
- **4(v).** Today is the 14th postpartum day for Mrs. Evangeline. She has fever and on examination she has a fluctuating swelling in the left breast draining pus. Mrs. Evangeline has
- **4(vi).** Mrs. Fatima is in her postpartum period. She has fever with chills and rigors, headache and muscle/joint pain. On examination, she is conscious, oriented, vital signs are stable and she has an enlarged spleen. Mrs. Fatima has

5. THEME: ANTEPARTUM PROBLEMS-VAGINAL BLEEDING [QUESTIONS 5(i) – 5(vi)] (Total: 6 Marks)

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

Options:

- **A.** Inevitable abortion
- **B.** First 22 weeks of pregnancy
- **C.** First 16 weeks of pregnancy
- **D.** Taking a detailed history
- **E.** Ruptured ectopic pregnancy
- **F.** Stabilising the patient

- **G.** Delayed menstrual period
- **H.** Threatened abortion
- **I.** Referring the patient immediately
- **J.** First 18 weeks of pregnancy

Questions:

- **5(i)** By definition, vaginal bleeding in early pregnancy is the bleeding that occurs during this period of pregnancy
- **5(ii)** The priority in managing a patient who presents with vaginal bleeding in early pregnancy who is in shock is
- **5(iii)** Mrs. Selvi presented to you with history of bleeding PV since that morning. When you took the history, she told you that her period was overdue by 7 days. On examination her vitals were stable and per speculum showed bleeding PV and there was no abdominal tenderness or guarding. The most likely diagnosis is

- **5(iv)** Mrs. Reena presents with lower abdominal pain with bleeding PV following 8 weeks of amenorrhea. Per speculam examination showed blood in the vagina. Uterus was corresponding to date and cervical os was closed. The diagnosis is
- **5(v)** Mrs. Seetha presented to a Family Physician with the history of syncopal episodes since morning. She had her last full periods 6 weeks ago and then 2 weeks ago she had some spotting per vaginum. But she has started having bleeding PV since this morning. On examination, she was pale, her pulse was 116/min, BP was 90/70.Per-speculum examination showed blood in the vagina and the cervical os was closed. Cervical Excitation test was positive. The most likely diagnosis is
- **5(vi)** Mrs. Radhika presents with lower abdominal pain with bleeding PV following 12 weeks of amenorrhea. Per-speculum examination showed blood in the vagina and the cervical os was open. Gentle per-vaginal examination showed that her uterine size was around 8-10 weeks. The diagnosis is

6. THEME: NEONATAL MORTALITY [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.** 35/1000 live births
- **B.** Death during first 7 days of life
- **C.** 37 weeks
- **D.** Prematurity and low birth weight, birth asphyxia and infections
- E. Sarnat & Sarnat classification
- **F.** Number of neonatal deathsX1000

Total number of live births

G. Number of neonatal deathsX1000

Total number of births

- **H.** 20/1000 live births
- **I.** 5-minute Apgar score
- **J.** Neonatal jaundice, neonatal convulsions and birth asphyxia
- **K.** Death during first 28 days of life
- L. 35 weeks
- M. 38 weeks
- **N.** 40 weeks
- **O.** 1-minute Apgar score

Questions:

- **6(i)** The present neonatal mortality in India is
- **6(ii)** The major causes that contribute to neonatal death in India are
- **6(iii)** Neonatal death is defined as:
- **6(iv)** You just conducted a normal delivery for Mrs. Neera. Her newborn baby's Apgar score is 7 at 1 minute and 8 at 5 minutes. Which is a valid predictor of neonatal mortality?

- **6(v)** Mrs. Rani had obstructed labour and her newborn baby did not cry at birth. A tool that may help to predict the long-term outcomes in a baby with perinatal asphyxia is:
- **6(vi)** A baby is said to be term when his/her gestation age is more than

7. THEME: BREAST FEEDING [QUESTIONS 7(i) – 7(vi)] (Total: 6 Marks)

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

Options:

- A. 4 months
- **B.** Lying position
- C. NG feeds
- **D.** 6 months
- **E.** Football hold position
- **F.** 2 months
- **G.** Direct breast feeds and paladai feeds
- H. Clock-work feeding
- **I.** 2 weeks
- **J.** Sitting position
- **K.** On-demand feeding
- L. Cradle-hold position
- M. Cross-cradle hold position
- N. 4 weeks
- O. Only Spoon feeds
- P. Only Direct breast feeds

