

**ROYAL CIVIL SERVICE COMMISSION
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2013
EXAMINATION CATEGORY: TECHNICAL**

PAPER III: SUBJECT SPECIALIZATION PAPER for *NURSING*

Date	: 14 October 2013
Total Marks	: 100
Examination Time	: 150 minutes (2.5 hours)
Reading Time	: 15 Minutes (prior to examination time)

GENERAL INSTRUCTIONS:

1. Write your Roll Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is being provided to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO SECTIONS**, namely SECTION A and SECTION B:
 - **SECTION A** has two parts:

Part I	-	30 Multiple-Choice Questions
Part II	-	5 Short Answer Questions
4. All questions under SECTION A are **COMPULSORY**.
 - **SECTION B** consists of two Case Studies. Choose only ONE case study and answer the questions under your choice.
4. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating any or correct Section, Part and Question Number will NOT be evaluated and no marks would be awarded.
5. Begin each Section and Part in a fresh page of the Answer Booklet.
6. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
7. Use of any other paper including paper for rough work is not permitted.
8. You are required to hand over the Answer Booklet to the Invigilator before leaving the examination hall.
9. This paper has **10** printed pages in all, including this instruction page.

GOOD LUCK!

SECTION A
PART I - Multiple Choice Questions (30 Marks)

Choose the correct answer and write down the letter of the correct answer chosen in the Answer Booklet against the question number. E.g. 31 (c). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. A client's burn wounds are being cleaned twice a day in a hydrotherapy tub. Which of the following interventions should be included in the plan of care before a hydrotherapy treatment is initiated?
 - a. Limit food and fluids 45 minutes before therapy to prevent nausea and vomiting.
 - b. Increase the intravenous flow rate to offset fluids lost through the therapy.
 - c. Apply a topical antibiotic cream to burns to prevent infection.
 - d. Administer pain medication 30 minutes before therapy to help manage pain.

2. The nurse may be able to minimize the client's discomfort during parenteral medication in following ways EXCEPT:
 - a. Positioning the client as comfortable as possible
 - b. Diverting the client's attention from the procedure through conversation
 - c. Injecting the medication as fast as possible
 - d. Selecting proper injection site.

3. The partial or total separation of wound is called:
 - a. Fistula
 - b. Evisceration
 - c. Dehiscence
 - d. Decubitus ulcer

4. You are a pediatric nurse responsible for caring 13 years old male child. The mother of child states: "I think my son is sexually interested in girls". The most appropriate course of action that you will respond is by stating:
 - a. I will talk to the doctor about it
 - b. Has this been going on for a while?
 - c. How do you know this?
 - d. Teenager often exhibit signs of sexual interest in females

5. When assessing a dark skinned client for cyanosis, the nurse should examine:
 - a. A client's retina
 - b. A client's nail bed
 - c. A client's oral mucous membrane
 - d. A client's palm

6. Older adults with known cardiovascular disease must balance which of the following measures for optimum health?
- Diet, exercise, and medication.
 - Stress, hypertension, and pain.
 - Mental health, diet, and stress.
 - Social events, diet, and smoking.
7. Tshomo, a mother of a 4-year-old child tells the nurse that her child is a very poor eater. What's the nurse's best recommendation for helping the mother increase her child's nutritional intake?
- Allow the child to feed herself
 - Use specially designed dishes for children – for example, a plate with the child's favorite cartoon character
 - Only serve the child's favorite foods
 - Allow the child to eat at a small table and chair by herself
8. The time taken by a medicine to produce a therapeutic response is called:
- Duration
 - Peak
 - Onset
 - Plateau
9. An adolescent who sustained a tibia fracture in a motor vehicle accident has a cast. What should the nurse do to help relieve the itching?
- Apply cool air under the cast with a blow-dryer
 - Use sterile applicators to scratch the itch
 - Apply cool water under the cast
 - Apply hydrocortisone cream under the cast using sterile applicator.
10. Which of the following nursing diagnostic statement is NOT correct?
- Ineffective airway clearance related to obesity
 - Impaired skin integrity related to altered circulation
 - Self esteem disturbance related to low self esteem
 - Ineffective individual coping related to fear about unknown prognosis
11. Measurement of vital signs is very important as it provides data to determine the patient's
- State of health
 - Response to medical therapy
 - Response to nursing therapy
 - All of the above

