

NURSING COUNCIL OF KENYA

*BSc. Nursing
Examination*

Revision Questions

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Note from the authors


Medical/ Nursing knowledge is constantly changing. As new information becomes available, changes in treatment, procedures, drug use and practice become necessary. The authors have taken care to ensure that the information given in this text is accurate and up to date. However, readers are strongly advised to be more aware of the most current information in practice through continuous study. The authors assume no liability for any inconveniences arising from this publication.

In addition, some answers provided may be general requiring elaboration based on guiding terms like 'state, 'describe,' 'outline,' 'explain' e.t.c. More so, a few questions have been deliberately left unanswered for the student to be actively engaged. Where necessary insights are provided.

It is as advisable that one explores all areas that appertain to a given questions as part of revision instead of merely focusing on answering the questions.

Key points are indicated in Green 

Explanations and subsequent points are in Purple 

Questions for the student are indicated with Red 

JAN 2006 PAPER I

Q1. Mr. Inoko 38yrs has been admitted in your ward with a diagnosis of head injury with increased intra-cranial pressure (ICP):

a) List six signs and symptoms of increased intra-cranial pressure (3mrks)

Signs and Symptoms (Early)

-Decrease LOC

-Restlessness/Agitation

-Irritability

-Lethargy/Stupor

-Coma

Signs and Symptoms (Late)

-changes in vital signs

-blood pressure (systolic blood pressure increases but diastolic remains the same).

-widening of pulse pressure is neurologic in nature (if narrow cardiac in nature).

-heart rate decrease

-respiratory rate decrease

-temperature increase directly proportional to blood pressure

-projective vomiting

-headache

-papilledema (edema of optic disc)

-abnormal posturing

-decorticate posturing (damage to cortex and spinal cord)

-decerebrate posturing (damage to upper brain stem that includes pons, cerebellum and midbrain)

-unilateral dilation of pupils called uncal herniation

-bilateral dilation of pupils called tentorial herniation

-resulting to mild headache

-possible seizure activity

b) Explain how you would carry out neurological assessment using the Glasgow coma scale (7mrks)

c) Describe the nursing management of a patient with increased intra-cranial pressure (10mrks)

i) *Perform general Assessment*

-Perform neurologic examination as the patient's condition allows including pupil checks, assessment of selected cranial nerves, frequent measurements of vital signs and intracranial pressure, and use of the Glasgow Coma Scale.

ii) *Make appropriate diagnoses including:*

-Ineffective airway clearance related to diminished protective reflexes (cough, gag)

-Ineffective breathing patterns related to neurologic dysfunction (brain stem compression)

-Ineffective cerebral tissue perfusion related to the effects of increased ICP

-Deficient fluid volume related to fluid restriction

-Risk for infection related to ICP monitoring system

iii) *Make interventions including:*

Maintain patent airway

-Assess airway patency

-Suction secretions

Optimizing cerebral tissue perfusion

-Keep head in neutral position to promote venous drainage.

-Avoid valsalva maneuver by avoiding

-straining stool

-excessive vomiting (use anti emetics)

-excessive coughing (use anti-tussive like dextromethorphan)

-stooping/bending

-lifting heavy objects

-Monitor PaCO₂,

-Reduce suctioning time to less than 15 seconds.

-Keep patient sedated before initiation of many nursing activities

Maintaining negative fluid balance

-Administer various osmotic and loop diuretics

-Administer corticosteroids to reduce cerebral edema

-Restrict fluids

- Assess fluid status
- Catheterize-urinary catheter
- Monitor fluid input;output
- Monitor CVP

Preventing infection-

- Maintain infection control precautions e.g. sterile dressing over the ventricular catheter
- Administer prophylactic antibiotics eg penicilins
- Monitor for signs and symptoms of infection e.g. Fever, chills, nuchal rigidity

Monitor and manage potential complications by detecting early signs of increasing ICP

- Do frequent neurologic assessment and analyze trends

Monitoring ICP

Monitor for potential complications-monitor for potential complications including brain stem herniation and diabetes insipidus

Q2. Mrs. Tamu 29yrs has been admitted in a medical ward with a diagnosis of anemia. She is to be transfused with two pints of blood

a) List four causes of anemia (2mrks)

- i) *Dietary deficiencies- Iron, folic acid, and vitamin B12 are all essential to production of healthy RBCs. A deficiency of any of these nutrients can cause anemia. Pernicious anemia is associated with a lack of intrinsic factor in stomach secretions, which is necessary for absorption of vitamin B12.*
- ii) *Hemolysis-is the destruction, or lysis, of RBCs. Destruction of RBCs leads to a hemolytic anemia. This may be a congenital disorder or it may be caused by exposure to certain toxins.*
- iii) *Heredity-Thalassemia anemia; Individuals with thalassemia do not synthesize hemoglobin normally.*

b) State three major types of anemia (3mrks)

- i) *Aplastic Anemia-the bone marrow becomes fatty and incapable of production of the necessary numbers of RBCs.Aplastic anemia may be congenital—that is, the person is born with bone marrow incapable of producing the correct number of cells. Or it may be due to exposure to toxic substances such as industrial chemicals (e.g., benzenes and insecticides), chemotherapy medications, or use of cardiopulmonary bypass during surgery.*
- ii) *Sickle cell anemia- is an inherited anemia in which the RBCs have a specific mutation that makes the hemoglobin in the red cells very sensitive to oxygen changes. Sickled cells are very rigid and easily cracked and broken. The abnormal shape also causes*

the cells to become tangled in the blood vessels and organs. The result is congestion, clumping, and clotting.

Sickle cell disease is an autosomal recessive hereditary disorder. This means that if both parents pass on the abnormal hemoglobin, the child will have the disease. If only one parent passes on the abnormal hemoglobin, the child will have the sickle cell trait and will be able to pass the trait (or the disease if the other parent is also affected) on to his or her child.

iii) *Pernicious anemia-* is associated with a lack of intrinsic factor in stomach secretions, which is necessary for absorption of vitamin B12.

c) Describe the management of Mrs. Tamu, stating your role as a nurse during blood transfusion (10mrks)

i) *Baseline Assessment-* Prior to the blood transfusion, it is important to assess the patient's vital signs and history of transfusions or transfusion reactions. Vital signs provide baseline data. The risk of a febrile reaction goes up with each unit of blood product given to the patient. Many times, febrile reactions occur after the transfusion is completed, but they can occur at any time. This is the reason for obtaining a set of baseline vital signs, including the patient's temperature.

ii) *Identification-* The nurse helps in checking and double checking the patient's identity; to match the donor's blood type with the recipient's blood type. The Nurse should;

a. *-Ask the patient to state his or her name and birth date aloud if alert and able to speak.*

b. *-Use the patient's identification band to confirm the identity and compare it with the information on the paperwork obtained from the blood bank.*

c. *Examine the blood bag and verify that the patient information and any other information, such as the ABO type, Rh type, and unit number, all match.*

d. *Finally, check the expiration date on the blood bag.*

e. *Do not give the unit of blood if any of the information does not match.*

iii) *Monitoring-The Nurse* carefully monitors the patient's response to the transfusion to prevent complications or to detect and treat them quickly if they occur. Stay with the patient for the first 15 minutes of the blood transfusion to assess for any immediate reactions. Check and document vital signs before starting the transfusion, after the blood has begun to infuse, and after the infusion is complete.

d) Discuss your role as a nurse in the prevention of anemia (5mrks)

-Antenatal supplementation of Folic acid and iron

-Educate on nutrition in pregnancy

-Assess for blood-borne infections that may lead to infections

-Conduct a nutritional assessment referring to a dietician if indicated

-Thorough booking history to identify any current treatment and co-existing conditions that may lead to Anemia

JANUARY 2006 PAPER II

Part I

Q1. The condition for which a nurse prepares a woman for emergency caesarean delivery is:-

- a) Prolapsed cord
- b) Twin pregnancy
- c) *Meconium-stained amniotic fluid*
- d) A non-reactive non-stress test

Q2. To screen for the presence of neural tube defects in the fetus, the test that would be performed on a pregnant woman is:-

- a) Biophysical profile
- b) Amniocentesis
- c) *Serum alpha-fetoprotein*
- d) TORCH titres

Neural Tube Defects result from a failure of the neural tube to close or attain its normal musculoskeletal coverings in early embryogenesis. Among the most common major congenital malformations, NTDs include the fatal condition of anencephaly as well as spina bifida (meningomyelocele and meningocele); most have the potential for surgical correction.

Maternal serum alpha-fetoprotein is a fetal glycoprotein that is synthesized sequentially in the embryonic yolk sac, GI tract, and liver. Normally, AFP crosses the fetomaternal circulatory interface within the placenta to appear in the mother's serum. In addition, a small amount of AFP enters the amniotic fluid via fetal urination, GI secretions, and transudation from exposed blood vessels. The concentration of AFP in amniotic fluid is highest at the end of the first trimester and slowly declines during the remainder of pregnancy.

Q3. During first examination of normal newborn baby, a nurse would expect to identify:-

- a) Apical pulse rate of 90beats per minute
- b) Hands and feet that have a bluish color
- c) Eye discharge that is yellow and watery.
- d) *Umbilical stump that has two veins and one artery*

Q4. For a woman who is in labor and experiencing slight shoulder dystocia the nurse would:-

- a) Place her in knee-chest position
- b) Apply fundal pressure to the suprapubic area
- c) Prepare for assisted forceps delivery
- d) Obtain an order for oxytocin infusion

Shoulder Dystocia-Is defined as impaction of the fetal shoulders after delivery of the head and is associated with an increased incidence of fetal morbidity and mortality secondary to brachial plexus injuries and asphyxia. Post term and macrosomic infants are at risk because the trunk and shoulder growth is disproportionate to growth of the head in late pregnancy.

Suprapubic pressure is applied. Fundal pressure should not be applied, as it only presses the fetal shoulder into the pubic symphysis and may lead to uterine rupture.

Pressure is applied to the fetal sternum to decrease shoulder diameter

Q5. A laboring woman's husband assists her during the transitional phase of labor. The behavior that if exhibited by the husband would require intervention by a nurse is:-

- a) Offers the woman a bed pan when she needs to have a bowel, movement
- b) Gives ice-chips to the woman when she says her mouth is dry
- c) Provides effleurage when the woman complains of intense abdominal pain
- d) Encourages the woman to fix her gaze on him when she experiences a contraction

Q6. To help a woman recognize the best time for conceiving a nurse would instruct the woman to monitor for:-

- a) Drop in body temperature lasting several days
- b) Increase in the amount of cervical mucus that is clear and stretchy
- c) Abdominal bloating that occurs suddenly
- d) Breast tenderness accompanied by slight nipple discharge

Q7. The sign that leads a nurse to suspect that a two week old infant who was born prematurely may be having apnoea is:-

- a) Intermittent episodes of acrocyanosis for periods of 10minutes

- b) Random episodes of breathe-holding during periods of stress
- c) Transient episodes of mottling with environmental temperature changes
- d) A lapse of spontaneous breathing for 20 seconds*

Q8. When performing a physical assessment of a woman who is 20weeks pregnant, a nurse would expect to palpate the uterine fundus at:-

- a) Symphysis pubis
- b) Midway between Symphysis pubis and umbilicus*
- c) Umbilicus
- d) Midway between umbilicus and xyphoid process

Q9. A woman complains of morning sickness during the first trimester of pregnancy. To alleviate the symptoms, she should:-

- a) Consume a clear liquid diet
- b) Take prenatal vitamins with milk
- c) Eat foods that are low in protein
- d) Avoid exposure to noxious odors*

Q10. A primi-gravida who has had no antenatal care is admitted to the labor ward in active labor. Her cervix is eight centimeters dilated. She starts to push with a contraction. During her next contraction, the nurse should:-

- a) Instruct the patient to take a deep breath, hold it and then bear down
- b) Instruct the patient to take short rapid breaths*
- c) Help the patient to assume a semi-sitting position and hold her knees in a flexed position while bearing down.
- d) Apply firm pressure on the patient's lower back.

Q11. The midwife should suspect pregnancy induced hypertension if during a client's assessment she finds the following:-

- a) Ankle oedema and proteinuria
- b) Glycosuria and proteinuria
- c) Proteinuria and hypertension*
- d) Hypertension and hyporeflexia

Q12. The treatment of puerperal mastitis before suppuration occurs is:-

- a) Antibiotics, breast support and ice application
- b) Antibiotics, breast support and heat application
- c) Antibiotics, aspiration and breast support
- d) *Antibiotics, incision and drainage, breast support*

Part II

Q1. State five functions of the amniotic fluid (5mrks)

While in the womb, the baby floats in the amniotic fluid. The amount of amniotic fluid is greatest at about 34 weeks (gestation) into the pregnancy, when it averages 800mL. Approximately 600 mL of amniotic fluid surrounds the baby at full term (40 weeks gestation).

The amniotic fluid constantly moves (circulates) as the baby swallows and "inhales" the fluid, and then releases it.

The amniotic fluid helps:

- i) *The developing baby to move in the womb, which allows for proper bone growth*
- ii) *The lungs to develop properly*
- iii) *Keep a relatively constant temperature around the baby, protecting from heat loss*
- iv) *Protect the baby from outside injury by cushioning sudden blows or movements*

Q2. Pregnancy brings about changes in all body systems. State five changes that take place in the endocrine system (5mrks)

Pregnancy is associated with normal physiological changes that assist fetal survival as well as preparation for labour. It is important to know what 'normal' parameters of change are in order to diagnose and manage common medical problems of pregnancy, such as hypertension, gestational diabetes, anaemia and hyperthyroidism.

Pregnancy alters the function of most endocrine glands, partly because the placenta produces hormones and partly because most hormones circulate in protein-bound forms and protein binding increases during pregnancy.

The placenta produces a hormone (similar to thyroid-stimulating hormone) that stimulates the thyroid, causing hyperplasia, increased vascularity, and moderate enlargement. Estrogen stimulates hepatocytes, causing increased thyroid-binding globulin levels; thus, although total thyroxine levels may increase, levels of free thyroid hormones remain normal. Effects of thyroid hormone tend to increase and may resemble hyperthyroidism, with tachycardia, palpitations, excessive perspiration, and emotional instability.

