

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES ~ GENERAL NURSING SCIENCE
MNScFAMILY NURSE PRACTITIONER PROGRAMME
Title of Course: Family Nurse Practice of the Child and Adolescent
Course Code: GNS 607

TIME ALLOWED: THREE (3) HOURS

PAGES: 12 INCLUDING COVER PAGE

MARKS: 100

INSTRUCTIONS:

There are two parts to this exam. Answer all questions in both parts.

Part I. Multiple choice, indicate the question number and the answer, e.g. 1. B.

Part II answer each question on a separate page.

WRITE LEGIBLY

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

Part I MULTIPLE CHOICE -

TOTAL 25 MARKS

CHOOSE THE ONE BEST ANSWER FOR EACH QUESTION. ONE MARK EACH.

1. According to the 2018 Swaziland Integrated HIV Management Guidelines a child should be fully informed of his or her HIV status by the age of
 - A. 8
 - B. 10
 - C. 12
 - D. 18

2. The rate of bronchiolitis is highest in children under age 2 because.
 - A. Breastfeeding is a risk factor.
 - B. School-aged children don't get as many respiratory infections.
 - C. Preschool children are more prone to bacterial infections as opposed to viral infections.
 - D. The airways are smaller and can block when there is swelling due to infection.

3. Faith is a 10-year-old has tested HIV positive today. Which of the following tests does she need prior to beginning ART?
 - A. Full blood count.
 - B. Chest X-ray.
 - C. Genotypic/phenotypic resistance testing.
 - D. Full psychometric testing.

4. Sifiso is a 2 ½ year old child with 48-hour history of upper respiratory symptoms and fever of 39° C with pain in his left ear starting 8 hours ago. He has purulent drainage from his right external auditory canal. He weighs 15 Kg. Which is the best initial treatment?

- A. Paracetamol 125 mg orally every 4 hours alternating with aspirin 125 mg orally every four hours.
- B. Amoxicillin 250 mg four a day for 5 days.
- C. Amoxicillin 250 mg orally twice times a day for 10 days.
- D. Amoxicillin 250 mg orally three a day for 5 days.

5. Sihle is a 5-year-old girl who is HIV+. She weighs 15 Kg. You treated her for pneumonia with Amoxicillin 250 mg tablet twice daily. After two days she returns to the clinic with a temperature of 38° C and respiratory rate of 44. According to the 2018 Swaziland Integrated HIV Guidelines, what is your next best action?

- A. Double the dose of amoxicillin.
- B. Add erythromycin, since this is likely an atypical pneumonia.
- C. Reassure her mother that more time on the antibiotic is needed to see an improvement.
- D. Screen for TB, PJP, interstitial lymphoid pneumonitis, or asthma.

6. When counselling an adolescent on avoiding HIV infection, the practitioner should be sure to

- A. Include the parent
- B. Emphasize abstinence.
- C. Be alert to both verbal and non-verbal cues.
- D. Treat the client as an adult.

7. All children and adolescents diagnosed with HIV should receive Co-trimoxazole Preventive Therapy (CPT) at a dose appropriate to their weight and age. Which of the following is an indication that the treatment can be discontinued?

- A. The treatment has been continuous for at least 6 months.
- B. The parent gives permission to stop treatment.
- C. The pill burden becomes so high that the child might lapse treatment.
- D. CD4 count is greater than 350 cells/mm³, undetectable viral load and no opportunistic infections.

8. Which of the following best describes the clinical presentation of asthma?

- A. Recurrent night waking with shortness of breath and curtailment of activity.
- B. Respiratory distress and wheezing on examination.
- C. Allergic rhinitis and conjunctivitis.
- D. Three or more febrile URIs within a year with shortness of breath.

9. Phila had an intussusception at age 3 months. Which vaccine should she never receive?

- A. Pertussis.
- B. Live measles vaccine.
- C. Rotavirus.
- D. Covid-19.

10. Which of the following is considered when prescribing rehydration therapy for a child with moderate dehydration?

- A. Intravenous (IV) fluid therapy is the preferred route according to the Standard Treatment Guidelines.
- B. The child should be admitted to the hospital.
- C. Oral rehydration therapy is as effective and less costly when compared to IV therapy if the child can keep fluid down.
- D. Fluid replacement should consist of 10-20 ml/kg over 3-4 hours.