12. The process of wound healing for cesarean wound is :
- Healing by primary intention
 - Healing by secondary intention
 - Healing by tertiary intention
 - None of the above
13. Which of the following are the parts of needle?
- Hub, barrel, bevel
 - Bevel, plunger, shaft
 - Shaft, bevel, hub
 - None of the above
14. The nurse receives the pre-operative blood reports for a client who is scheduled to undergo surgery. Which of the following laboratory findings should you report to the surgeon?
- Haemocrit is 44%
 - Haemoglobin is 12.2 g/dl
 - BUN is 15mg/dl
 - Creatinine is 2.6mg/dl
15. All of the following are the complications associated with immobility EXCEPT
- Hypostatic pneumonia
 - Muscle atrophy
 - Osteoporosis
 - Empyema
16. We should complete transfusion of whole blood within four hours to prevent
- Haemolytic jaundice
 - Thrombophlebitis
 - Pyrogenic reaction
 - Extravasation of blood.
17. If the patient has seizure, you will need to do all of the following EXCEPT
- Help him lie down immediately
 - Loosen the clothing around his neck and abdomen
 - Force a patients mouth open during the seizure
 - Clear away the objects close to him

18. Which of the following intervention is most appropriate to prevent bed sore in a bed ridden elderly patient?
- Slide or lift the patient when turning him
 - Apply lotion after bathing him and vigorously massage his skin
 - Turn or reposition him at least every 1-2 hourly
 - Make wrinkle free bed
19. The signs and symptoms associated with volkman's contracture are
- Prolonged nausea, vomiting, and abdominal pain
 - Foot drop, wrist drop, stiff joint
 - Absence of finger and toe movement, absence of pulse
 - Numb, persistent pain, motor paralysis
20. Kegel exercise is necessary to strengthen the
- Muscles of bladder
 - Muscles of perineum
 - Muscles of abdomen
 - Muscles of uterus
21. "Sniffing morning air" is the phrase which explains the appropriate position of a patient's neck during the insertion of
- Nasogastric tube
 - Tracheostomy tube
 - Endotracheal tube
 - Orogastric tube
22. In the early postoperative period, the nurse notes a bright red, soaked dressing on the client's surgical wound. What should the nurse do FIRST in response to this observation?
- Ignore it because drainage is normal
 - Increasing the IV flow rate
 - Take the client's vital signs
 - Change the dressing
23. You have just started on the evening shift in the surgical ward. Which of the following patients should you check (attend) on first?
- A 75 year old man who is scheduled for open cholecystectomy in 12 hours
 - A 34 year old man who is complaining of low back pain following back surgery and has an onset of urinary incontinence in the last hour
 - A 21 year old male who had amputation of his lower extremity yesterday, complaining of pain.
 - A 27 year old female who has received 2 units of RBC via transfusion half an hour ago.

24. A 68-year-old woman is diagnosed with thrombocytopenia due to acute lymphocytic leukemia. She is admitted to the hospital for treatment. The nurse should assign the patient
- To a private room so she will not infect other patients and health care workers.
 - To a private room so she will not be infected by other patients and health care workers.
 - To a semiprivate room so she will have stimulation during her hospitalization.
 - To a semiprivate room so she will have the opportunity to express her feelings about her illness.
25. A fifty-year-old blind and deaf patient has been admitted to your ward (ENT ward). As a staff nurse your primary responsibility for this patient is?
- Let others know about the patient's deficits
 - Communicate with your supervisor your concerns about the patient's deficits.
 - Continuously update the patient on the social environment.
 - Provide a secure environment for the patient.
26. A patient is getting discharged from the medical ward. The patient has a history of severe COPD. The patient is primarily concerned about his ability to breathe easily. Which of the following would be the best instruction for this patient?
- Deep breathing techniques to increase O₂ levels.
 - Cough regularly and deeply to clear airway passages.
 - Cough following bronchodilator utilization
 - Decrease CO₂ levels by increasing oxygen intake during meals.
27. A 5 year old boy has been admitted to in the pediatric ward due to abdominal surgery. When does the discharge training and planning begin for him?
- Following surgery.
 - Upon admission
 - Within 48 hours of discharge
 - Preoperative discussion
28. Which of the following roles of the nurse in research is least appropriate for the beginning researcher?
- Principal investigator
 - Evaluator of the research findings
 - User of research findings
 - Participant in studies
29. Which one of the following is NOT an active immunizing agents?
- Hemophilus influenza type B
 - Varicella vaccine

- c. MMR (measles, mumps, rubella)
- d. Hepatitis B immune globulin

30. The nurse teaches a group of mothers of toddlers how to prevent accidental poisoning. Which of the following suggestions should the nurse give regarding medications?
- a. Lock all medications in a cabinet.
 - b. Child proof all the caps to medication bottles.
 - c. Store medications on the highest shelf in a cupboard.
 - d. Place medications in different containers.

PART – II : Short Answer Questions (20 marks)

Answer ALL the questions. Each question carries 4 marks. Mark for each sub-question is indicated in the brackets.

1. Explain how you will locate the correct site for administering injection in the following sites (4 marks)
 - a. Ventro gluteal muscle
 - b. Deltoid muscle

2. Pema is admitted in the maternity ward due to hyperemesis gravidarum. She couldn't take anything orally so the physician advised to administer 2 pints of 5% DW, 2 pints of DNS, and one pint of 10% DW in 48 hours. Calculate the IV infusion rate. (drip factor is 20) (4 marks).

3. Write down the name of two drugs each that are used to treat the following conditions. (1x 4= 4 marks)
 - a. Hypotension
 - b. Malaria
 - c. HIV-AIDS
 - d. Constipation

4. Write down two purposes each for performing the following procedures. (4 marks)
 - a. Skeletal traction
 - b. Wound suture

5. List down four complications that are associated with immobility. (4 marks)

SECTION B
Case Study

Choose either Case 1 or Case 2 from this Section. Each Case carries 50 marks. Mark for each sub-question is indicated in the brackets.

CASE 1

Patient's profile:

Mr Karma is 61 year old man who presents to emergency department with his wife Pema. He complains of nausea and vomiting for two days and symptoms of confusion. His blood sugar level is 700 mg/dL. Regular insulin is prescribed and he is admitted for further evaluation.

Scenario:

Mr Karma is newly diagnosed with diabetes. His hemoglobin A1C is 10.3%. He is slightly overweight. He is 5 feet 8 inches tall and his weight is 79kg. He reports no form of regular exercise. He does not follow special diet at home. He states, "I eat whatever my wife cooks for me. She is a very good cook." For past few months Mrs Pema noticed that her husband has been really thirsty and has been up and down to the toilet a hundred times a day. She stated that the condition seems to be getting worse and worse.

Questions

1. Describe the following serum glucose test used to help confirm the diagnosis of diabetes mellitus: Random blood sugar, fasting blood sugar, Postprandial blood sugar, and oral glucose tolerance test. (4 marks)
2. Explain what hemoglobin A1C lab test tells the health care provider. (3 marks)
3. How might a nurse explain about diabetes mellitus to Mr Karma in lay terms? (3 marks)
4. Explain the difference between Type 1 diabetes, Type 2 diabetes, gestational diabetes and who is at increased risk for developing each type. Based on this understanding which type of diabetes does Mr Karma have? (5 marks)
5. Discuss at least 4 long term complications of diabetes with rationales. (8 marks)
6. Discuss how culture may influence Mr Karma's diabetes management in terms of choice of food, diet, exercise. (5 marks)

7. Name at least two hypoglycemic agents used to control diabetes besides insulin. (2 marks)
8. Write four nursing diagnosis that is applicable for Mr Karma in his current condition (on priority basis) and the nursing interventions with nursing objectives and expected outcomes. (4x5=20 marks)

CASE 2

Patient's profile:

Lhamo is 13 year old with leukemia. She lives at home with her parents and younger siblings. She had been receiving chemotherapy for past three months. She has a central venous access device that is cared for by her parents and herself. Lhamo experienced a number of absences from school as a result of her hospitalizations, chemotherapy and the effects of her chemotherapy regimen. She has alopecia and has been hospitalized with a line infection, stomatitis and bleeding requiring platelet infusion. She refuses to meet her friends although she speaks with them over the phone. She tells them that the refusal is based on the fact that she is prone to infection and doesn't want to risk exposure and be admitted again.

Scenario:

Currently, Lhamo is admitted in the pediatric ward with a temperature of 39°C that didn't respond to the paracetamol which was prescribed to her since yesterday. Her admission assessment indicated that her lungs were clear; heart sounds normal; has alopecia and has evidence of white patches in her mouth. The laboratory investigation results were as follows:

- Hb: 9g/dL
- Hematocrit: 25%
- Platelets: $50 \times 10^3 / \text{mm}^3$
- White blood cell count: $2000 / \text{mm}^3$

Questions:

1. Discuss the significance of Lhamo's laboratory findings. (3 marks)
2. Lhamo is diagnosed with central venous access device line infection. Discuss how these infections occur and how can it be prevented. (4 marks)

3. What are the common complications of chemotherapy? Mention at least four and the nursing interventions (care) for each of those complications. (8 marks)
4. Lhamo tells the nurse that her mouth and throat has developed sores and she cannot eat or drink anything. Discuss your impressions about Lhamo's complaints and the appropriate nursing actions to help her. (5 marks)
5. Lhamo is prescribed antibiotics gentamicin 100mg IV every 8 hourly and cefoxitin 1g IV every 6 hourly. Briefly discuss these agents including its mechanism of action and side effects.(5 marks)
6. Write four nursing diagnosis on priority basis and the nursing interventions against each diagnosis with appropriate nursing objectives and expected outcome. (5x4 =20 marks)
7. Define the following: (1x5=5 marks)
 - Sarcoma
 - Carcinoma
 - Lymphoma
 - Leukemia
 - Benign tumor