

**APPENDIX F:
SBMA WRITTEN EXAMS AND CASE STUDIES FOR
FIRST-YEAR RESIDENT PHYSICIANS**

SBMA Written Exams and Case Studies for First-Year Resident Physicians

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Written Evaluation

OBGYN RY1

Critical Thinking

- 1) All of the following typically open onto the vestibule EXCEPT
 - a. urethra
 - b. skene ducts
 - c. bartholin ducts
 - d. mullerian ducts

- 2) The vagina is lined most with what type of epithelium?
 - a. cuboidal epithelium
 - b. glandular epithelium
 - c. squamous epithelium

- 3) Which part of the uterus becomes the lower uterine segment during pregnancy?
 - a. cervix
 - b. cornua
 - c. corpus
 - d. isthmus

General Knowledge

- 4) Which one of the following is not one of the major goals of medicine?
 - a. provide relief from pain and suffering
 - b. eradicate all disease
 - c. try to treat disease
 - d. minimize harm in the process of healing

- 5) The ethical principle of providing treatment that protects or benefits patients and avoids unnecessary harm is
 - a. respect for persons
 - b. beneficence
 - c. justice
 - d. autonomy

- 6) The ethical principle of respecting the patient's desires and requests is
 - a. respect for persons
 - b. beneficence
 - c. justice
 - d. autonomy

Ambulatory Care

- 7) What is the recommendation for the administration of hepatitis B vaccine to pregnant women?
 - a. contraindicated throughout pregnancy
 - b. given pre- and postexposure to women at risk
 - c. given postexposure only
 - d. restricted to second or third trimester

8) How should a woman be counseled if she inadvertently becomes pregnant within 3 months of receiving a live-virus vaccine?

- a. no fetal risk
- b. theoretical, but no definite risks
- c. serious fetal risks, but are uncommon
- d. significant risk and pregnancy termination is recommended

9) Breast self-examination should be performed

- a. Following menstruation
- b. At 2-week intervals, on the same day of the week
- c. Weekly, on the same day of the week
- d. 3 to 5 days before menstruation

Neonatal Care

10) Which is NOT a risk factor for neonatal respiratory distress syndrome?

- a. male gender
- b. maternal use of glucocorticoids antepartum
- c. premature birth
- d. white race

11) Which of the following is NOT a sign of neonatal respiratory distress syndrome (RDS)

- a. increased respiratory rate
- b. chest wall retraction during inspiration
- c. grunting
- d. systemic hypertension

12) Which of the following increase the likelihood of a premature neonate becoming hypothermic?

- a. thin skin
- b. large surface area
- c. decreased fat
- d. all of the above

13) All neonates should receive the following initial care EXCEPT

- a. provide warmth
- b. low flow oxygen
- c. position head and clear airway as necessary
- d. dry and stimulate

14) The early stages of neonatal infection may be associated with all of the following clinical signs EXCEPT

- a. jaundice
- b. respiratory depression
- c. hypothermia
- d. jitteriness

15) The most common pathogens of ascending infection leading to neonatal sepsis and stillbirth do NOT include which of the following?

- a. Escherichia coli
- b. Ureaplasma urealyticum
- c. Bacteroides fragilis
- d. Group B streptococcus

16) Most peri- and intraventricular hemorrhages of the preterm infant develop within what time period following birth?

- a. 1 hour
- b. 12 hours
- c. 3 days
- d. 7 days

17) Approximately what percentage of all neonates born before 34 weeks will have evidence of intraventricular hemorrhage?

- a. 2
- b. 10
- c. 20
- d. 50

18) Which factor increases a diabetic's risk for spontaneous abortion?

- a. HgA1C = 6.3%
- b. Poor general glycemic control
- c. Preprandial glucose 115mg/dL
- d. Postprandial glucose 125mg/dL

19) Infants of diabetic mothers are at increased risk for which of the following congenital anomalies?

- a. cardiac malformations
- b. craniofacial malformations
- c. reproductive tract malformations
- d. cretinism

20) Which of the following can lead to intrauterine passage of meconium?

- a. cord compression
- b. hypoxia
- c. normal bowel peristalsis
- d. all of the above

21) What is the primary pathophysiological basis of meconium aspiration syndrome?

- a. airway blockage
- b. chemical pneumonitis
- c. pulmonary hypoplasia
- d. unknown

Reproductive Endocrinology

22) Which of the following correctly describes the anatomical portions of the fallopian tube from most lateral to most medial?