The placenta produces corticotropin-releasing hormone (CRH), which stimulates maternal ACTH production. Increased ACTH levels increase levels of adrenal hormones, especially aldosterone and cortisol, and thus contribute to edema. Increased production of corticosteroids and increased placental production of progesterone lead to insulin resistance and an increased need for insulin, as do the stress of pregnancy and possibly the increased level of human placental lactogen. Insulinase, produced by the placenta, may also increase insulin requirements, so that many women with gestational diabetes develop more overt forms of diabetes.

The placenta produces melanocyte-stimulating hormone (MSH), which increases skin pigmentation late in pregnancy. The placenta also produces the β subunit of human chorionic gonadotrophin (β -hCG), a trophic hormone that, like follicle-stimulating and luteinizing hormones, maintains the corpus luteum and thereby prevents ovulation.

The pituitary gland enlarges by about 135% during pregnancy. The maternal plasma prolactin level increases by 10-fold. Increased prolactin is related to an increase in thyrotropin-releasing hormone production, stimulated by estrogen. The primary function of increased prolactin is to ensure lactation. The level returns to normal postpartum, even in women who breastfeed.

Adrenal and pancreas

- Cortisol levels increase in pregnancy, which favors lipogenesis and fat storage.*
- Insulin response also increases so blood sugar should remain normal or low.*
- Peripheral insulin resistance may also develop over the course of pregnancy and gestational diabetes is thought to reflect a pronounced insulin resistance of this sort.*

Thyroid and parathyroid

- Thyroxine-binding globulin (TBG) concentrations rise due to increased oestrogen levels.*
- T4 and T3 increase over first half of pregnancy but there is a normal to slightly decreased amount of free hormone due to increased TBG-binding.*
- TSH production is stimulated, although in healthy individuals this is not usually significant. A large rise in TSH is likely to indicate iodine deficiency or subclinical hypothyroidism.*
- Serum calcium levels decrease in pregnancy which stimulates an increase in parathyroid hormone (PTH).*
- Cholecalciferol (vitamin D3) is converted to its active metabolite, 1,2, 5-dihydroxycholecalciferol, by placental 1 α -hydroxylase.*

Q3. State five ways in which you as a midwife can prevent the occurrence of puerperal sepsis (5mrks)

-Ensure aseptic technique during delivery

-Ensure that vaginal pads are changed frequently

-Monitor vital signs

-Encourage fluid intake

Q4. Health education to mothers is one of the aims of antenatal care.

a) List six topics that could be included during a health education session with a pregnant mother (3mrks)

-Breast feeding

-Common discomforts in pregnancy

-Drug and substance use and abuse

b) State four danger signs and symptoms of pregnancy and what each could indicate. (4mrks)

-Cramping and bleeding within the first 20 weeks can be signs of a miscarriage.

-Pain or pressure in the lower abdomen between weeks 6 and 16 could mean an ectopic pregnancy has occurred.

-Vaginal bleeding, sudden continuous or crampy abdominal pain, and tenderness when the abdomen is pressed are signs of an abruptio placenta.

-Extremely severe nausea and vomiting that causes weight loss and dehydration is called Hyperemesis gravidarum.

-Blood pressure higher than 140/90 with: headache; swelling of the face, eyes, hands, or feet; blurred vision or flashing lights in front of the eyes; and protein in the urine is called pre-eclampsia, or toxemia.

Q5. Acute inversion of the uterus is one of the obstetrical emergencies. State five causes of this complication (5mrks)

Uterine Inversion is diagnosed by partial delivery of the placenta that is followed by massive blood loss and hypotension. Inversion occurs most commonly with fundal placentas and is classified as incomplete if the corpus travels partially through the cervix, complete if the corpus travels entirely through the cervix, and prolapsed if the corpus travels through the vaginal introitus.

Causes include:

(I) Spontaneous inversion caused by:

- Precipitate labour.

- Traction on a short cord by the foetus.

- Straining or coughing while the uterus is lax, particularly if the cervix is torn or gaped.

-Submucous fundal myoma.

(II) Iatrogenic inversion caused by:

-Pressure on the fundus

-Traction on the cord while the uterus is lax

Treatment of uterine inversion consists of manually replacing the uterus after adequate intravenous access has been established.

- i) If the uterus can be replaced easily without removing the placenta, less blood will be lost; if the bulk of the placenta prevents replacement of the uterus, however, the placenta should be removed to facilitate uterine replacement.*
- ii) If the cervix has contracted around the corpus of the uterus, uterine relaxant agents may be used, including nitroglycerin; betamimetics such as terbutaline sulfate or ritodrine hydrochloride; magnesium sulfate; and halogenated general anesthetics such as halothane or isoflurane. If the patient is normotensive and has been given adequate analgesia, nitroglycerin is the preferred agent because it has a rapid onset of 30–60 seconds and a short half-life, which enables the uterus to contract again after it has been replaced and minimizes further blood loss. General anesthesia should be used if other agents are unsuccessful in freeing the uterus.*
- iii) After the uterus is replaced, uterine contractile agents should be used.*
- iv) If the obstetrician is unable to replace the uterus manually, laparotomy is performed. In addition to attempts to reduce the prolapse vaginally, traction can then be placed on the round ligaments. If traction is unsuccessful, a vertical incision can be made on the posterior lower uterine segment to enable replacement of the uterus.*

*****Q6. Describe the changes that take place on the foetal circulation as soon as the baby is born (4mrks)**

With birth, a change from parallel flow through the heart to a serial one gradually takes place. The following changes must occur:

- 1. The gas exchange takes place in the baby's lungs.*
- 2. By cutting the umbilical cord, the placental circulation system is switched off.*
- 3. The fetal heart shunts become closed.*

-With the first breath, increased alveolar Oxygen pressure causes Vasodilatation in the Pulmonary vessels.

-Obstetrical clamping includes spontaneous constriction and change of the Umbilical Vein to Ligamentum Teres and Umbilical Arteries to Medial Umbilical Ligaments.

-Within 10-15 hours after birth, the Ductus Arteriosus constricts and will become the Ligamentum Arteriosum.

-Increased Left Atrial pressure and decreased Right Atrial pressure causes the Foramen Ovale to close and become the Fossa Ovalis.

-The Ductus Venosus also constricts and becomes the Ligamentum Venosum

Q7. State three functions of the pelvic muscles (3mrks)

The pelvic floor is a collection of muscles (and ligaments and connective tissue), wrapping down from the front of the pelvis to the back, that holds the organs and structures of the lower abdomen in place and that thus affects urologic, colorectal, and sexual function.

- i) Provides support for the pelvic organs and in the maintenance of continence as part of the urinary and anal sphincters*
- ii) Important in sexual intercourse*
- iii) During childbirth, it influences the passive movements of the fetus through the birth canal and relaxes to allow the exit of the fetus from the pelvis.*

Q8. State four contra-indications to breastfeeding (4mrks)

- i) Maternal use of illegal substances or excessive alcohol.*
- ii) Infant with galactosemia (infants with phenylketonuria may consume only up to 20 oz of breast milk per day).*
- iii) Maternal human immunodeficiency virus infection.*
- iv) Maternal active, untreated tuberculosis. Women can give their infant expressed breast milk and can breast feed once their treatment regimen is well established.*
- v) Maternal active, untreated varicella. Once the infant has been given varicella zoster immunoglobulin, the infant can receive expressed breast milk if there are no lesions on the breast. Within 5 days of the appearance of the rash, maternal antibodies are produced, and thus breast feeding would be beneficial in providing passive immunity.*
- vi) Active herpes lesions on the breast.*

JANUARY 2006 PAPER III

Part II

Q1. State any four acceptable qualities of a person who should be trained as a community health worker (4mrks)

-He/she should be a member of the communities where they are to work

-He/she should understand what is meaningful to those communities,

-He/she should communicate in the language of the people,

-He/she should recognize and incorporate cultural buffers (e.g., cultural identity, spiritual coping, traditional health practices) to help community members cope with stress and promote health outcomes

-In addition this person should be:

-Sympathetic, empathetic and understanding

-Respectful, tolerant and patient.

-Tactful, observant and co-operative

-Be able to adjust and work freely with different people and different situations in the community.

-Good interpersonal relationship with colleagues and other health workers and clients

-Trustworthy

Q2. Explain three categories of people who voluntary counseling and testing (VCT) is:

a) Indicated (3mrks)

-Anyone 18 and over can freely request VCT

-Those with more than one sexual partner should seek counseling

-Those diagnosed with a sexually transmitted disease or tuberculosis.

- 'Mature minor' (between 15 and 18years) already engaged in risky behavior.

b) Contra-indicated (3mrks)

-Child below 15 years

-Person who does not consent

-Person of unsound mind

Q3. Describe the following terms as applied in epidemiology; (4mrks)

a) Ecology

*Ecology is the study of the interactions between organisms and their environment, and how these shape both the organisms and **the** environment they live in.*

b) Rate

Rate is the frequency with which an event occurs in a defined population, usually in a specified period of time OR The number of events in a population described by use of proportions

Q4. As a community health nurse, describe any three health related needs/problems you are likely to find in a home for the elderly. (6mrks)

The focus of care for the older adult is on assisting them to meet their physical, psychological, cultural, sociological, and spiritual needs. Encouraging the use of community services for seniors and promoting self-care are important.

*-There's impairment in mobility and the ability to carry out instrumental activities of daily living (IADL), such as shopping for groceries, preparing meals, and cleaning and maintaining a home, threaten their independence. Adding the loss of a spouse, the death of friends, or the lack of social contacts may further isolate an older person, leading to depression and **hopelessness**. The accumulation of losses can overwhelm an older adult's resources and coping mechanisms and is related to a high rate of suicide, especially for older men. Suicide is the ultimate expression of hopelessness.*

-Chronic diseases may limit an older person's ability to be independent in self-care and activities of daily living. Hypertension is common, as are heart disease and strokes in this age group.

- Osteoporosis-a bone disease, common among postmenopausal women and men over 80 years of age, causing bone weakness and fracture risk.

- Sensory impairment-Hearing and vision losses affect the physical and psychological health of the older adult. Good sensory function is necessary to protect the individual from accidents, social isolation, and limitations in self-care.

In addition there is:

-Abuse and neglect

-Malnutrition

Q5. Explain any three measures you would initiate on realizing that the cold chain refrigerator in the maternal and child health clinic is faulty (3mrks)

The cold chain is a system of keeping vaccine cold and in a potent state from the manufacturers' level until it is administered to a child or a pregnant woman. A break in the cold chain system will render most vaccines useless.

Measures include:

-Temperature checks (check and adjust settings).

- Freeze watch (on the fridge)
- Shake test for pentavalent vaccines
- Obtain/prepare cooler box and transfer vaccines
- Call for repair/ replacement

Q6. It is important to know your catchment area as a community health nurse.

a) Define the catchment area(1mrk)

The geographical region and the population within the region, that a health facility is mandated to serve.

b) State any four reasons why you should know your catchment area.(4mrks)

Q7. Describe any three main features of a ventilated improved pit latrine (6mrks)

The VIP latrine is an improvement over the simple dry pit latrine. The distinctive feature that gives the VIP latrine its name is the vent pipe installed into the pit, which is used to exhaust the foul odour from the pit and control flies. The principle is that a continuous flow of air comes in through the superstructure and enters the pit through the hole. This cold air will go down into the pit displacing (pushing up) the hot smelly air upward through the vent pipe. The other advantage of the vent is controlling flies.

Q8. State any three indications for an emergency pill (3mrks)

Emergency contraception (also known as postcoital contraception or morning-after pill) refers to the use of drugs or a device as an emergency measure to prevent pregnancy. Women who have had recent unprotected intercourse, including those who have had a failure of another method of contraception, are potential candidates for this intervention. It is intended for occasional or back-up use, not as a primary contraceptive method for routine use.

Part III

Q1. Describe your role as a community health nurse in the following areas.

a) School health (12mrks)

School health programme refers to all school activities and procedures that contribute to initiation, understanding, maintenance and improvement of the health of pupils and school personnel.

i) *Participating in health assessment measures; observation, screening, medical examination and epidemiological investigation.*

ii) *Providing or arranging for care of injuries and of emergencies or continuing illness.*

- iii) *Counseling or arranging for counseling with students or other personnel who have health problems, including emotional health problems.*
- iv) *Involving parents, teachers and pupils in planning and conducting health care activities and in decision making relative to their own health.*
- v) *Contributing to the development of health related learning experiences for students through curriculum development; by special activities such as clubs or study groups; or through advisement with teachers or other personnel.*

b) Occupational health (8mrks)

- i) *Prevention of occupational injury and diseases through a comprehensive pro-active occupational health safety strategy.*
- ii) *Promotion of health and work ability, by focusing on non-occupational, workplace preventable conditions that, whilst not caused directly by work, may affect the employee's ability to maintain attendance or performance at work through a comprehensive workplace health promotion strategy.*
- iii) *Improving environmental health management by reducing risk to the working population and the wider community which contributes to the wider public health agenda.*
- iv) *Provide general health advice and health assessment on health issues and their relationship to working ability.*
- v) *As a health educator, the Nurse carries out a need assessment for health promotion within the workplace, prioritizes activities in consultation with management and workers, develop and plan appropriate interventions, deliver or co-ordinate the delivery of health promotion strategies.*

Q2. Mrs. Kibibi has been required to report back to work for four weeks post-partumly. She has come to you for advice on breastfeeding.

a) Describe the key issues you will discuss with her on exclusive breastfeeding (12mrks)

- Importance of exclusive breastfeeding and breast milk*
- Duration-up to 6 months*
- Positioning and attachment for breastfeeding*
- Effective alternative feeding-expressed breast milk*
- Importance of counseling if mother HIV-positive*
- Associated complications of breastfeeding and how to go about them*
- Medication and breastfeeding e.g. monitoring baby for jaundice when taking cotrimoxazole*

b) Describe the major issues you will discuss with her on effective expressed breastfeeding (8mrks)

-Maintenance of hygiene-ensure cleanliness prior to or during expressed breastfeeding

-Ensure proper storage of the expressed breast milk (clean containers, storage duration, storage conditions)

-Breast milk should be warmed prior to feeding it to the infant

-Expressing breast milk- the skill/ procedure, ensure regular sessions to express the milk

-Relieving engorgement

-Cup feeding expressed breast milk-rest cup lightly on lower lip

-Signs of adequate feeding- baby is satisfied with the feed, minimum 300 g weight gain in the first month

-Quantity to feed-start with 80 ml/kg body weight per day for day 1 and increase total volume by 10-20 ml/kg per day, till baby takes 150 ml/kg/day.