11. According to the Global Initiative for Asthma (GINA) Guidelines 2020, all children with asthma, including mild asthma, should be prescribed the following chronic medication on a daily basis

- A. Short-acting beta agonist.
- B. Low-dose inhaled cortico-steroid.
- C. Theophylline tablets.
- D. Oral high-dose steroids.

12. Eczema is thought to be caused by

- A. Overactive mucus glands
- B. Allergic reaction
- C. Degradation of the mast cells.
- D. Dry air.

13. You are examining a 3-month-old infant. You would expect that the child is able to

- A. Crawl.
- B. Smile.
- C. Sit independently.
- D. Say one word.

14. Prudence is 6 years old, has height of 100 cm and a weight of 30 Kg, giving her a BMI of 30 kg/m². She has been having increased appetite, thirst and fatigue. She has recently lost weight. You measure her random blood sugar and get a reading of 28.6 mmol/L. The most likely diagnosis is

- A. Diabetes mellitus type 1.
- B. Diabetes mellitus type 2.
- C. High dietary sugar intake.
- D. Eating disorder.

15. Sipho is a 9/12 child who comes in for immunizations. You notice that his Z score for his weight for age is -3 and he has oedema of his legs. He needs to be evaluated today for

- A. Kwashiorkor.
- B. Marasmus.
- C. Failure to thrive
- D. Possible TB.

16. The R_0 , or rate of infectivity, for measles (rubeola) is:

- A. 1.5
- B. 2
- C. 5
- D. 15

17. You are examining a 6/12 infant. The child can sit unassisted but cannot crawl nor is she able to feed herself a biscuit. Your best action would be to:

- A. Make a referral to occupational therapy for evaluation of a delay.
- B. Re-assure the mother that the child is normal, recheck next routine visit.
- C. Recheck the child in a week.
- D. Arrange to re-test the child in a more quiet environment.

18. The difference between type 1 and type 2 diabetes is

- A. type 1 is caused by lack of insulin due to destruction of the beta cells of the pancreas, whereas type 2 is caused by the body's inability to use the insulin it has created.
- B. type 2 is caused by lack of insulin due to destruction of the beta cells of the pancreas, whereas type 1 is caused by the body's inability to use the insulin it has created.
- C. type 1 has its onset in childhood whereas type 2 has its onset in adulthood.
- D. type 2 has its onset in childhood whereas type 1 has its onset in adulthood.

19. A 4-year-old child presents with fever, exudative pharyngitis, anterior cervical lymphadenopathy and a fine, raised pink rash, The most likely diagnosis is:

- A. Scarlet fever
- B. Group A beta-haemolytic streptococcus pharyngitis
- C. Rubella
- D. Rubeola.

20. Which is the typical pattern of the rash of measles (rubeola)?

- A. It begins on the trunk and spreads outward to the extremities.
- B. It begins in the face and neck and spreads over the rest of the body over three days.
- C. It appears first in the feet and then spreads throughout the body.
- D. It has no particular pattern; it can start anywhere on the body.

21. Which of the following is true about Covid-19 in children?

- A. They cannot become infected and cannot pass the infection.
- B. Covid-19 infections tend to be serious in children under age 3.
- C. Poor feeding may be a sign of Covid-19 in infants under age 1.
- D. Children of all ages should wear a mask when out in public.

V. 12 MARKS

Thandi is a two-year-old child who was developing normally her first year. At her first birthday she weighed 12 kg, but by 18 months had only gained 2 kg. She now has pale mucus membranes, has a flat affect, does not smile or try to communicate with adults and cries easily. She has decreased subcutaneous tissue, lower extremity oedema, and abdominal distention. You diagnose her with severe acute malnutrition (SAM) and you admit her to the hospital. You implement the WHO 10-step programme. What are the four most critical, life threatening complications you must attend to? Why did you choose these? (8 Marks) What tests will you order and which interventions will you start first. (4 Marks)

VI.16 MARKS

Ten-year-old Musa has a haemoglobin of 10.2 mg/dl. In addition to taking a thorough history, you will do additional investigations to assess his anaemia. Complete this graph. Omit the shaded boxes.

Test	What does it test	What does an abnormal HIGH test indicate	What does an abnormal LOW test indicate
Haemoglobin			
MCH			
MCV			
Serum Iron			
Ferritin			
Total iron binding capacity			