- a. interstitial, isthmus, ampulla, infundibulum
- b. infundibulum, ampulla, interstitial, isthmus
- c. interstitial, ampulla, infundibulum, isthmus
- d. infundibulum, ampulla, isthmus, interstitial

23) The hormone that triggers ovulation is

- a. thyrotropin (TSH)
- b. androstenedione
- c. estradiol
- d. leutonizing hormone (LH)

- 24) Anatomical changes associated with physiological aging of the ovaries include all of the following EXCEPT
- increased volume
 - decrease of oocyte number
 - corrugation of the tunica albuginea
 - atrophy of the cortical layer
- 25) Infertility is defined as a couple's failure to conceive following unprotected intercourse for
- 6 months
 - 1 year
 - 2 years
 - 3 years
- 26) Choose the INCORRECT statement.
- polymenorrhea is a menstrual cycle interval of less than 21 days
 - oligomenorrhea is a menstrual cycle interval of more than 37 days
 - amenorrhea is the absence of menstrual bleeding for more than 12 months
 - postmenopausal bleeding is uterine bleeding occurring more than 12 months after the last menstrual period in a postmenopausal woman
- 27) The differential diagnosis of dysfunctional uterine bleeding (DUB) in the perimenarchal girl includes
- anovulation
 - pregnancy
 - coagulopathies
 - all of the above
- 28) Hirsutism and virilization are characterized as
- estrogen excess disorder
 - androgen excess disorder
 - progesterone excess disorder
 - prolactin excess disorder
- 29) Bromocriptine has proven efficacy for which of the following conditions during pregnancy?
- Graves disease
 - Addison disease
 - Primary aldosteronism
 - Pituitary prolactinoma
- 30) Which of the following is most useful in screening for thyroid disorders?
- thyroid-binding globulin (TBG)
 - thyroid-releasing hormone (TRH)
 - thyrotropin (TSH)
 - none of the above
- 31) Untreated maternal subclinical hypothyroidism increases the risk of which of the following?
- abnormal psychomotor development in child
 - placental abruption
 - preterm delivery
 - all of the above
- 32) Choose the INCORRECT statement
- multiple small adhesions on the ovarian surface should be coagulated then removed
 - gentle tissue handling need not be observed during ovarian reconstruction because adhesion formation is uncommon
 - resection of an ovarian cyst through the laparoscope decreases incidence of new adhesion formation

- 33) Which technique is NOT recommended for evaluation of tubal patency?
- tubal insufflation
 - hysterosalpingogram
 - chromopertubation at time of laparoscopy/laparotomy

Gynecology

- 34) Pregnant women with gonorrhea frequently have concurrent infection with which of the following?
- Chlamydia trachomatis
 - Herpes simplex virus
 - Trichomonas vaginalis
 - Haemophilus ducreyi
- 35) What is the treatment of choice for uncomplicated gonorrhea in pregnancy?
- ceftriaxone
 - penicillin
 - erythromycin
 - azithromycin
- 36) What is the etiology of mucocutaneous external genital warts?
- Treponema pallidum
 - Human papillomavirus
 - Parvovirus
 - Haemophilus ducreyi
- 37) The primary treatment of candidal vaginitis is
- topical synthetic imidazoles
 - systemic corticosteroids
 - topical cephalosporins
 - systemic penicillin
- 38) Which of the following are possible etiologies for chronic pelvic pain?
- pelvic organ prolapse
 - ovarian remnant
 - nerve entrapment
 - all of the above
- 39) In patients with true chronic pelvic pain syndrome
- duration of pain is 12 months or longer
 - the patient has experienced relief from most previous treatments
 - physical function is significantly impaired at home or work
 - symptoms of depression are rarely exhibited
- 40) Indications for visualization of an adnexal mass with laparoscopy or laparotomy include which of the following?
- ovarian mass greater than 6 cm
 - adnexal mass greater than 10cm
 - any mass developing after menopause
 - all of the above
- 41) Which of the following are nongynecologic causes of an adnexal mass?
- appendiceal abscess
 - diverticulosis
 - pelvic kidney
 - all of the above

- 42) Choose the CORRECT statement
- endometriosis appears to be progressive in most untreated patients
 - pregnancy always results in regression of endometriosis
 - postmenopausal women do not experience symptoms of endometriosis
- 43) Choose the INCORRECT statement pertaining to diagnosis of endometriosis
- bimanual examination may reveal uterosacral ligament tenderness and nodularity, induration of the rectovaginal septum, and fixed retroversion of the uterus
 - Ultrasonography can provide specific information to classify extent and severity of disease
 - A painful swelling of suspected implants before or during the time of menstruation is a classic sign of endometriosis
- 44) Fibrocystic change of the breast
- occurs mainly in menopausal women
 - presents with breast discomfort in 85%-90% of cases
 - increases the risk of developing breast cancer
- 45) What is the most common benign breast condition?
- ductal ectasia
 - fibroadenoma
 - fibrocystic change
 - intraductal papilloma
- 46) A 54-year-old woman underwent a total abdominal hysterectomy for uterine leiomyomata. The day after surgery, the patient's temperature is 38.4 C and she complains of pelvic pain, chills, and rectal pressure. Your bedside examination of the patient reveals a vaginal cuff abscess. The most likely source of bacteria that caused this infection is
- incompletely sterilized surgical instruments
 - vagina
 - the surgeon's skin
 - residual peritoneal fluid
- 47) The hospital where you perform the majority of your gynecologic surgeries has recently implemented a policy to reduce postoperative infections. The most important step in preventing the spread of infection is
- frequent handwashing
 - admitting patients to the hospital 12 to 24 hours before scheduled procedures
 - sterile placement of Foley catheters

Obstetrics

- 48) What is the average increase in maternal blood volume during pregnancy?
- 10%
 - 25%
 - 40%
 - 75%
- 49) Which of the following characterizes arterial blood pressure in normal pregnancy?
- nadir in midpregnancy, rising thereafter
 - nadir in the first trimester, rising thereafter
 - peaks in the first trimester, falling thereafter
 - peaks in the second trimester, falling thereafter

- 50) In the fetus or neonate, what are the two sutures between the frontal and parietal bones called?
- frontal
 - sagittal
 - lambdoid
 - coronal
- 51) The embryonic heart is completely formed by how many weeks after fertilization?
- 4
 - 6
 - 10
 - 12
- 52) If all family members who inherit an abnormal gene express the abnormal phenotype, the gene is most likely inherited in what fashion?
- X-linked
 - autosomal recessive
 - autosomal dominant
 - multifactorial
- 53) Most congenital defects have what type of inheritance?
- X-linked
 - autosomal recessive
 - autosomal dominant
 - multifactorial
- 54) What is the goal of antepartum fetal surveillance?
- prevent fetal deaths
 - prevent early deliveries
 - increase fees for obstetricians
 - delay delivery until lung maturity achieved
- 55) What is the definition of a reactive nonstress test (NST)?
- 1 acceleration in 20 minutes
 - 2 accelerations in 20 minutes
 - 8 accelerations in 20 minutes
 - 15 accelerations in 20 minutes
- 56) Forceps applied when the fetal head (left occiput anterior position) has reached the pelvic floor and is at the perineum should be classified as what type of delivery?
- outlet forceps
 - low forceps
 - midforceps
 - high forceps
- 57) Which of the following is NOT a prerequisite for forceps application?
- head must be engaged
 - fetus must present either by the vertex or by the face with the chin posterior
 - cervix must be completely dilated
 - membranes must be ruptured
- 58) Which of the following is a relative contraindication for delivery using vacuum extraction?
- face presentation
 - 35-week gestation
 - Chorioamnionitis
 - Post-term pregnancy

- 59) Which of the following is most likely to have a successful induction of labor?
- primiparous; cervix 2 cm dilated / 20% effaced / 0 station
 - primiparous; cervix 2 cm dilated / 20% effaced / -1 station
 - multiparous; cervix 2 cm dilated / 80% effaced / -1 station
 - multiparous; cervix 1 cm dilated / 20% effaced / 0 station
- 60) How long does it take oxytocin to reach steady-state levels in the plasma?
- 5 minutes
 - 10 minutes
 - 20 minutes
 - 40 minutes
- 61) Which maternal characteristic is NOT an anesthesia risk factor?
- anatomic anomaly of the face
 - asthma
 - marked obesity
 - mild hypertension
- 62) What is an advantage of ketamine when compared to thiopental?
- not associated with hypotension
 - causes delirium
 - causes hallucinations
 - safer for hypertensive patients
- 63) Kernicterus is the result of elevated neonatal blood levels of which of the following?
- albumin
 - bilirubin
 - erythropoietin
 - schistocytes
- 64) A low 1-minute Apgar score helps to identify which of the following?
- infant with birth asphyxia
 - normal infant
 - infant destined to develop neurological problems
 - infant who requires resuscitation
- 65) Which of the following is NOT part of the Apgar score?
- heart rate
 - respiratory effort
 - color
 - amniotic fluid consistency
- 66) What is the Apgar score of a neonate at 5 minutes of life whose respiratory effort is irregular, pulse is 90 beats per minute, who is floppy and cyanotic, and who only expresses minimal grimaces?
- 1
 - 3
 - 5
 - 7