Q: Explain any four factors considered while planning a survey as part of the process of community diagnosis. (18mrks)

Community diagnosis generally refers to the identification and quantification of health problems in a community as a whole in terms of mortality and morbidity rates and ratios, and identification of their correlates for the purpose of defining those at risk or those in need of health care

Goals include:

1) Analyze the health status of the community

2) Evaluate the health resources, services, and systems of care within the community

3) Assess attitudes toward community health services and issues

4) Identify priorities, establish goals, and determine courses of action to improve the health status of the community

5) Establish an epidemiologic baseline for measuring improvement over time.

*The process of community diagnosis involves **four stages**:*

1. Initiation

2. Data collection and analysis

3. Diagnosis

4. Dissemination

i) Time/ Duration- By setting a timeline that includes each of the tasks, you can keep track of their commencement and end, and maintain control over the survey process.

- ii) *Costs-make sure that you don't exceed your budget and realize, only after the survey is complete, that you spent more than what you intended.*
- iii) *Scope/ Area under survey- Where do you intend to survey (which community will make up the population under survey?)*
- iv) *Target group/The Audience-Who is going to respond to your survey.? Bear in mind that all the people who you invite might not respond to the survey. Hence you also need to estimate the percentage of those invited whom you want to respond.*
- v) *Place of survey-geographical coverage*
- vi) *Instruments to be used-for data collection*

SUPPL. JANUARY 2006 PAPER II

Part II

Q1. Outline the objectives of the first antenatal visit (6mrks)

The aim of antenatal care is to monitor the progress of pregnancy to optimize maternal and fetal health.

Objectives include:-

- i) *Develop a partnership with the woman*
- ii) *Promote an awareness of the public health issues for the woman and the family*
- iii) *Exchange information with the woman and her family enabling them to make informed choices about pregnancy and birth*
- iv) *Facilitate the woman to make an informed choice about the methods of infant feeding.*
- v) *Offering parenthood education within a planned programme or on an individual basis.*
- vi) *Providing a holistic approach to the woman's care that meets her individual needs*

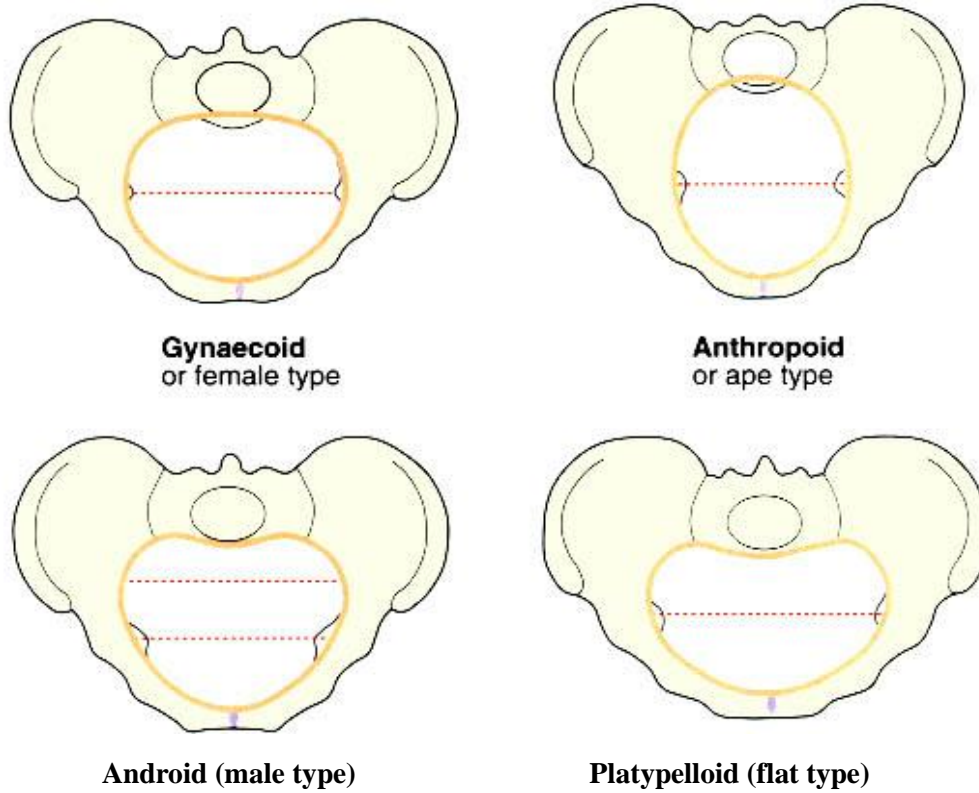
Q2. Draw and label the diagram of the gynaecoid pelvis (5mrks)

*1. **Gynaecoid** (40–50% of women). Inlet is rounded, side walls are straight, and sacrum is well curved.*

*2. **Anthropoid** (20% of all women, 40% of African-American women). Inlet is oval, long, and narrow; side walls are straight; sacrum is long and narrow; and sacrosciatic notch is wide.*

*3. **Android** (30% of all women, 10–15% of African-American women). Inlet is heart shaped with a short posterior sagittal diameter.*

4. *Platypelloid* (2–5% of all women). Inlet is flat and oval with a short posterior sagittal diameter.



Q3. Differentiate the caput succedaneum and cephalohaematoma (6mrks)

A caput succedaneum is a soft swelling of the most dependent part of the foetal head that occurs in prolonged labour before full cervical dilatation and after rupture of the membranes due to obstruction of the venous return from the lower part of the scalp by the cervical ring.

A cephalohaematoma is an effusion of blood under the periosteum that covers the skull bones.

Diagnosis and Differential Diagnosis:

<i>Cephalohaematoma</i>	<i>Caput Succedaneum.</i>
<i>Develops hours or days after birth</i>	<i>Present at birth.</i>
<i>Localized haematoma to one bone limited by sutures at its edges.</i>	<i>Diffuse tissue oedema overlying more than one bone.</i>
<i>Well-defined edges.</i>	<i>Poorly-defined edges.</i>
<i>Elastic- does not pit on pressure.</i>	<i>Soft, pits on pressure.</i>

Disappears within few weeks.

Disappears within 1-2 days.

Q4. Explain four observations you would make during the second stage of labor (4mrks)

Stage two is from full cervical dilatation until delivery of the infant - usually 1 hour or less in parous patients but may be 1-3 hours in primiparae.

Observations may include:

- Crowning*
- Bulging perineum*
- Gaping anus*
- Defecation*

Q5. State four signs and symptoms of puerperal psychosis (4mrks)

Signs usually develop within the first two-three weeks post-delivery.

The signs include:

- Hallucinations*
- Illogical thoughts*
- Delusions*
- Extreme feeling of anxiety and agitation*
- Suicidal/homicidal thoughts*
- Periods of delirium or mania*
- Refusal to eat*
- Insomnia*

Q6. Explain how rupture of the uterus may be prevented (4mrks)

Uterine rupture may occur if there has been a previous caesarean section (risk with lower segment incision. It may also occur with obstructed labour in multiparous patients and with use of prostaglandins or Syntocinon

Prevention includes:

History check on previous Uterine Scars to consider avoiding normal labour

Elective CS in case of previous scar

Monitoring contractions and signs of uterine rupture

Monitoring for obstructed labour and considering CS

Exclude malpresentations, malposition and disproportion

Q7. Explain the management of fetal distress (7mrks)

Signs of fetal distress require monitoring with a view to induction of labour.

Continuing fetal distress during labour may indicate need for Caesarean section.

Term or post-mature fetuses may produce meconium stained liquor. This can be detrimental to the fetal lungs by producing a chemical pneumonitis if inhaled.

Management includes:

Conservative:

-Reassess and Monitor FHR

-Stop oxytocin drip: if it is in use

-Left lateral position of the mother: to relieve aorto-caval compression and improve venous return which improves cardiac output and subsequently improves utero-placental blood flow

-Oxygen: increases the O₂ supply to the foetus.

Immediate delivery:

If foetal distress is not improved by the conservative methods immediate delivery is done by:

-Vacuum extraction,

-Forceps delivery

-Breech delivery if the cervix is fully dilated and vaginal delivery is amenable.

-CS: if rapid vaginal delivery is not amenable.

Part III

Q1. Mrs. PT admitted in the labor ward is diagnosed to have cord prolapsed.

a) Explain three predisposing factors to cord prolapsed (6mrks)

Umbilical cord prolapse occurs when the umbilical cord slips past the presenting fetal part and passes through the open cervical os. The blood supply to the fetus is cut off when the fetus compresses the umbilical cord against the cervix.

Predisposing factors include:

-Rupture of membranes when the fetus is not yet engaged in the pelvis i.e. Prom

-Footling breech presentation

-Transverse lie, oblique lie

-Abnormal placentation- Placenta praevia

-Long cord

-Cephalopelvic disproportion

-Multiple gestations

-Polyhydramnios-sudden rupture of membranes in polyhydramnios

b) Describe the management of Mrs.PT until the baby is delivered (14mrks)

If umbilical cord is palpated on vaginal examination the examiner should call for help and elevate the presenting fetal part to prevent compression of the umbilical cord. The examiner can assess the fetal pulse by palpating the umbilical cord, taking care not to confuse his or her own pulse with that of the fetus. While the examiner continues to elevate the presenting fetal part, the patient should be transported to an operating room where appropriate anesthesia is initiated and urgent cesarean section performed. If a patient presents with a prolapsed cord, viability of the fetus must be established before proceeding with cesarean section. Placing the patient in knee-chest position may be helpful in relieving cord compression with prolapse.

Key management:

-Manual displacement of the presenting part higher up

-Putting the patient in trendelenberg position

-If the cord protrudes from the vulva, handle it gently and wrap it in a warm moist pack.

-Giving oxygen to the mother

-Spontaneous delivery if cervix fully dilated

-CS: is the safest procedure

Q2. Mrs.BB is transferred to postnatal ward after normal delivery.

a) State three observations you would make on Mrs. BB and the baby when receiving them in postnatal ward (6mrks)

-Temperature

-Pulse

-Respirations

JULY 2006-PAPER III

Q1. Baby Ivan born 36wks gestation develops jaundice 12hrs after delivery.

a) State five inherent factors that predisposed baby Ivan to develop jaundice. (5mrks)

Jaundice is a condition that makes a newborn's skin and the sclera look yellow due to systemic accumulation of bilirubin.

Jaundice occurs when bilirubin builds up faster than a newborn's liver can break it down and pass it from the body. Reasons for this include:

i). Newborns make more bilirubin than adults do since they have more turnover of red blood cells.

ii). A newborn baby's still-developing liver may not yet be able to remove adequate bilirubin from the blood.

iii). Too large an amount of bilirubin is reabsorbed from the intestines before the baby gets rid of it in the stool.

-Inherent predisposing factors include:

-Biliary obstruction

-Rhesus incompatibility

-Haemoglobinopathies

-Glucose-6-phosphate Dehydrogenase Enzyme deficiency

b) Discuss the management of baby Ivan till he recovers (15mrks)

Physical assessment

-Extent of skin and scleral color change

-Associated clinical signs like lethargy and refusal to feed

-Change in urine and stool colour

-Presence of dehydration, hypothermia, acidosis or hypoxia

Laboratory tests

-Serum bilirubin analysis to determine bilirubin levels and whether conjugated or unconjugated

-Indirect Coomb's test

-WBC to detect any underlying infections

Initiate treatment based on findings

Phototherapy to convert unconjugated bilirubin

- Monitor temperature*
- Provide eye-shield*
- Provide moisture in the phototherapy box*
- Monitor fluid input-output*
- Monitor baby's rest patterns, feeding and responsiveness*
- Exchange transfusion with bilirubin below 255µmol/L(15mg/dL)*
- Obtain blood sample and order for blood for transfusion*
- Set up for and initiate Exchange transfusion*

Q2. Miss Nancy aged 20yrs and an addicted tobacco smoker presents in outpatient department with history of having missed her last two menstrual periods. The pregnancy test reveals that she is pregnant.

a) List six active substances in tobacco that will affect Miss Nancy's pregnancy. (3mrks)

- Nicotine,*
- Dioxin,*
- Cyanide,*
- Cadmium*
- Tar*
- Carbon monoxide*

Nicotine and Cotinine the two pharmacologically active substances in tobacco are found in higher concentrations in infants whose mothers smoke.

b) Discuss the effects of tobacco on the fetus. (10mrks)

- Spontaneous abortion*
- Abortion of a chromosomally normal fetus (39% more likely in smokers than in nonsmokers)*
- Abruptio placentae, placenta previa, and premature rupture of membranes*
- Preterm birth*
- Low infant birth weight*
- Sudden infant death syndrome*

c) Discuss the effects of tobacco smoking on Miss Nancy during pregnancy (7mrks)

- Miscarriage*

-Preterm birth

-Abruptio placenta

-Hypertension in pregnancy

Part II

Q1. Draw and label a cross-section of the umbilical cord (3mrks)

-Umbilical vein

-2 umbilical arteries

-Warton's jelly

Q2. Define;

a) Vasa praevia

Vasa previa (VP) can occur when the umbilical cord inserts into the membrane of the placenta instead of the central region of the placenta. When one of these vessels is located near the internal os, it is at risk of rupturing and causing fetal hemorrhage. VP can also occur when vessels leading to an accessory lobe cover the internal os.