Questions

- **7(i).** You are giving health education to Mrs. Angel about breastfeeding. The position to be avoided while breastfeeding the baby is
- **7(ii).** Mrs. Kanchana's newborn baby is weighing 1.7 kg. You plan to start the baby on breast milk. Which route of feeding will you plan to use for this baby?
- **7(iii).** Mrs. Selvi has a 3 month old baby. She is asking you about the time when she can start weaning food for the baby. The ideal time to start weaning food is
- **7(iv).** Unfortunately Mrs. Shanthi died during labour. You have counseled the grandmother to give cow's milk in 2:1 dilution to her baby. When will you advise her to start the baby on full strength cow's milk?
- **7(v).** Mrs. Latha's baby is a Preterm baby. She is asking you, how frequently she should feed her baby. You will recommend her this type of feeding:
- **7(vi).** Mrs. Ratna's baby is a 3.2 Kg Term baby. She is asking you, how frequently she should feed her baby. You will recommend her this type of feeding:

8. THEME: IMMUNISATION-PROPERTIES OF VACCINE [QUESTIONS 8(i) – 8(vi)] (Total: 6 Marks)

From the options 'A and B' given below, choose the best answer for the questions 8(i)-(vi).

Options:

- A. Live vaccine
- B. Inactivated vaccine

Questions

You are called to talk to a group of Family Medicine residents on vaccines. You plan to give a quiz on the properties of vaccines. Write the answers for the following questions you have compiled for the quiz:

- **8.** (i) This type of vaccine stimulates a weaker immune response and takes several additional doses or booster doses to maintain a person's immunity
- 8. (ii) This type of vaccine cannot be used in people with weakened immune system
- **8.** (iii) This type of vaccine is more stable
- **8.** (iv) This type of vaccine is more safer than the other vaccine
- **8.** (v) This type of vaccine needs to be refrigerated to stay potent
- **8.(vi)** This type of vaccine could revert to a virulent for

9. THEME: ROUTE OF ADMINISTRATION OF VACCINE [QUESTIONS 9(i) –

9(vi)] (Total: 6 Marks)

From the options 'A and D' given below, choose the best answer for the questions 9(i)-9(vi)

Options:

- **A.** Oral
- **B.** Intramuscular(IM)
- **C.** Subcutaneous(SC)
- **D.** Intradermal(ID)

Questions:

What is the route of administration of the following vaccines?

- **9(i).** Mrs. Ruby has brought her son for Hepatitis B vaccination. The route of administration of this vaccine is
- **9(ii).** Mr. Sankar has come to you asking for Yellow fever vaccine as he is going to Sudan next month. The route of administration of this vaccine is
- **9(iii).** Mrs. Bhuvana has brought her infant for Rotavirus vaccine. The route of administration of this vaccine is
- **9(iv).** One of the pilot immunization programs in the new health system in Timor-Leste is planning to use the Inactivated Polio vaccine (IPV). The route of administration of this vaccine is
- **9(v).** Mrs. Malathy has brought her 2 days old son for BCG vaccine. The route of administration of this vaccine is
- **9(vi).** Aarthy a 10 months old infant has been brought by her parents for Measles vaccine. The route by which you will give this vaccine is
- 10. THEME: DEVELOPMENTAL DELAY[QUESTIONS 10(i) -10(vi)] (Total: 6 Marks)

For the developmental milestones given in 10(i)-10(vi), choose the age at which they are usually attained from the option given from A to J $\underline{Options}$

A. 1 month	F. 13 months
B. 2 months	G. 2 years
C. 4 months	H. 3 years
D. 6 months	I. 4 years
E. 9 months	J. 5 years

Questions

- 10(i) Sankar has been brought for an upper respiratory infection to you by his mother. You notice that he descends stairson his own and his mother says he can do this for the past few days. Sankar's developmental age is
- **10(ii)** Mrs. Shalini has brought her daughter for vaccination. On routine checking of the milestone, you find that the baby's eyes follow objects to midline. The baby's age is:
- **10(iii)** Ganesan's mother tells you that for the past 1 week he started walking on his own. Ganesan's likely age is:

- **10(iv)** You wanted to assess the age of toddler Gokul. When you asked his mother she said, he started riding the tricycle recently. Gokul's age is likely to be around:
- 10(v) Gomathy was brought to you for the assessment of developmental delay. You notice that Gomathy has Pincer grasp. Gomathy's developmental age is likely to be around:
- **10(vi)** Roshinihas been brought for immunization. You notice that she rolls over supine to prone. Roshini's age is approximately:
