# UNIVERSITY OF SWAZILAND

## **FACULTY OF HEALTH SCIENCES**

# FINAL EXAMINATION PAPER, MAY 2010

TITLE OF PAPER: NURSING SCIENCE AND ARTS IV

**COURSE CODE: NUR 341** 

TIME ALLOWED: TWO (2) HOURS

**MARKS: 75** 

# **INSTRUCTIONS:**

- 1. THERE ARE THREE (3) QUESTIONS IN THIS PAPER.
- 2. ANSWER ALL THREE QUESTIONS.
- 3. EACH QUESTION IS ALLOCATED 25 MARKS.
- 4. EACH CORRECT STATEMENT OR FACT WITH SCIENTIFIC RATIONALE CARRIES ONE (1) MARK.
- 5. WRITE LEGIBLY.

THIS PAPER IS NOT TO BE OPENED UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.

### **QUESTION 1**

**SITUATION:** Mr. X who is 41 years old presents at the outpatient department complaining of painful and swollen joints of the left hand fingers, and he is unable to move the fingers. The problem began when he was 42 years of age. His laboratory studies revealed the presence of hyperuricemia, and eventually diagnosed gouty arthritis.

- A. Describe the pathophysiology of gout. (6)
- B. In the condition gout, describe tophi including the body parts in which tophi are usually found. (5)
- C. Develop two nursing diagnoses based on Mr. X's complaints (painful joints and being unable to move fingers). (4)
- D. Discuss your nursing interventions in nursing Mr. X considering the nursing diagnoses which you developed above (in C). (10)

#### **TOTAL 25 MARKS**

# **QUESTION 2**

**SITUATION:** Mr. Y who is 68 year old is brought into your ward by relatives. The relatives report that Mr. Y, who is a known hypertensive client, suddenly fell to the ground, developed aphasia, and incontinence.

- A. Differentiate haemorrhagic from ischemic cerebro-vascular accident. (4)
- B.Comapre right with left sided cerebro-vascular accident, considering behaviour perception and motor deficits. (6)

**SITUATION:** Mrs. Y is admitted into the surgical ward after being involved in a road traffic accident (RTA) along the Malagwane hill. She is bleeding from a large laceration on the scalp, has difficulty in breathing, and is poorly oriented. Further diagnostic

investigations were conducted on her to confirm the site of injury and establish a diagnosis.

- C. Describe the pathophysiogy of a contusion. (5)
- D. Develop two nursing diagnosis for the stated data (difficulty in breathing and poor orientation). (2)
- E. Manage Mrs. Y considering the nursing diagnosis developed above (in D). (8)

#### TOTAL = 25 MARKS

# **QUESTION 3**

Write CLEARLY the letter that corresponds with the most appropriate answer e.g. 1. B

- 1. Which of the following is TRUE concerning the intraocular pressure?
  - A. It varies during the day with a peak in the early morning.
  - B. Normal value is 9-21 mm Hg.
  - C. It can be normal in patients with glaucoma.
  - D. A and B only.
  - E. All of the above.
- 2. The client who is to instil ophthalmic ointment should be instructed to:
  - A. Rub eyelid to distribute the ointment.
  - B. Use a cotton swab to apply the ointment.
  - C. Squeeze the ointment inside the lower eyelid.
  - D. Refrain from blinking after instillation.
  - E. All of the above.

- 3. Which of the following statements about administration of eye medication is true?
- A. Wait for 3 minutes between instillation when instilling several medications in one eye.
- B. Both hands should be gloved when instilling any medication.
- C. Multidose bottles of eye drops may be used for several clients.
- D. Hand washing is mandatory before and after the administration of eye drops.
- 4. Which of the following interventions is recommended for a client with AIDS who has a dry itchy skin?
  - A. Taking daily showers / tub baths to remove dead skin.
  - B. Used defatted soap for cleaning to decrease dryness.
  - C. Wearing long-sleeved shirts to discourage scratching.
  - D. Applying an emollient lotion to retain skin moisture.
- 5. Corticosteroids result in immuno-suppression because they:
  - A. Are cytotoxic and interfere with cell replication.
  - B. Interfere with the release of lymphokines and antibodies.
  - C. Isolate T-cells in bone marrow resulting in lymphopenia.
  - D. Interfere with T-helper cell growth and replication.
- 6. Which of the following may a nurse safely administer to an immuno-compromised client?
  - A. Measles, mumps, rubella vaccine (MMR).
  - B. Tetanus-diphtheria toxoid.
  - C. Hepatitis-B immune globulin (HBIG).

- D. Oral poliovirus vaccine, trivalent (OPV).
- 7. Mastoiditis is the inflammation of the:
  - A. Bones of the middle ear.
  - B. Temporal bone behind the ear.
  - C. Labyrinth structure.
  - D. Sixth and seventh cranial nerves.
- 8. Preventive measures for swimmer's ear include:
  - A. Instilling alcohol drops into ear canals before swimming.
  - B. Wearing snug-fitting ear plugs whenever in water.
  - C. Drying the ear canals with cotton applications after swimming.
  - D. Swimming only in chlorinated swimming pools or hot tubs.
- 9. Which of the following data indicates that the treatment of otitis media is ineffective?
  - A. Return of hearing acuity.
  - B. Onset of vertigo and nausea.
  - C. Reduction in fever.
  - D. Negative Romberg test.
- 10. Which of the following changes in the ear is related to aging?
  - A. Hearing acuity for high-frequency sounds increases.
  - B. The pinna atrophied, shorter and thicker.
  - C. Cerumen dries, leading to impaction and hearing loss.
  - D. Unsteadiness resulting from cochlear degeneration.

11. What influences the incidence of gout?
A. Ethnicity.
B. Residence.
C. Genetics.
D. All of the above.
12. Contrast media is always used in the following radiographic examination of the nervous system, EXCEPT
A. Cerebral angiography.
B. Computed tomography.
C. Digital substraction method.
E. Myelography.
13. Which of the following instructions should the nurse give to the client who is having a lumbar puncture?
A. "slide over the side of the bed so your buttocks are right at the edge"
B. "now that the needle is in the right place, you can slowly tighten your legs"
C. "hold your breath and bear down like you're having a bowel movement once the needle is in"
D. "you will be able to go up to the bathroom as soon as the test is over"
14. Which of the following findings from a cerebral spinal fluid specimen is abnormal?
A. Pressure = 14 mm Hg.
B. Colour = straw.
C. Protein = $45 \text{ mg/mL}$ .
D. Glucose = 35 mg/mL.

15. The cerebrospinal fluid is normally, (CSF) slightly with a specific gravity
(SG) of
A. Acidic, 1.005.
B. Alkalinic, 1.005.
C. Acidic, 1.025.
D. Alkalinic, 1.025.
16. Which of the following observations is most indicative of Parkinson's disease?
A. Demonstrates regular fine motor activity of both hands that persists with intentional activity.
B. Has difficulty arising from chair and beginning to walk without assistance.
C. Follows objects around the room with eyes and often smiles to self when left alone in the room.
D. Weakness of the right leg becoming more noticeable after a warm bath / shower.
17. Symptoms of Parkinson's disease are a result of:
A. Decreased production of serotonin.
B. Decreased production of acetylcholine.
C. Increased production of dopamine.
D. Decreased production of dopamine.
18. When instructing a client with Parkinson's disease about Levodopa (Larodopa), the nurse should advice the client to:
A. Increase the dose when the stiffness / tremors become worse.
B. Take medication with milk / at mealtimes to decrease stomach irritation.
C. Include multivitamin in daily routine to balance nutrition.

D. Notify physician if urine / perspiration turns a dark colour.

19. Which of the following findings in the client with meningitis should the nurse report to the physician immediately?
A. Temperature = $40^{\circ}$ C.
B. Pulse = 126 beats per minute, regular.
C. Inability to follow an object with the eyes.
D. Pain with neck flexion.
20. Which of the following clinical signs is associated with meningitis?
A. Nuchal rigidity.
B. Persistent headache.
C. Positive Kerning's sign.
D. All of the above.
21. Which of the following changes occur with viral meningitis?
A. The cerebral spinal fluid thickens.
B. Brain cell metabolism is altered.
C. Exudate covers the brain and cranial nerves.
D. Cerebral blood vessels dilate.
22. Which of the following drugs is contra-indicated in the management of meningitis?
A. Paracetamol (acetaminophen).
B. Codeine sulphate.
C. Penicillin G.
D. Morphine sulphate.

23. Interventions for viral meningitis include:
A. Suicide precautions.
B. Seizure precautions.
C. Strict isolation.
D. Rehabilitation.
24. Which of the following diagnostic tests should a nurse anticipate will be performed in a client with meningitis?
A. Myelography.
B. Lumbar puncture.
C. Brain scan.
D. Pneumoencephalography.
25. How is the onset of meningitis?
A. Sudden and mild.
B. Sudden and severe.
C. Gradual and mild.
D. Gradual and severe.
TOTAL 25 MARKS