Management: Third trimester bleeding caused by VP is usually accompanied by fetal distress, and emergency cesarean section is indicated. If VP is diagnosed antenatally, elective cesarean section should be scheduled at 37–38 weeks under controlled circumstances to reduce fetal mortality.

b) Pseudocyesis (3mrks)-

Is the medical term for a false pregnancy

The symptoms of pseudocyesis are similar to the symptoms of true pregnancy and are often hard to distinguish from such natural signs of pregnancy as morning sickness, tender breasts, and weight gain.

Symptoms of pseudocyesis generally last from a few months to a few years. In most cases, symptoms last for a full nine months. There is a high success rate for treatments involving psychotherapy, as it treats the underlying psychological causes of the disorder.

Q3. State four types of placenta praevia (4mrks)

*Placenta previa (PP) is defined as the implantation of the placenta over or near the cervical os. PP can be classified into four types based on the location of the placenta relative to the cervical os: **complete or total previa**, in which the placenta covers the entire cervical os; **partial previa**, in which the margin of the placenta covers part but not all of the internal os; **marginal previa**, in which the edge of the placenta lies adjacent to the internal os; and **low-lying previa**, in which the placenta is located near but not directly adjacent to the internal os.*

Management-Standard management of patients with PP includes initial hospitalization with hemodynamic stabilization. Laboratory studies should be ordered as outlined

earlier. Steroids should be given to promote lung maturity for gestations between 24 and 34 weeks. Rh o(D) immunoglobulin should be administered to Rh-negative mothers. Management of PP is then based on gestational age, severity of the bleeding, and fetal condition and presentation.

The location of the placenta also plays an important role in management and route of delivery.

Q4. State five differences between caput succedaneum and cephalohaematoma (5mrks)

<i>Cephalohaematoma</i>	<i>Caput Succedaneum.</i>
<i>Develops hours or days after birth</i>	<i>Present at birth.</i>
<i>Localized haematoma to one bone limited by sutures at its edges.</i>	<i>Diffuse tissue oedema overlying more than one bone.</i>
<i>Well-defined edges.</i>	<i>Poorly-defined edges.</i>
<i>Elastic- does not pit on pressure.</i>	<i>Soft, pits on pressure.</i>
<i>Disappears within few weeks.</i>	<i>Disappears within 1-2 days.</i>

Q5. List eight nursing activities during the fourth stage of labor following a normal delivery (4mrks)

- Examination of placenta and membranes
- Education on positioning and breastfeeding
- Initial examination of the newborn
- Lochia monitoring
- Labeling the baby
- Perineum repair
- Recording of birth
- Monitoring vital signs
- Tetracycline eye prophylaxis

Q6. Describe the differences between encephalocele and meningocele (4mrks)

<i>Encephalocele</i>	<i>Meningocele</i>
<i>Results from failure of closure of the posterior neuropore</i>	<i>Results from failure of closure of the anterior neuropore</i>
	<i>There is a bony defect in the cranial vault through which dura and arachnoid mater bulge</i>

Q7. State five indications of an episiotomy (5mrks)

Episiotomy is an incision into the perineal body to enlarge the outlet area and facilitate delivery. Episiotomy may be necessary in cases of vaginal soft tissue dystocia or as an accompaniment to forceps or vacuum delivery. The role of prophylactic episiotomy, however, is debated.

i). Cephalopelvic Disproportion (CPD)

ii). Breech presentation

iii). Vaginal soft tissue dystocia

iv). FGM 3rd degree

v). Obstructed labour

Q8. List the clinical features which indicate that a pre-eclampsia patient is progressing towards developing eclampsia (6mrks)

-Systolic Bp greater than 170 mmHg

-Diastolic Bp > 110 mmHg

-Proteinuria greater than 1 g/l

-Severe headache

-Visual disturbances

-Epigastric pain

-Vomiting

-Liver tenderness

-Hyperreflexia

-Progressive decrease in platelet count

-Papilloedema

-Haematuria

-Increased levels of liver enzymes (ALT or AST > 70 iu/l)

Q9. Explain how specific pelvic joints increase the capacity of the pelvis to allow passage of the fetus during pregnancy and delivery (6mrks)

The hormone relaxin, produced during pregnancy, loosens the pubic symphysis and sacro-iliac ligaments, allowing movement between the hip bones that can further increase the size of the pelvic inlet and outlet

Mention:

***Sacro-iliac joint;** Sacrum/ilium of coxal bone- gliding movement*

***Pubic symphysis;** Coxal bone/coxal bone- weakening of the symphysis allows movement*

JAN 2007 -PAPER III

Part I

Q1. The following are clinical types of poliomyelitis:-

- i) Flaccid poliomyelitis
 - ii) Abortive poliomyelitis
 - iii) Non-abortive poliomyelitis
 - iv) Non-paralytic poliomyelitis
- a) i,iii,iv
 - b) I,ii,iv*
 - c) Ii,iv,i
 - d) Iii,iv,ii

Poliomyelitis is an acute infectious disease caused by a group of polio virus. The disease is spread by healthy carriers or diseased person through faeco-oral route and droplet infection through nasopharynx. Poliomyelitis can affect the nerves and leads to partial or full paralysis.

Q2. The following are examples of “spacing methods” of family planning:-

- a) Natural methods, chemical barriers, vasectomy
- b) Mechanical barriers, tubectomy, chemical barriers
- c) Tubectomy, vasectomy, natural methods
- d) Chemical barriers, natural methods, mechanical barriers*

Q3. In environmental health, water based diseases are:-

- a) Due to the presence of an aquatic host
- b) Caused by vectors that leave near aquatic conditions*
- c) Caused by poor quality of water
- d) Due to inadequate quantities of water

Q4. A child with marasmus will present with the following clinical symptoms:-

- a) Oedema of the legs but not the face
- b) Very poor appetite*

c) Diffuse depigmentation

d) No hepatic enlargement

Q5. In focused antenatal care:-

a) The mother is encouraged to visit antenatal clinic at least seven times during pregnancy

b) The mother is encouraged to save some money for buying baby cloth when born

c) The mother is encouraged to decide on the place of birth when labor begins

d) The mother is encouraged to make transport arrangements several months before her time of delivery.

Q6. In determination of disease incidence:-

a) The total population is considered

b) The ability of disease to recur is not considered

c) Persons years time at risk is considered

d) All the individuals suffering from the diseases are considered

Q7. The demographic trends in Kenya indicate that since 1969 to date:-

a) The crude birth rate has increased

b) The infant mortality rate has increased

c) Life expectancy at birth has increased

d) Total fertility rate has increased

Q8. The following should be highly considered when counseling family planning and HIV positive:-

a) Drug interactions between hormonal methods and anti-tuberculosis drugs

b) The clients current stage of AIDS

c) The clients nutritional states

d) The clients economic status and source of funding

Q9. When preparing a family for their parents' changed role due to HIV status an important aspect to consider is:-

- a) Drug therapy instructions
- b) Nutritional and diet preparation
- c) *Distigmatisation of the infected*
- d) Exercise schedule for the infected

JAN 2007 -PAPER VI

Part I

Q1. The first scientific paper in nursing was published by:-

- a) Anna Benkingham
- b) *Florence Nightingale*
- c) Isabella Hampton
- d) Margaret Mylos

Q2. The graduate nurse's role in research is:-

- a) *Intelligent consumption of research findings*
- b) Research assistants
- c) Funding of research
- d) Data analysis and cleaning

Q3. A nurse researcher formulated the following hypothesis: "There is a relationship between self-concept and suicidal behavior". This implies that:-

- a) The independent variable is suicidal behavior
- b) The hypothesis is directional
- c) The type of design suggested would be experimental
- d) The dependent variable is suicidal

Q4. Theoretical framework refers to:-

- a) A comprehensive list of all the relevant previous research work done in an area of interest.
- b) Roy's adaptation theory
- c) A pictorial presentation of relationships between variables

d) An examination of both the depth and breadth of literature review

Q5. Traits leadership theories in nursing:-

- a) Focuses on what leaders do in relational and contextual terms
- b) Emphasizes on the degrees of trust and respect between leaders and followers
- c) Is independent on personal characteristics of followers
- d) Emphasizes that physical and emotional characteristics are critical in inspiring others toward a common goal

The trait model of leadership is based on the characteristics of many leaders - both successful and unsuccessful - and is used to predict leadership effectiveness.

Among the core traits identified are:

- *Achievement drive: High level of effort, high levels of ambition, energy and initiative*
- *Leadership motivation: an intense desire to lead others to reach shared goals*
- *Honesty and integrity: trustworthy, reliable, and open*
- *Self-confidence: Belief in one's self, ideas, and ability*
- *Cognitive ability: Capable of exercising good judgment, strong analytical abilities, and conceptually skilled*
- *Knowledge of business: Knowledge of industry and other technical matters*
- *Emotional Maturity: well adjusted, does not suffer from severe psychological disorders.*
- *Others: charisma, creativity and flexibility*

Strengths/Advantages of Trait Theory

- *It is naturally pleasing theory.*
- *It is valid as lot of research has validated the foundation and basis of the theory.*
- *It serves as a yardstick against which the leadership traits of an individual can be assessed.*
- *It gives a detailed knowledge and understanding of the leader element in the leadership process.*

Q6. The resolution stage of grief response:-

- a) Lasts less than six months
- b) May be prolonged if there has been a love-hate association
- c) *May be prolonged by anticipatory grieving*

- d) May be of less intensity if the affected has experienced a number of recent losses

Grief refers to the personal feelings that accompany an anticipated or actual loss.

Q7. Mrs. Mama has laid down strict and rigid rules for her baby during toilet training. The characteristics the baby is likely to exhibit in adulthood include:-

- i) Stubbornness
- ii) Malevolence
- iii) Disorganization
- iv) Stinginess
- v) Miserliness

a) I,iii,and iv

b) Ii,iii and iv

c) I,iv and v

d) I, ii and iv

Q8. A patient tells a nurse “I felt very bad when my relatives visited me and I refused to talk to them”. The nurse’s best response would be:-

a) “Did they make you feel that way?”

b) “How did you do that?”

c) “Do you think they came to visit you just to annoy you?”

d) “DESCRIBE WHAT you were feeling just before your relatives visited you”.

Q9. The organic mental syndrome associated with sedatives abuse is:-

a) Dementia

b) Amnestic syndrome

c) Organic hallucinosis

d) Organic mood disorder

Amnesic disorders are characterized by an inability to learn new information (short-term memory deficit) despite normal attention, and an inability to recall previously learned information (long-term memory deficit).

Q10. Mini, a 7-year-old boy has been diagnosed with Attention Deficit Hyperactive Disorder (ADHD). The drug group most likely to be used would be:-

- a) Central nervous system depressants
- b) Anticonvulsants
- c) Major tranquilizers-

d) Central nervous system stimulants

Antipsychotic drugs are also called major tranquilizers and neuroleptics. They are used in the treatment of acute and chronic psychoses, particularly when accompanied by increased psychomotor activity

CNS stimulants are sometimes given to children with ADHD. Those commonly used include

dextroamphetamine, methylphenidate (Ritalin), imipramine, atomoxetine, bupropion, and dexmethylphenidate (Focalin).

They increase levels of neurotransmitters (probably norepinephrine, dopamine, and serotonin) in the CNS.

The following nursing diagnoses may be considered for clients receiving therapy with agents for ADHD:

- *Risk for injury related to overstimulation and hyperactivity (CNS stimulants) or seizures (possible side effect of bupropion)*
- *Risk for suicide secondary to major depression related to abrupt withdrawal after extended use (CNS stimulants)*
- *Risk for suicide (children and adolescents) as a side effect of atomoxetine and bupropion*
- *Imbalanced nutrition, less than body requirements, related to side effects of anorexia and weight loss (CNS stimulants)*
- *Disturbed sleep pattern related to overstimulation resulting from use of the medication (CNS stimulants) or side effect of insomnia with atomoxetine*
- *Nausea related to side effects of atomoxetine or bupropion*
- *Pain related to side effect of headache with atomoxetine or bupropion*
- *Risk for activity intolerance related to side effects of sedation and dizziness with atomoxetine or bupropion*

Q11. Benzhexol (Artane):-

- a) Should not be administered to patients with Parkinsonian syndrome
- b) May be used safely in patients with prostatic hypertrophy
- c) Should never exceed 15mg daily dosage
- d) Does not cause orthostatic hypotension

Q12. Exhibitionism:-

- a) Occurs Less than 6months
- b) Occurs equally in both men and women
- c) *Is intensified when the perpetrator has excess free time and is under significant stress*
- d) Is more frequent in men without satisfying sexual relationships

Exhibitionism is characterized by recurrent, intense, sexual urges, behaviors, or sexually arousing fantasies, of at least a 6-month duration, involving the exposure of one's genitals to an unsuspecting stranger. The urges for genital exposure intensify when the exhibitionist has excessive free time or is under significant stress. Most people who engage in exhibitionism have rewarding sexual relationships with adult partners but concomitantly expose themselves to others.

Q13. The main purpose of publishing research findings is to:-

- a) Meet the requirements of the sponsor
- b) Solicit for more funds for future research
- c) Get recognition in the profession
- d) *Contribute to scientific literature*

Q14. While conducting research among psychiatric patients the nurse researcher:-

- a) Uses key informant approach only
- b) May interview the patients directly if they attain a specified mental health status
- c) Must get consent from relatives and guardians only
- d) May use experimental approach

Q15. Children of divorced parents:-

- a) Experience distress and dysfunction more in the year proceeding divorce

- b) Experience less severe distress after two years of divorce as compared with those children remaining in conflictual marriages
- c) Distress and dysfunction are lowest experienced in the year after divorce
- d) Have similar psychological problems with those of non-divorced parents

Q16. Mr. Moto has been constantly physically abusing his wife. Mr. Moto:-

- a) Is likely to have a diagnosable mental disorder
- b) May predispose his anger on his children
- c) May have come from a background in which violence is frequent and tolerated
- d) May predispose himself to homicide

Q17. Discovery learning approach:-

- a) Is more effective than expounding the principles then engaging the students in learning
- b) Takes less time than exposition learning approach
- c) Helps students attain higher level (life skill) or methodological objectives as opposed to passive receivers
- d) Is best applied when student need grasp a few basic concepts

Q18. Micro-evaluation:-

- a) Enables the teacher to launch into new lines of argument when the students seem unconvinced
- b) Enables students to benefit in some future learning situations
- c) Should be minimal and limited if students are working together
- d) Comprises absolute evaluation

Part II

Q1.Explain the significance of rigor in quantitative research (4mrks)

-It Eliminates or minimizes systematic bias or, at least, to detect its presence so it can be taken into account in interpreting the data.