Oncology

- 67) The etiology of cancer of the cervix is most likely related to
- genital herpes zoster
 - cigarette smoking
 - HPV infection

- 68) Known risk factors for endometrial cancer include all of the following EXCEPT
- age
 - obesity
 - oral contraceptive use
 - nulliparity
- 69) Current practice guidelines recommend HPV testing as an adjunctive test to help direct management in women with which Pap test diagnosis?
- inflammation, atypia
 - ASC
 - ASC-H
 - LSIL
- 70) Referral for colposcopy is recommended for patients with all of the following diagnoses EXCEPT
- LSIL
 - ASC-US on two consecutive Paps 6 months apart
 - ASC-US, HPV negative
 - AGC
- 71) You may consider omitting lymphadenectomy as part of the staging procedure for squamous cell vulvar carcinoma when
- lesion 1.5 cm diameter, less than 5 mm invasion
 - unilateral lesion, less than 5 mm invasion
 - any location, less than 1 mm invasion
 - unilateral lesion 1.3 cm diameter, 3 mm invasion
- 72) Which of the following tests is used for FIGO staging of cervical cancer?
- intravenous pyelogram
 - CT scans of abdomen and pelvis
 - Lymphangiogram
 - PET scan
- 73) A 23-year-old patient is diagnosed with a stage IA malignant ovarian germ cell tumor. Which of the following would be the standard treatment?
- unilateral oophorectomy
 - bilateral oophorectomy and hysterectomy
 - unilateral oophorectomy followed by chemotherapy
 - ovarian biopsy followed by chemotherapy
- 74) What is the primary surgical treatment of endometrial carcinoma?
- total abdominal hysterectomy alone
 - total abdominal hysterectomy with bilateral salpingo-oophorectomy
 - radical hysterectomy
 - pelvic exenteration

Examinee _____

Vaginal Bleeding in Early Pregnancy Case Study # 2

Mrs. B. is a 20 year old Para 2 who came to the health center 2 days ago complaining of irregular vaginal bleeding & abdominal & pelvic pain. Symptoms of early pregnancy were detected & confirmed with a pregnancy test. Mrs. B. was advised to avoid strenuous activity & sexual intercourse & return immediately if her symptoms persisted. Mrs. B. returns to the health center today & reports that irregular vaginal bleeding has continued & she now has acute abdominal pain that started 2 hours ago.

What will you include in your initial assessment of Mrs. B. & why?

What particular aspects of Mrs. B.'s physical examination will help you make a diagnosis & why?

What screening procedures / laboratory tests will you include in your assessment of Mrs. B & why?

You have completed your assessment of Mrs. B, & your main findings include the following:
Mrs. B.'s temperature is 36.8 degrees C, her pulse rate is 130 beats per minute & weak, her blood pressure is 85/60 & her respirations are 20 per minute. Her skin is pale & sweaty. Mrs. B. has acute abdominal & pelvic pain, her abdomen is tense & she has rebound tenderness. She has light vaginal bleeding. On vaginal exam, the cervix is found to be closed & cervical motion tenderness is present. The 6 week size uterus is softer than normal.

Based on these findings, what is Mrs. B.'s diagnosis & why?

Based on your diagnosis, what is your plan of care for Mrs. B & why?

Mrs. B's postoperative course was without complications and notable for patient tolerating oral intake, having minimal complaints of abdominal pain, ambulating well & spontaneously voiding. She is now ready to be discharged: however, her hemoglobin is 9g/dL. She has indicated that she would like to become pregnant again, but not for at least a year.

Based on these findings, what is your continuing plan of care for Mrs. B. & why?

Examinee _____

Pregnancy Induced Hypertension Case Study # 2

Mrs. C. is a 23 year old gravida 3 para 2 at 37 weeks gestation who is brought to the ER complaining of a severe headache & blurred vision. Mrs. C. has had 4 prenatal care visits during this pregnancy. Her prenatal course has been unremarkable. She was last seen 1 week ago, at which time she was counseled about danger signs in pregnancy & what to do about them.