-It forms a way of achieving relative constancy of research conditions by controlling intrinsic or extrinsic factors or variables.

Q2.Explain the following levels of measurements;

Measurement is the assignment of numbers to events or objects according to rules that permit important properties of the objects or events to be represented by properties of the number system. Numbers are assigned to qualities of objects to designate the quantity of the attribute.

a) Interval-scale measurement

Interval scale-Is one in which the differences between the numbers on the scale are meaningful: it includes both nominal and ordinal information.

a) Ratio-scale measurement

Ratio scale-Is one that has a meaningful zero point as well as meaningful differences between the numbers on the scale

Q3.Outline the essential information needed for obtaining informed consent (8mrks)

-Fair treatment of subjects

-Confidentiality/privacy pledge.

-Safety of subjects

-Compensation if any

-Nature of procedures

-Aims of study

-Type of data to be obtained

-Voluntary basis

-Right to withdraw and withhold information

-Participant selection

-Potential risks.

-Potential benefits

Q4.State four rights of delegation (4mrks)

***Right task-** Matching the specific client care goals and activities with the person to entrust with the appropriate responsibility and authority*

***Right circumstance-** Familiar situations and environments enhance client safety and competent performance of any task.*

***Right person-** specific tasks or client care goals and activities should be matched with the right person with the appropriate responsibility and authority*

Right direction- Communication with adequate detail should be done to provide more information or direction in delegation.

Right supervision- supervision of personnel is essential to ensure safety and completeness of client care.

Q5. Explain the following variables in regard to making appropriate

- a) Characteristics of the learner(2mrks)
- b) Characteristics of objectives/tasks(2mrks)
- c) Characteristics of media (2mrks)

Q6. Explain any three factors that influence the process of curriculum development of health workers (6mrks)

- i). Changes in professional practice*
- ii). Emergence of new health issues/conditions*
- iii). Changes in national health policies*

Q7. Outline eight ways a teacher can increase his/her effectiveness in the learning process (8mrks)

- i). Use of teaching methods that stimulate various senses*
- ii). Use of humor*
- iii). Use of teaching aids*
- iv). Giving illustrations*
- v). External motivation*
- vi). Use of play/games*
- vii). Use of models or simulation*
- viii). Appropriate use of tests*

JANUARY 2008- PAPER I

Part I

Q1. Pulmonary disorders that cause finger-clubbing include:-

- a) Pneumonia, asthma, emphysema
- b) Lung cancer, lung abscess, bronchiectasis*
- c) Cystic fibrosis, pulmonary hypertension, pneumothorax

d) Pleural effusion, beryllium disease, chronic atelectasis

Q2. Complications of viral pneumonia include

a) Lung-cavitation, haemorrhage, lung infarction

b) Shock, pleural effusion, pericarditis.

c) Super-imposed bacterial infection, bronchopneumonia

Q3. Causes of neuropathic pain include

a) *Phantom limb, post-herpetic neuralgia, reflex-sympathetic dystrophy*

b) Bone fracture, crush injury, burn

c) Causalgia, bruise, knife cut

Neuropathic pain is caused by damage to the peripheral or central nervous system. A simple definition is "pain in an area of abnormal sensation." Pain may be described as aching, burning, shooting, or stabbing and may be associated with abnormal sensation; normal touch is perceived as painful (allodynia). It may be caused by tumor invasion or compression but also by surgery, radiotherapy, and chemotherapy. Many patients have neuropathic pain that responds to opioids, and so initial management should include a trial of opioids.

Q4. Clinical features of pheochromocytoma include

a) Muscle weakness, thin skin, raised blood pressure

b) Tingling, muscle spasm, periods of temporary paralysis

c) Excessive facial hair, acne, weight loss

d) *Headache, blurring of vision, diaphoresis*

Pheochromocytoma is a tumor arising most commonly from the adrenal gland. Presents with Headache, sweating, heart palpitations and elevated BP

In Pheochromocytoma; diet high in vitamins, minerals, and calories. Foods that contain caffeine should be avoided, since they can precipitate hypertensive crisis.

The signs and symptoms associated with pheochromocytoma can mimic those found in chronic hypertension. They include the following:

1. *Paroxysmal or sustained hypertension, headaches, visual changes, palpitations, diaphoresis, abdominal pain, and anxiety.*

2. *Hypoglycemia and postural hypotension can also be found.*

Diagnosis is made by noting increased urine levels of unconjugated norepinephrine, epinephrine, and their metabolites; metanephrine (the most sensitive and specific

substrate); and vanillylmandelic acid in a 24-hour urine collection. Abdominal CT or MRI is recommended for localization of the neoplasm.

Treatment recommendations include surgical intervention regardless of gestational age, and careful pharmacologic control of hypertension.

1. Phenoxybenzamine hydrochloride (alpha-adrenergic long-acting blocker) (10–30 mg two to four times daily) or phentolamine mesylate (short-acting alpha-adrenergic blocker), given intravenously, is recommended as initial treatment.

2. If tachycardia or arrhythmias persist after alpha-adrenergic blockade, then beta-blockers (i.e., propranolol 20–80 mg four times daily) can be given with close monitoring.

Q5. In the management of pemphigus:-

- a) *Corticosteroids are administered in high doses until remission is apparent*
- b) Dapsone is given after screening the patient for glucose-6-phosphate dehydrogenase
- c) Systemic prednisone is continued for months in alternate day doses
- d) Fluid and electrolyte balance must be maintained to counteract their loss from the skin

Pemphigus is an acute or chronic serious skin disease characterized by the appearance of bullae (large fluid-filled blisters) of various sizes on otherwise normal skin and mucous membranes.

The autoimmune response that occurs in pemphigus causes a patient's own antibodies to attack the skin and mucous membranes, and destroy the protein "glue" that holds the cells together. The result is skin that separates from itself, causing the characteristic blisters.

Q6. Micro-organisms responsible for hospital acquired pneumonia are:-

- a) Streptococcus pneumonia, haemophilus influenza, legionella pneumophilia
- b) Chlamydia pneumonia, mycoplasma, para-influenza virus
- c) Pseudomonas aeruginosa, staphylococcus aureus, klebsiella pneumonia
- d) Pneumocystis carinii, cytomegalovirus, aspergillus fumigatus

Hospital-acquired pneumonias are often more serious and may be caused by Escherichia coli, Haemophilus influenzae, and Pseudomonas aeruginosa, among others.

*The most common cause of **community-acquired bacterial pneumonia** is *Streptococcus pneumoniae*; also called *pneumococcal pneumonia*. Other community-acquired infections are caused by *Staphylococcus aureus* and *Mycoplasma pneumoniae*.*

Q7. Bioavailability of drugs taken by mouth is affected by:-

- a) Water-solubility, blood flow through the kidneys, normal liver function
- b) Capacity of liver enzymes to metabolize, age of the patient, extent of protein binding
- c) Distribution volume, weight of the patient, ability of drug to cross membranes
- d) Acidity of the stomach, transit time through the digestive tract, presence of food*

Q8. Immunoglobulin G (IgG) is:-

- a) Responsible for secondary antibody response
- b) Produced when an antigen is encountered for the first time
- c) Responsible for defense against invasion of micro-organisms through body's mucous membranes
- d) The mediator of immediate reactions*

Ig G

*-Only antibody that pass placental circulation causing **passive immunity**.*

-Short term protection.

-Has an Immediate action.

Ig A

-Present in all bodily secretions (tears, saliva, colostrums).

Ig M

-Acute in inflammation.

Ig E

-For allergic reaction.

Ig D

-For chronic inflammation

Q9. Surgical management of peptic ulcers is indicated in

- a) Severe *Helicobacter-pylori* infection, H2 receptor antagonist resistance

- b) Failure to heal after 12-16 weeks of treatment, Zollinger-Ellison syndrome
- c) NSAID-Induced ulcers, stress ulcers
- d) Cushing's ulcers, curling ulcers

JAN 2008 PAPER II

Part II

Q1. State five causes of abnormal vaginal bleeding (5mrks)

Q2. Describe:

a) Halothane (3mrks)

b) Glipizide (3mrks)- *Sulfonylurea*

Action-Lowers blood glucose level by stimulating insulin release from pancreas, increasing insulin sensitivity at receptor sites, and decreasing hepatic glucose production. Also increases peripheral tissue sensitivity to insulin and causes mild diuresis.

Use- To control blood glucose in type 2 (non-insulin-dependent) diabetes mellitus in patients who have some pancreatic function and don't respond to diet therapy.

Contraindications

- *Hypersensitivity to drug*
- *Severe renal, hepatic, thyroid or other endocrine disease*
- *Uncontrolled infection, serious burns, or trauma*
- *Diabetic ketoacidosis*
- *Pregnancy or breastfeeding*

Q3. State five causes of pulmonary embolism (5mrks)

PE- refers to the obstruction of the pulmonary artery or one of its branches by a thrombus (or thrombus) that originates somewhere in the venous system or in the right side of the heart.

The causes include:

-Immobilization: A stroke, broken bone, or spinal cord injury can result in confinement to bed so that clot formation can occur in either the arms or legs.

-Prolonged travel, such as sitting in an airplane or a long car trip, allows the blood to sit in the legs and increases the risk of clot formation.

-Recent surgery

-Trauma or injury (especially to the legs)

-Obesity

-Heart disease (such as an irregular heartbeat)

-Burns

-Previous history of blood clot in the legs (DVT) or PE

-Conditions that increase clotting of the blood

-Pregnancy

-Cancer

-Estrogen therapy

-Certain protein and enzyme deficiencies

Q4. State four aspects of nursing management in a patient with possible acute hypoparathyroidism (4mrks)

In Hypoparathyroidism, there's a Decreased secretion of parathyroid hormone leading to hypocalcaemia; Resulting to hyperphosphatemia

A. Predisposing Factors

- 1. Following subtotal thyroidectomy*
- 2. Atrophy of parathyroid gland due to:
 - a. inflammation*
 - b. tumor*
 - c. trauma**

B. Signs and Symptoms

- 1. Acute tetany
 - a. tingling sensation*
 - b. paresthesia*
 - c. numbness*
 - d. dysphagia*
 - e. positive trousseau's sign/carpopedal spasm*
 - f. positive chvostek sign*
 - g. laryngospasm/broncospasm*
 - h. seizure feared complications*
 - i. arrhythmia**
- 2. Chronic tetany
 - a. photophobia and cataract formation*
 - b. loss of tooth enamel*
 - c. anorexia, nausea and vomiting*
 - d. agitation and memory impairment**

C. Diagnostic Procedures

- 1. Serum Calcium is decreased (normal value: 8.5 – 11 mg/100 ml)*
- 2. Serum Phosphate is decreased (normal value: 2.5 – 4.5 mg/100 ml)*
- 3. X-ray of long bones reveals a decrease in bone density*
- 4. CT Scan – reveals degeneration of basal ganglia*

D. Nursing Management

1. Administer medications as ordered such as:

a. Acute Tetany

- Calcium Gluconate IV slowly*

b. Chronic Tetany

- Oral Calcium supplements*
- Calcium Gluconate*
- Calcium Lactate*
- Calcium Carbonate*

c. Vitamin D (Cholecalciferol) for absorption of calcium

2. Avoid precipitating stimulus such as glaring lights and noise

3. Encourage increase intake of foods rich in calcium

- a. anchovies*
- b. salmon*
- c. green turnips*

4. Institute seizure and safety precaution

5. Encourage client to breathe using paper bag to produce mild respiratory acidosis result.

6. Prepare trachea set at bedside for presence of laryngo spasm

7. Prevent complications

8. Hormonal replacement therapy for lifetime

9. Importance of follow up care.

Q5. Outline five indications of endotracheal intubations (5mrks)

- i) Profound disturbance in consciousness with the inability to protect the airway*
- ii) Tracheobronchial toilet*

- iii) *Severe pulmonary or multisystem injury associated with respiratory failure, such as sepsis, airway obstruction, hypoxemia, and hypercarbia*
- iv) *Surgical procedures involving the cranium, thorax, or abdomen*
- v) *Procedures that may involve intracranial hypertension*
- vi) *An obstructed or compromised airway,*
- vii) *Altered mentation,*
- viii) *loss of consciousness,*

Q6. Outline the management of newly diagnosed cancer patient (6mrks)

Cancer is a disease process that begins when an abnormal cell is transformed by the genetic mutation of the cellular DNA. This abnormal cell forms a clone and begins to proliferate abnormally, ignoring growth-regulating signals in the environment surrounding the cell.

-Open communication and support are vital as the patient and family periodically reassess treatment plans and goals when complications of therapy develop or disease progresses.

- A variety of therapies, including surgery, radiation therapy, chemotherapy, and biologic response modifier (BRM) therapy, may be used at various times throughout treatment. The client and significant other should be educated to undertake the therapy due.

- Preventing and reducing pain help to decrease anxiety and break the pain cycle.

- Grieving is a normal response to these fears (diagnosis of cancer) and to the losses anticipated or experienced by the patient with cancer. The patient and family just informed of the cancer diagnosis frequently respond with shock, numbness, and disbelief.

- Monitoring and managing potential complications such as infections, bleeding and hemorrhage

- Assessment for body image changes as a result of disfiguring treatments is necessary to facilitate the patient's adjustment to changes in appearance or functional abilities.

- Patients often experience distress (eg, pain, nausea) related to the underlying cancer or treatments.

Q7. Explain the three stages of chronic renal disease (6mrks)

Chronic renal failure, or ESRD, is a progressive, irreversible deterioration in renal function in which the body's ability to maintain metabolic and fluid and electrolyte balance fails, resulting in uremia or azotemia (retention of urea and other nitrogenous wastes in the blood).

ESRD may be caused by systemic diseases, such as diabetes mellitus (leading cause); hypertension; chronic glomerulonephritis; pyelonephritis; obstruction of the urinary

tract; hereditary lesions, as in polycystic kidney disease; vascular disorders; infections; medications; or toxic agents.

Stage 1: *Reduced renal reserve, characterized by a 40% to 75% loss of nephron function. The patient usually does not have symptoms because the remaining nephrons are able to carry out the normal functions of the kidney.*

Stage 2: *Renal insufficiency occurs when 75% to 90% of nephron function is lost. At this point, the serum creatinine and blood urea nitrogen rise, the kidney loses its ability to concentrate urine and anemia develops. The patient may report polyuria and nocturia.*

Stage 3: *End-stage renal disease (ESRD), the final stage of chronic renal failure, occurs when there is less than 10% nephron function remaining. All of the normal regulatory, excretory, and hormonal functions of the kidney are severely impaired. ESRD is evidenced by elevated creatinine and blood urea nitrogen levels as well as electrolyte imbalances.*

Once the patient reaches this point, dialysis is usually indicated. Many of the symptoms of uremia are reversible with dialysis.

Q8. Draw a diagram of the pancreas in relation to the duodenum and the biliary tract (5mrks)

JANUARY 2008-PAPER III

Part I

Q1. Community participation in primary health care (PHC) means the:-

- a) Community must build their health facilities
- b) Community assumes responsibility for health services*
- c) Leaders of the community should participate in health care
- d) Members of the community should engage in health visits

Q2. In descriptive epidemiology the important characteristics of study are:-

- a) Demographic data*
- b) Mortality rates
- c) Disease prevalence
- d) Disease incidence

Descriptive epidemiology evaluates and catalogs all the circumstances surrounding a person affected by a health event of interest.

The primary considerations for descriptive epidemiology are frequency and pattern. Frequency evaluates the rate of occurrence, and pattern helps analytical epidemiologists suggest risk factors. Descriptive epidemiology evaluates frequency and pattern by examining the person, place, and time in relationship to health events.

Q3. The group A drugs recommended by WHO for the treatment of Gonorrhoea include:-

- a) I.M Spectinomycin 2g
- b) I.M Ceftriaxone 250mg
- c) Amoxycillin 3g with 1g of Probenicid orally
- d) I.M Kanamycin 2g

Q4. To effectively combat endemic malaria, health workers should:-

- a) Distribute the IT mosquito nets and intensify health education*
- b) Spray larvicides and cut grass
- c) Give more chemoprophylaxis and treat all cases
- d) Provide mosquito nets and clear vegetation

Q5. The immediate treatment for an infant with severe diarrhea and sunken eyes and fontanelles includes:-

- a) Giving an anti-diarrhoeal drug and admit immediately
- b) Taking a blood slide for malarial parasites And then admit
- c) Giving intravenous fluids and then admit
- d) Giving oral rehydration solution plus an antibiotic

Q6. The activities the nurse engages in during the preparatory phase of home visit includes:-

- a) Location of the house
- b) Clarifying source of the referral
- c) Recording and reporting
- d) Analyzing community references

Break.....!!!!

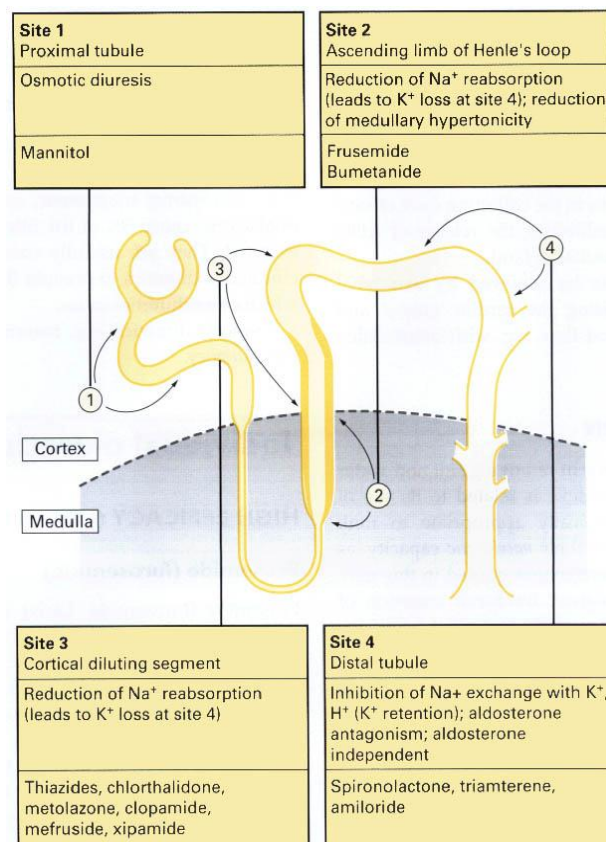
Tips 4Alcohol and cigarette peddlers

- Smoking; cigarette smoke disrupts both mucociliary and macrophage activity
- Alcohol suppresses the body's reflexes, may be associated with aspiration, and decreases white cell mobilization and tracheobronchial ciliary motion
- There is a strong correlation between cigarette smoking and bladder cancer. Specific chemicals that cause bladder cancer have been found in cigarette smoke. The more cigarettes smoked, the greater the risk.

JULY 2010-PAPER I

Part II

Q1. Draw a diagram of the nephron and indicate the sites of action of the four major subclasses of diuretics. (4mrks)



Q2. Describe the pathophysiology of neurogenic shock (6mrks).

In shock, the cells lack an adequate blood supply and are deprived of oxygen and nutrients; therefore, they must produce energy through anaerobic metabolism. This results in low energy yields from nutrients and an acidotic intracellular environment.

Neurogenic shock occurs when dysfunction or injury to the nervous system causes extensive dilation of peripheral blood vessels.

It occurs due to factors that either stimulate the parasympathetic nervous system or block the sympathetic nervous system.

Signs and symptoms include hypotension and altered mental status and, during the early phases, bradycardia and warm, dry skin.

Q3.State four characteristics of cancer cells (4mrks).

*i).**Cancer cells lack contact inhibition**-This is a property of normal cells in which contact by the cell with another cell or tissue signals cells to stop dividing; they continue to divide and invade surrounding tissues.*

*ii). **Cancer cells are malignant**-is the dissemination or spread of malignant cells from the primary tumor to distant sites by direct spread of tumor cells to body cavities or through lymphatic and blood circulation.,*

*iii). **Cancer cells have tumor-specific antigens**-These proteins distinguish the malignant cell from a benign cell of the same tissue type.*

*iv). **Cancer cells are pleomorphic**-The nuclei of cancer cells are large and irregularly shaped*

Q4.Explain the clinical manifestation of pernicious anemia (6mrks)

It's a chronic anemia characterized by a deficiency of intrinsic factor leading to hypochlorhydria (decrease hydrochloric acid secretion).It results due to poor cobalamin absorption through the GI tract. Parenteral or intranasal administration of cobalamin is the treatment of choice.

Signs and Symptoms

1. Weakness and fatigue

2. Headache and dizziness

3. Pallor and cold sensitivity

4. Dyspnea and palpitations as part of compensation

5. GIT changes that includes

a). mouth sore

b). red beefy tongue

c). indigestion/dyspepsia

d). weight loss

e). jaundice

6. CNS changes

- a). *tingling sensation*
- b). *numbness*
- c). *paresthesia*
- d). *positive to Romberg's test – damage to cerebellum resulting to ataxia*
- e). *result to psychosis*

C. Diagnostic Procedure

Schilling's Test- *reveals inadequate/decrease absorption of Vitamin B12*

D. Nursing Management

1. *Enforce CBR*
2. *Administer Vitamin B12 injections at monthly intervals for lifetime as ordered*
 - *Never given orally because there is possibility of developing tolerance*
 - *Site of injection for Vitamin B12 is dorsogluteal and ventrogluteal*
 - ***No side effects***
3. *Provide a dietary intake that is high in carbohydrates, protein, vitamin c and iron*
4. *Instruct client to avoid irritating mouth washes instead use soft bristled toothbrush*
5. *Avoid heat application to prevent burns*

Q5.List six risk factors for multiple organ dysfunctions (3mrks)

MOD-refer to an altered organ function in an acutely ill patient requiring medical intervention to achieve homeostasis.

- i) *Old Age- There's lack of physiologic reserve associated with aging and the natural degenerative process, especially immune compromise.*
- ii) *Presence of chronic illness,*
- iii) *Malnutrition,*
- iv) *Immunosuppression,*
- v) *Surgical or traumatic wounds.*

If preventive measures fail, treatment measures to reverse MODS are aimed at (1) controlling the initiating event, (2) promoting adequate organ perfusion, and (3) providing nutritional support.

Primary nursing interventions are aimed at supporting the patient and monitoring organ perfusion until primary organ insults are halted. Providing information and support to family members is a critical role of the nurse in caring for patients with MODS. Addressing end-of-life decisions is an important role of the health care team to ensure that supportive therapies are congruent with the patient's wishes.

Q6. Explain the action of the extra ocular-muscles used in rotating the eye upwards (6mrks)

Eye movements are controlled by muscles innervated by cranial nerves III, IV and VI.

Part III

Q1. Master Kata aged 2yrs is admitted into the ward, suffering from laryngo-tracheo bronchitis (LTB)

a). State three anatomical differences between the larynx of a young child and that of an adult (3mrks).

c) Describe the pathophysiology of laryngo-tracheal bronchitis (5mrks)

Laryngo-tracheobronchitis (ie, croup) is a viral infection of the upper respiratory tract that causes varying degrees of airway obstruction.

It mostly occurs in infants and young children between six months and three years of age.

The virus infects the nose and throat initially, and then spreads along the upper respiratory tract to the larynx and trachea. As the infection progresses, the trachea becomes swollen, which narrows the space available for air to enter the lungs.

Bacterial infection of the same areas can occur during the viral infection. Bacterial coinfection is usually more severe and requires a different treatment than a viral infection.

Croup can be very mild or very severe, depending on how difficult it is for the infant or child to pull air into the lungs. The size (diameter) of the windpipe (which is normally smaller in infants) and degree of narrowing due to swelling are important determinants of severity. Croup may become more severe when a child becomes agitated or upset.

A child with moderate to severe croup may have to struggle to breathe in ways that can be frightening for both the child and parent (or other caregivers).

Symptoms:

- *Inspiratory stridor*
- *Harsh or brassy cough*
- *Hoarseness*
- *Mild cold with low grade fever and a runny nose*
- *Fatigue*
- *Restless*
- *Sleep apnea*
- *Loss of appetite*

c). Describe the specific management of master Kata till discharge (12mrks)

Most children with croup have mild symptoms and can be successfully treated at home. This includes using mist from a humidifier, Fever can be treated with an over-the-counter medication such as acetaminophen or ibuprofen.

Treatment is aimed at decreasing symptoms and reducing inflammation. Glucocorticoids are effective by oral, parenteral or nebulized routes, and continue to provide the mainstay of therapy. The common oral dexamethasone dose (0.6 mg/kg) may exceed the dose required for good clinical efficacy. Dexamethasone provides long-lasting and effective treatment for mild croup, as well as for moderate and severe croup. It works to decrease swelling of the larynx, usually within six hours of the first dose. Nebulized epinephrine provides effective additional therapy for more severe cases.

Pharmacological therapies generally aim to improve oxygenation, reduce airway narrowing and/or reverse the inflammatory process.

-Intravenous fluids may be needed if the child is dehydrated as a result of fever or rapid breathing, both of which increase the body's loss of fluids. Difficulty breathing can discourage a child from drinking, which can increase the risk of dehydration.

-Monitoring of oxygen levels, breathing and heart rate, skin color (normal versus blue-tinged), and level of alertness are used to measure the child's status and response to treatment. A child who fails to improve or who improves slowly may need further treatment.

Q2. Mrs K, aged 30yrs has been brought into the ward after sustaining 40% burns in an accident. On assessment the following data was obtained:

Capillary refill-10secnds

Blood pressure-60/30mm/hg

Urine output-5mls in the last one hr

Serum potassium-8m Eq/litre

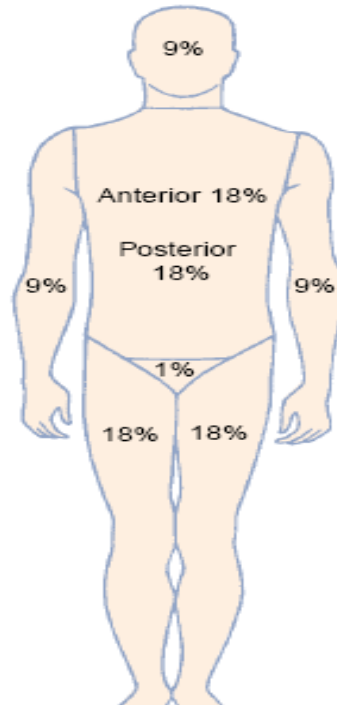
a) Explain the above manifestations

*(***Shock)*

b) Describe the management of Mrs. K, for the first 72hrs. Give reasons for your interventions.

Part II

Q1. Draw a diagram illustrating the rule of nine for estimating the percentage of body burns in adults (5mrks)



Q2.State five behavioral outcome of a patient who has been on management for acne vulgaris for the past two months (5mrks)

Acne vulgaris is a common skin disorder of the sebaceous glands and their hair follicles that usually occurs on the face, chest, upper back, and shoulders. The most common cause is hormonal changes during puberty.