What will you include in your initial assessment of Mrs. C & why?

What particular aspects of Mrs. C.'s physical examination will help you make a diagnosis or identify her problems / needs & why?

What screening procedures / laboratory tests will you include in your assessment of Mrs. C & why?

Mrs. C reports onset of severe headache 3 hours prior to admission, & blurred vision that began 2 hours after onset of headache. She denies upper abdominal pain, decreased urine output, convulsions or loss of consciousness. She reports normal fetal movement.

Mrs. C. is conscious & alert. Her blood pressure is 150/110. There is no abdominal tenderness. Uterus is 37 weeks size. Fetal movements are normal & fetal heart rate is 120 / minute. Urine shows 3+ protein.

Based on these findings, what is Mrs. C.'s diagnosis & why?

Based on your diagnosis, what is your plan of care for Mrs. C & why?

Examinee _____

Partograph Case Study # 2

Record all information on the partograph

Mrs. B was admitted at 10:00 on September 4, 2006.
Membranes intact
Gravida 1, Para 0
Medical Record number 1443
The fetal head is 5/5 palpable above the symphysis pubis
The cervix is 4cm dilated
There are 2 contractions in 10 minutes, each lasting less than 20 seconds
FH 140
Membranes intact
Blood pressure 100/70
Temperature 36.2
Pulse 80 per minute
Urine output 400mL: negative protein & acetone

What is your diagnosis? _____

What action will you take? _____

10:30 FH 140, Contractions 2/10 each 15 sec, pulse 90
11:00 FH 136, Contractions 2/10 each 15 sec, pulse 88, membranes intact
11:30 FH 140, Contractions 2/10 each 20 sec, pulse 84
12:00 FH 136, Contractions 2/10 each 15 sec, pulse 88, Temp 36.2
The fetal head is 5/5 palpable above the symphysis pubis
The cervix is 4cm dilated, membranes intact

What is your diagnosis? _____

What action will you take? _____

12:30 FH 136, Contractions 1/10 each 15 sec, pulse 90
13:00 FH 140, Contractions 1/10 each 15 sec, pulse 88
13:30 FH 130, Contractions 1/10 each 20 sec, pulse 88
14:00 FH 140, Contractions 2/10 each 20 sec, pulse 90, temp 36.8, blood pressure 100/70
The fetal head is 5/5 palpable above the symphysis pubis
Urine output is 300 mL, negative protein & acetone

What is your diagnosis? _____

What action will you take? _____

The cervix is 4cm dilated, sutures apposed
Labor augmentation with oxytocin 2.5 units in 500 mL IV fluid at 10 drops per minute (dpm) is started
14:30 FH 140, Contractions 2/10 each 30 sec, pulse 88, infusion increased to 20 dpm
15:00 FH 140, Contractions 3/10 each 30 sec, pulse 90, infusion increased to 30 dpm
15:30 FH 140, Contractions 3/10 each 30 sec, pulse 88, infusion increased to 40 dpm
16:00 FH 144, Contractions 3/10 each 30 sec, pulse 92, fetal head is 2/5 palpable above the symphysis pubis, cervix is 6cm dilated, sutures apposed, infusion increased to 50 dpm

16:30 FH 140, Contractions 3/10 each 45 sec, pulse 90

What action will you take? _____

17:00 FH 138, Pulse 92, Contractions 2/10 each 40 sec, maintain at 50 dpm

17:30 FH 140, Pulse 94, Contractions 3/10 each 45 sec, maintain at 50 dpm

18:00 FH 140, Pulse 96, Contractions 4/10 each 50 sec, maintain at 50 dpm

18:30 FH 144, Pulse 94, Contractions 4/10 each 50 sec, maintain at 50 dpm

19:00 FH 144, Pulse 90, Contractions 4/10 each 50 sec, fetal head is 0/5 palpable above the symphysis pubis, the cervix is fully dilated

19:30 FH 142, Pulse 100, Contractions 4/10 each 50 sec

20:00 FH 146, Pulse 110, Contractions 4/10 each 50 sec

20:10 Spontaneous delivery of a live male infant, Wt 2.654kg

How long was the active phase of the first stage of labor?

How long was the second stage of labor?

Why was labor augmented?