- Washes face and other affected areas with mild soap and water twice each day to remove surface oils and prevent obstruction of the oil glands.
- Avoids scrubbing the face; acne is not caused by dirt and cannot be washed away
- Uses prescribed mild abrasive soaps and drying agents are prescribed to eliminate the oily feeling.
- Avoids all forms of friction and trauma, including propping the hands against the face and rubbing the face
- Avoids manipulation of pimples or blackheads
- Avoids cosmetics, shaving creams, and lotions which can aggravate acne,
- Eats nutritious diet that helps the body maintain a strong immune system.

Q3. Describe the acute HIV syndrome (5mrks)

Primary infection refers to the time when HIV first enters the body. At the time of primary infection with HIV, a person's blood carries a high viral load, meaning that there are many individual viruses in the blood. The number of copies of virus per milliliter of plasma or blood can exceed 1 million. Newly infected adults often experience an acute retroviral syndrome. Signs and symptoms of acute retroviral syndrome include fever, myalgia (muscle pain), headache, nausea, vomiting, diarrhea, night sweats, weight loss,

and rash. These signs and symptoms usually occur 2–4 weeks after infection, subside after a few days, and often are misdiagnosed as influenza or infectious mononucleosis.

The virus targets CD4+ cells in the lymph nodes and the thymus during this time, making the HIV-infected person vulnerable to opportunistic infections and limiting the thymus's ability to produce T lymphocytes.

Q4. With the aid of a diagram, illustrate four changes that develop in synovial joints secondary to chronic osteoarthritis. (5mrks)

Q5. Explain three types of spontaneous abortions (6mrks)

Spontaneous abortion is defined as the loss of a pregnancy before fetal viability (22 weeks gestation). The stages of spontaneous abortion may include:

- **Threatened abortion** (pregnancy may continue);
- **Inevitable abortion** (pregnancy will not continue and will proceed to incomplete/complete abortion);
- **Incomplete abortion** (products of conception are partially expelled);
- **Complete abortion** (products of conception are completely expelled).

Q6. Compare chronic duodenal ulcer and chronic gastric ulcer. (5mrks)

DUODENAL ULCER	GASTRIC ULCER
Incidence	
Age 30–60	Usually 50 and over
Male: female = 2–3:1	Male: female = 1:1
80% of peptic ulcers are duodenal	15% of peptic ulcers are gastric
Signs, Symptoms, and Clinical Findings	
Hypersecretion of stomach acid (HCl)	Normal—hyposcretion of stomach acid (HCl)
May have weight gain	Weight loss may occur
Pain occurs 2–3 hours after a meal; often awakened between 1–2 AM; ingestion of food relieves pain	Pain occurs ½ to 1 hour after a meal; rarely occurs at night; may be relieved by vomiting; ingestion of food does not help, sometimes increases pain
Vomiting uncommon	Vomiting common
Hemorrhage less likely than with gastric ulcer, but if present melena more common than hematemesis	Hemorrhage more likely to occur than with duodenal ulcer; hematemesis more common than melena
More likely to perforate than gastric ulcers	

Q7. State five functions of the Nursing council of Kenya (5mrks)

-Registration

-Licensure

-Regulation of curriculum

Q8. Explain the management of a penetrating eye injury at a health centre (4mrks)

JULY 2010 SUPPL-PAPER II

Q1. State five compensatory responses that may occur following a burn injury in the first 48hrs (5mrks)

Q2. Explain measures taken in the ward environment to ensure control of infection. (5mrks)

Q3. Mrs. Nei 52yrs old has been admitted to medical ward with a diagnosis of non-insulin dependent diabetes mellitus (NIDDM):

a) State three factors contributing to the development of diabetes mellitus (3mrks)

Diabetes mellitus is a group of metabolic diseases characterized by elevated levels of glucose in the blood (hyperglycemia) resulting from defects in insulin secretion, insulin action, or both.

Risk Factors to Developing Type II DM

- i) Overweight (Body Mass Index ≥ 25 kg/m²)*
- ii) Age 45 years and older*
- iii) Physical inactivity*
- iv) Diabetes in a first-degree relative*
- v) Prior gestational diabetes or history of delivering a baby >4 kg (9 lb)*
- vi) Polycystic ovary syndrome*
- vii) History of Impaired Glucose Tolerance (IGT) or Impaired Fasting Glucose (IFG)*

b) Explain any three tests used in the diagnosis of diabetes mellitus (3mrks)

*i. **Fasting plasma glucose**-a normal plasma glucose level is less than 100 mg/dL, although different laboratories may have slightly different normal values. When the fasting plasma glucose (drawn after at least 8 hours without eating) is > 126 mg/dL diabetes is diagnosed. If the fasting plasma glucose is between 100 and 125 mg/dL, the patient has impaired fasting glucose (IFG).*

*ii. **Glycohemoglobin (glycosylated hemoglobin, or HbA1c)** - is used to gather baseline data and to monitor progress of diabetes control (not to diagnose diabetes). Glucose in*

the blood attaches to hemoglobin in the red blood cells. Glycohemoglobin testing might be inaccurate in some people, such as those with anemia.

*iii). **Oral glucose tolerance test**-measures blood glucose at intervals after the patient drinks a concentrated carbohydrate drink. Diabetes is diagnosed when the blood glucose level is ≥ 200 mg/dL after 2 hours. A result between 140 and 199 mg/dL at 2 hours diagnoses impaired glucose tolerance (IGT).*

NB-Since diabetes affects so many body systems, additional tests recommended for baseline data include a lipid profile, serum creatinine and urine micro albumin levels to monitor kidney function, urinalysis, and electrocardiogram.

Q4. Mrs. Butra, 58yrs old has been in the gynecology ward where she had a successful hysterectomy due to cancer of the uterus.

State five risk factors associated with cancer of the uterus. (5mrks)

Cumulative exposure to estrogen is considered the major risk factor

Infertility, diabetes, hypertension, gallbladder disease, and obesity

Age: at least 55 years; median age, 61 years

- Postmenopausal bleeding*
- Obesity that results in increased estrone levels (related to excess weight) resulting from conversion of androstenedione to estrone in body fat, which exposes the uterus to unopposed estrogen*
- Unopposed estrogen therapy (estrogen used without progesterone, which offsets the risk of unopposed estrogen)*
- Other: nulliparity, truncal obesity, late menopause (after 52 years of age) and, possibly, use of tamoxifen*

Q5. Mr. Ate, 35yrs old is admitted to the medical ward with a diagnosis of chronic renal failure.

a) List four causes of chronic renal failure (2mrks)

- i) Diabetes mellitus resulting in diabetic nephropathy*
- ii) Chronic high blood pressure causing nephrosclerosis*
- iii) Glomerulonephritis, and autoimmune diseases.*

Diabetes and hypertension account for close to 70% of all chronic renal disease

b) Draw and label a diagram showing the functional unit of the kidney (5mrks)

(Nephron)

Q6. State five causes of adult respiratory distress syndrome (5mrks)

ARDS is a type of lung (pulmonary) failure that may result from any disease that causes large amounts of fluid to collect in the lungs. ARDS is not itself a specific disease, but a syndrome, a group of symptoms and signs that make up one of the most important forms of lung or respiratory failure. It can develop quite suddenly in persons whose lungs have been perfectly normal.

Causes:

- Breathing in (aspiration) of the stomach contents when regurgitated, or salt water or fresh water from nearly drowning.*
- Inhaling smoke, as in a fire; toxic materials in the air, such as ammonia or hydrocarbons; or too much oxygen, which itself can injure the lungs.*
- Infection by a virus or bacterium, or sepsis, a widespread infection that gets into the blood.*
- Massive trauma, with severe injury to any part of the body.*
- Shock with persistently low blood pressure may not in itself cause ARDS, but it can be an important factor.*
- A blood clotting disorder called disseminated intravascular coagulation, in which blood clots form in vessels throughout the body, including the lungs.*
- A large amount of fat entering the circulation and traveling to the lungs, where it lodges in small blood vessels, injuring the cells lining the vessel walls.*
- An overdose of a narcotic drug, a sedative, or, rarely, aspirin.*

SUPPL. PAPER II

Q1. Draw a well labeled diagram showing a cross-section of the female breast (6mrks)

Q2. State five factors that predispose a mother to risk during pregnancy (5mrks)

Q3. Outline four indications of vaginal examinations during labor other than assessing the progress of labor (4mrks)

Q4. Outline six conditions which can be diagnosed through amniocentesis (6mrks)

Amniocentesis can be used to diagnose many different gene and chromosome problems in the baby, including:

- Anencephaly*
- Down syndrome*
- Rare, metabolic disorders that are passed down through families*
- Fetal karyotype*

- *Chorioamnionitis*

It can also help:

- *Determine how well the baby's lungs are developed*
- *Detect spina bifida and other neural tube defects*
- *Detect Rh incompatibility*
- *Diagnose an infection in the baby*

Risks are minimal, but may include:

- *Infection or injury to the baby*
- *Miscarriage*
- *Leaking of amniotic fluid*

*****Q5.** Describe fetal circulation (4mrks)

Q6. Distinguish between preterm and small for gestation babies (6mrks)

Q7. Explain how pathological jaundice occurs in rhesus incompatibility (5mrks)

Q8. State four health messages on breastfeeding shared with a primi-gravida after delivery (4mrks)

Part III

Q1. Mrs. Z, Para 0+0 is admitted in labor ward for induction of labor

a) State four indications for induction of labor (2mrks)

Maternal:

-Hypertensive disorders with pregnancy:

- i- Severe pre-eclampsia.*
- ii- Imminent eclampsia.*
- iii- Eclampsia.*
- iv- Essential hypertension.*
- v- Chronic nephritis.*

-Antepartum haemorrhage:

- i- Placenta praevia type I&II.*
- ii- Accidental haemorrhage.*

-Diabetes mellitus: To avoid intrauterine foetal death and dystocia due to macrosomia.

Foetal:

-Post-term pregnancy.

-Intrauterine growth retardation.

-Intrauterine foetal death.

-Rh- isoimmunization.

-Gross congenital anomalies.

b) Describe the specific management for Mrs. Z, while on induction using syntocinon till delivery. (15mrks)

c) State three complications that may occur to Mrs .Z, during induction (3mrks)

-Uterine trauma.

-Separation of a posteriorly situated placenta.

-Sepsis

Q3. Mrs. X, para 1+0 is admitted in postnatal ward after normal delivery.

a) Explain physiology of 3rd stage of labor. (5mrks)

b) Describe the management of Mrs. X for the first 72hrs. (15mrks).

JULY 2007 PAPER TWO

Part I

Q1. The best management of varicose veins during pregnancy is:-

a) *Using supporting tights or crepe bandage, resting with feet elevated*

b) Avoiding standing for too long, wearing loose clothing

c) Avoiding sitting for a long time, elevating feet when sleeping

d) Wearing low heeled shoes, elevating feet when sleeping

Varicose veins are probably due to impaired venous return secondary to back pressure from the expanding gravid uterus. Varicose leg veins can ache and itch intensely, especially by the end of the day. They are best helped by elastic support tights or stockings, or to sit down whenever possible with the legs elevated.

Q2. The management of hypotonic uterine action includes:-

a) Intravenous infusion of 10% dextrose

b) Intravenous infusion of syntocinon in 5% dextrose

- c) Intravenous infusion of buscopan 15mgs
- d) Intravenous infusion of syntocinon in normal saline

Q3. When fetal head is well flexed, the presenting diameters are:-

- a) Sub-occipital bregmatic, sub-occipital frontal
- b) Sub-occipital bregmatic, biparietal
- c) Biparietal, bitemporal
- d) Bitemporal, sub-occipital bregmatic

Q4. Post obstetric history includes:-

- i) Any abnormality during previous pregnancies, labor and puerperium
- ii) Age at menarche
- iii) History of twinning in the family
- iv) Miscarriages and gestation when they occurred
- v) Number of children with ages and birth weight

- a) I, ii, iii
- b) I, iii, v
- c) V, iv, v
- d) I, ii, iv

Q5. The muscle layer involved in enmeshing bleeding vessels and preventing bleeding after the delivery of placenta is:-

- a) Inner circular layer
- b) Middle oblique layer
- c) Outer longitudinal layer
- d) Basal layer

Q6. During the 2nd trimester of pregnancy, the blood pressure falls due to:-

- a) Effects of progesterone on the smooth muscles causing relaxation and dilatation of arterial wall
- b) Effects of oestrogen on the smooth muscles causing relaxation and dilatation of arterial wall
- c) Effects of progesterone on the smooth muscles causing relaxation

d) Effects on oestrogen on smooth muscles causing relaxation

Q7. At the end of pregnancy the total weight gain is expected to be approximately 12kgs:-

- a) Fetus and blood volume
- b) Amniotic fluid and fats
- c) *Fat and blood volume*
- d) Fetus and fat.

Q8. The following are possible signs of pregnancy except:-

- a) Visualization of fetus by ultrasound
- b) Fetal heart sound at 20-24 week
- c) Presence of human chorionic gonadotrophin in blood or urine (positive pregnancy test)
- d) Fetal movement palpable from 22nd week

Q9. The minor disorders of pregnancy that may progress to major complications include:-

- a) Constipation, heart burn
- b) Nausea and vomiting, constipation
- c) Pica, constipation
- d) Excessive salivation, nausea and vomiting

Q10. The appropriate health message to share with a primi-gravida who attends antenatal clinic for the first time during the first trimester is on:-

AUGUST 2008-PAPER TWO

Part I

Q1. During pregnancy the uterine muscle fibers increases:-

- a) 10times in length, 5 times in thickness
- b) 20 times in length,10 times in thickness
- c) 5 times in length, 10 times in thickness
- d) 15 times in length, 10 times in thickness

Q2. The ischial spines are designated as important landmark in labor and delivery because the distance between the spines is a measurement of the:-

- a) Floor of the brim
- b) Outlet of the birth canal
- c) *Widest pelvic diameter*
- d) Narrower pelvic diameter

Q3. A newborn suffering from hyper-bilirubinaemia can be treated with:-

- a) Antibiotics such as penicillin
- b) Salicylate
- c) Steroids
- d) Intravenous 5% dextrose

Q4. Respiratory distress syndrome is characterized by:-

- a) Underdeveloped alveoli and deficient surfactant production
- b) Decreased pulmonary resistance and underdeveloped alveoli
- c) Uninflatable alveoli and overproduction of surfactant
- d) Poor alveolar ventilation and pulmonary vasodilatation

Q5. Preventive measures of ophthalmia neonatorum include:-

- a) Administering systemic penicillin within one hour after birth, isolation of the baby.
- b) Instillation of penicillin eye drops after birth, taking eye swab for culture and sensitivity
- c) *Treatment of abnormal vaginal discharge prenatally, application of 1% tetracycline eye ointment within one hour of birth*
- d) Treatment of all vaginal discharges prenatally, application of 3% tetracycline eye ointment within one hour of birth.

Q6. Causes of blood coagulation disorders during pregnancy include:-

- a) Eclampsia, anaemia, thrombophlebitis
- b) Dehydration, intrauterine foetal death, pre-eclampsia
- c) Ante partum haemorrhage, eclampsia, intrauterine sepsis

d) Amniotic fluid embolism, malnutrition, iso-immunization

Q7. Oomphalitis predisposes a newborn baby to:-

a) Anaemia, jaundice, hypothermia

b) Asphyxia neonatorum, constipation, umbilical hernia

c) Apnoeic attacks, haemorrhagic diseases of the newborn, neonatal tetanus

d) Jaundice, septicaemia, hepatitis

Q8. 1st stage of labor is defined as a period from the onset of:-

a) *Labor pains to full dilatation of the cervix*

b) Labor pains to crowning of the head

c) True labor to delivery of the baby

d) True labor to dilatation of the cervix

The first stage begins with the onset of labor and ends with full cervical dilation. It is further subdivided into latent and active phases.

The latent phase begins with the initial perception of regular contractions and ends when the rate of cervical dilation increases (usually at 3–4 cm of dilation).

The active phase is characterized by an increased rate of cervical dilation with descent of the presenting fetal part.

Q9. The indications for the first vaginal examination during labor are to:-

a) Confirm labor, determine descent, identify the presenting part

b) Determine engagement, confirm lie of the second twin, and examine cervical tears

c) Confirm crowning, ascertain whether membranes have ruptured, assess

d) Confirm cervical dilatation, determine state of the perineum, assess progress of labor

Q10. The signs that indicate placental separation include:-

a) Lengthening of the cord, a gush of blood, rising and hardening of the uterus

b) Rising and hardening of the uterus, heavy bleeding, lengthening of the cord

c) Shortening of the cord, rising and hardening of the uterus, a gush of blood

d) Heavy bleeding, an urge to bear down, lengthening of the cord

AUGUST 2008-PAPER III

Part I

Q1. Nordette is an example of:-

- a) *A biphasic low-dose pill*
- b) Monophasic low-dose pill
- c) Triphasic low-dose pill
- d) Quadriphasic low-dose pill

Q2. A contact disease caused by bacteria is:-

- a) Scabies
- b) Impetigo
- c) Trachoma
- d) Pediculosis

Q3. A child growing within the normal developmental milestones will be able to walk at the age of:-

- a) 3-6 months
- b) 6-9 months
- c) 12-18 months
- d) 20-24 months

Q4. The approximate calorie needs for young children under five years are:-

- a) 500 calories/kg/day
- b) 200 calories/kg/day
- c) 300 calories/kg/day
- d) 100 calories/kg/day

Q5. Cell-mediated immune system is made up of:-

- a) T-lymphocytes and macrophages
- b) T-lymphocytes and antibodies
- c) Macrophages and B-lymphocytes
- d) B-lymphocytes and T-lymphocytes

Q6. The scientific name for ringworm of the scalp is:-

- a) Tinea corporis
- b) Tinea pedis
- c) *Tinea capitis*
- d) Tinea versicolor

Q7. Disease of agricultural hazards include:-

- a) Zoonotic diseases, psychological changes
- b) *Zoonotic diseases, toxic hazards*
- c) Toxic hazards, psychological changes
- d) Ionizing radiation, toxic hazards

Q8. The international health agencies that were instrumental in starting Bamako initiative are:-

- a) WHO, CARE
- b) WHO, FAO
- c) UNICEF, UNDP
- d) WHO, UNICEF

Q9. The safe noise exposure level that does not cause damage to the tympanic membrane is:-

- a) 120dB
- b) 125dB
- c) 85dB
- d) 118Db

Q10. The major practice roles of the occupational health nurse include:-

- a) Clinician, administrator
- b) Cliunician, professional
- c) Administrator, environmental modifier
- d) Professional, environmental modifier

Q11. The drugs that may reduce the efficacy of hormonal contraceptives include:-

- a) Rifampicin, ibuprofen
- b) Phenytoin, Griseofulvin
- c) Griseofulvin, digoxin
- d) Rifampicin, chlorpheniramine

Q12. The vector that carries the causative organism for trypanosomiasis is:-

- a) Fleas
- b) Sand flies
- c) Black flies
- d) Tsetse flies*

Q13. The measures that would appropriately improve the health of the elderly include:-

- a) Mental health services, STI services
- b) Immunization, violence prevention programs
- c) Home safety programs, home based services*
- d) STI services, lead poisoning prevention

Q14. Prevalence rate is defined as the number of:-

- a) Old and new cases of a specified disease existing at a given time*
- b) New cases of a diseases in a population over a period of time
- c) Old cases of a specified diseases existing at a given time
- d) Deaths from a specified disease or condition at a given time

Q15. Some of the developmental tasks of a beginning family are:-

- a) Family planning, stabilizing the family unit
- b) Family planning, relating to kin network
- c) Relating to kin network, maintaining a stable marriage*
- d) Stabilizing the family unit, socializing children

Q16. Some of the indirect client services provided by the community health nurse include:-

- a) Supervising the care provided, teaching

b) Teaching, health planning with consumers

c) Record keeping, bed side care

d) Record keeping, supervising the care provided

Q17. The components of the biological environment include:-

a) Toxic substances, natural resources

b) Water supplies, food

c) Natural resources, geographical features

d) Food , geographical features

Q18. The major service system of the community that is usually the focus of the citizen and leadership of the community is:-

a) Health system

b) Social welfare system

c) Economic system

d) Religious system

Q19. The demographic parameters the community health nurse will examine while conducting a community diagnosis include:-

a) Distribution, morbidity

b) Distribution, genetics

c) Genetics, morbidity

d) Genetics, transport services

Q20. Vector borne diseases include:-

a) Plague, Dysentery

b) Plague, Rubella

c) Rubella, Leishmaniasis

d) Plague, Leishmaniasis

AUGUST 2008-PAPER IV

Part I

Q1. A type of Schizophrenia characterized mainly by delusions of persecution and auditory hallucinations is:-

- a) Disorganized
- b) Paranoid*
- c) Catatonic
- d) Undifferentiated

Q2. Postpartum depression typically appears on:-

- a) 3rd and 4th day
- b) 4th and 5th day
- c) 1st and 2nd day
- d) 5th and 6th day*

Q3. A type of Epilepsy in which psychological features are common is:-

- a) Occipital lobe epilepsy
- b) Parietal lobe epilepsy
- c) Frontal lobe epilepsy
- d) Temporal lobe epilepsy

Q4. Reciprocal inhibition involves:-

- a) Continuous presentation of the phobic stimulus
- b) Hierarchical introduction of anxiety producing stimuli
- c) Elimination of behavior by introduction of a more adaptive behavior which is incompatible with the unacceptable behavior
- d) Punishment during which the patient is removed from the environment where the unacceptable behavior is being exhibited

Q5. A behavior therapy technique used in treatment of sexual aversion disorder is:-

- a) Sensate focus
- b) Systematic desensitization*

c) Squeeze technique

d) Modeling

Q6. Co-dependence means:-

a) Dysfunctional behavior evident among members of the family of a chemically dependent person

b) Dysfunctional behavior evident among members of a social group that abuse the same chemical substances

c) Two or more people portray dependence on the same substance

d) Dysfunctional behavior evident among members of social group of a chemically dependent person

Q7. A leader who is mainly concerned with day-to-day operations of an organization with little regard to the future is called:-

a) Charismatic leader

b) Transactional leader

c) Transformational leader

d) Traditional leader

Q8. Zero-based budgeting means:-

a) Multiplying current year expenses by a certain figure

b) Budgeting for purchase of major equipments

c) Use of decision making package to justify the current budget needs

d) Budget where accountability, efficiency and economy is emphasized

Q9. Mentors differ from preceptors in that mentors:-

a) Passively model new staff

b) Choose who to mentor

c) Have a short relationship with the novice staff

d) Don't assist the novice staff in career development

Q10. Over delegation involves;-

a) Delegating at the wrong time, to the wrong person for the wrong reasons

b) Delegating to exceptionally competent employees

c) *Transferring too much roles from the manager to the subordinates*

d) Delegating authority and responsibility

Q11. Variables that take only a few discrete values are called:-

a) Outcome

b) Continuous

c) Extraneous

d) Categorical

Q12. In research journal articles, “blind reviews” means reviewers:-

a) Are told the names of the researchers and the researchers are not told the identity of the reviewers

b) Are not told the names of the researchers and the researchers are told the identity of the reviewers

c) Are not told the names of the researchers and the researchers are not told the identity of the reviewers

d) Know the names of the researchers and vice versa

Q13. It is difficult to obtain meaningful informed consent in qualitative research because the researcher does not know in advance how the study will evolve. This kind of consent gotten by qualitative research is called:-

a) Process consent

b) Uninformed consent

c) *Implied consent*

d) Incomplete consent

Q14. Random assignment means:-

a) Probability sampling where each subject has an equal and independent chance of participating in the study

b) Assigning subjects to the control and experimental group without predetermined criteria

c) Assigning subjects to control group and experimental group such that each has an equal chance of being selected for the study

d) Random sampling method of assigning subjects to control group and experimental group

Q15. Practicing nurses need to develop research critique skills to:-

- a) Challenge fellow nurses doing research report presentations
- b) Be able to do literature review when doing their research studies
- c) Participate fully in journal clubs
- d) Judge the utility of research findings

Q16. Reflective skepticism, a characteristic of critical thinkers means:-

- a) Asking awkward questions to challenge assumptions
- b) Ability to imagine and explore alternatives
- c) Taking a critical view of established dogmas and practices, scrutinizing them and questioning their current validity
- d) Reflecting on past events and questioning them

Q17. Problem-based learning means:-

- a) Learning that results from process working towards resolution of a problem
- b) Situation where students learn without any assistance from the teacher
- c) Learning that results after the learner gets the solution
- d) Learning where teachers use questions only

Q18. When an assessment tool measures what its supposed to measure, it is said to have:-

- a) *Validity*
- b) Reliability
- c) Consistency
- d) Discrimination

Q19. An appropriate method that can be used to teach acquisition of psychomotor skills is:-

- a) Case studies
- b) Demonstration

c) Micro-teaching

d) *Brainstorming*

Q20. Decision making hierarchy is called:-

a) Scalar chain

b) *Span of control*

c) Decentralized decision making

d) Centralized decision making

Part II

Q1. Explain the pathophysiology of extra-pyramidal side effects and give three examples (5mrks)

Extra pyramidal effects are a major side effect of antipsychotic drugs. They include acute dystonia (prolonged involuntary muscular contraction that may cause twisting of body parts, repetitive movements, and increased muscular tone), pseudoparkinsonism, and Akathisia (intense need to move about). Blockage of D₂ receptors in the midbrain region of the brain stem is responsible for the development of EPS.

Included in the EPS are:-

a) *Torticollis- twisted head and neck*

b) *Opisthotonus- tightness of the entire body with the head back and an arched neck.*

c) *Oculogyric crisis- eyes rolled back in a locked position*

Immediate treatment with anticholinergic drugs usually brings rapid relief.

Pseudoparkinsonism or drug induced Parkinsonism is often referred to by the generic label of EPS. Symptoms include a stiff stooped posture, mask-like face, decreased arm swing, a shuffling festinating gait, drooling, tremor, bradycardia, and coarse pill rolling movements of the thumb and fingers while at rest. Treatment of these symptoms includes adding an anticholinergic agent or amantadine, which is a dopamine agonist which increases the transmission dopamine blocked by the antipsychotic drug.

Q2. State two importance of informal organization structure (4mrks)

Q3. Briefly explain three differences between quantitative and qualitative research approaches (6mrks)

Q4. Depression has become common in Kenya due to differences in social changes taking place.

a) State the monoamine/neurotransmitter theory of depression (2mrks)

b) State two nursing diagnoses for a depressed client (2mrks)

Q5. Nurse Managers use teams to achieve specific organizational goals. Briefly explain three characteristics of an effective team (6mrks)

Q6. State two considerations you need to take into account when discussing research findings (3mrks)

Q7. State three aspects one would consider during cultural assessment (3mrks)

Q8. Define approach-approach conflict and give two examples (3mrks)

Q9. a) Define education according to Ralph Taylor (2mrks)

b) State four components of curriculum development according to Ralph Taylor (4mrks)

Part III

Q1. Currently, there is a lot of emphasis on research-based nursing practice. This is meant to broaden the body of knowledge on which nursing practices are based.

a) Briefly explain four components of the 'design and planning phase' of quantitative research process.(4mrks)

b) Describe three major factors that hinder utilization of research findings by the nurses (3mrks)

Q2. After your BSCN internship, you are posted to Kenya Medical Training College s a Tutor. This will involve different teaching strategies in the course of you work.

a) Define the following teaching strategies;

i) Lecturing

ii) Demonstration

iii) Team teaching

b) Write short notes on lecture method of teaching under the following headings;

i) Three preparations you need to make before the lecture

ii) Four advantages of lecture methods

iii) Five aids you can use during your lecture

- iv) Five aids you can use during your lecture
- v) State five characteristics of an effective tutor

Volume II will be out soon; make your request!