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HEALTH RECORDS AND INFORMATION TECHNOLOGY LEVEL 6

AITC/HRIT/15/6/A

MEDICAL BILLING AND INSURANCE REIMBURSEMENT

July/August Series



AMREF INTERNATIONAL TRAINING CENTER

WRITTEN ASSESSMENT

DATE:7TH AUGUST 2026

TIME:2 HOURS START:2 PM FINISH:4PM

INSTRUCTIONS TO CANDIDATE

1. You have **THREE** hours to answer all the questions.
2. Marks for each question are indicated in the brackets.
3. The paper consists of **TWO** sections: A and B.
4. Do not write on the question paper.
5. A separate answer booklet will be provided.

This paper consists of FOUR (4) printed pages

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing

SECTION A

Answer ALL the questions in this section

1. Define the following terms as used in Health Reimbursement
 - a) Premium (2marks)
 - b) Balance billing (2marks)
2. During a departmental meeting, the Health Information and Medical Insurance team is asked to explain why an effective reimbursement system is essential for healthcare organizations. Highlight FIVE Importance of Reimbursement in healthcare organizations (5 marks)
3. Mr. Otieno visited a specialist and was required to pay KES 1,000 at the reception desk. Later, he received a bill requiring him to pay 20% of the remaining treatment costs, with his insurer paying the balance. State the difference between Co-pay and Co-insurance (4 marks)
4. A newly established insurance company is training its staff on the principles that govern insurance contracts and risk management in healthcare financing. List FOUR basic characteristics of insurance (4 marks)
- 5 An insurance company observed that most individuals enrolling for health insurance were those with chronic illnesses and high healthcare needs, leading to increased claim costs. What is adverse selection, and how do insurers deal with the problem? (4 marks)
- 6.A Health Records Officer is preparing insurance claims and must use standardized coding systems to accurately represent diagnoses and procedures for reimbursement purposes. Outline FOUR medical coding systems are used to support fee-for-service payment methodologies. (4 marks)
7. An audit at City Hospital revealed that several insurance claims were rejected because diagnosis and procedure codes had been entered incorrectly. Outline the link between coding and reimbursement. (2 marks)
- 8.The finance department of a hospital is updating its chargemaster to ensure that all services, procedures, medications, and supplies are billed correctly. Identify FOUR components of the hospital charge master (4 marks)

9. Two healthcare facilities use different reimbursement methods. Identify TWO major differences between fee-for-service reimbursement and capitation? (4 marks)

10. A patient seeking health insurance coverage is comparing several plans offered by different insurers, each with varying provider networks, referral requirements, and cost-sharing arrangements. State FOUR types of health insurance plans (4 marks)

SECTION B (40 MARKS)

Answer question 11 and any other TWO questions in this section.

11. HopeCare Specialist Hospital has recently partnered with several insurance providers to improve access to healthcare services. However, the hospital has experienced delayed reimbursements and an increase in rejected insurance claims. The hospital administrator has appointed a team of Health Information Management professionals to review the medical billing process and recommend strategies for improving billing accuracy and reimbursement

- a. Explain the medical billing workflow (10marks)
- b. As a member of the review team, explain **FIVE measures** the hospital can implement to improve the efficiency and accuracy of its medical billing process and reduce claim denials (10 marks)

12. Sunrise Medical Centre has experienced a steady decline in revenue despite a high number of patients visiting the facility. The hospital's management has tasked the Health Information and Medical Insurance Department with reviewing the entire Revenue Cycle Management (RCM) process and recommending ways to improve efficiency and maximize revenue collection.

- a. With the help of a well-labelled diagram, describe the revenue cycle management life cycle. (10 marks)
- b. Describe FIVE Challenges Associated with Healthcare RCM (10 marks)

13. Sunrise County Hospital provides healthcare services to patients covered by different health insurance plans. The hospital receives reimbursement using various payment methods depending on the insurer. The hospital management has asked the Medical Insurance Department to explain these reimbursement methods and their implications for healthcare delivery and financial management. Based on the case study Discuss the following payment methods with examples

- a. Fee-for-service reimbursement (10 marks)
- b. Episode of Care Reimbursement Methodology (10 marks)

14. Finance departments consider the Case Mix Index when determining the hospital's budget. If the hospital's actual Case Mix Index is less than what the finance department predicted, the hospital may experience a loss in revenue

- a. Define Case Mix Index (2 marks)
- b. Describe FOUR purposes of case mix index in a hospital (8 marks)
- c. Identify TWO factors that influence Case Mix Index (4 marks)
- d. Perform the following calculations:
 - i. A facility has 29 Medicare cases that are assigned to DRG 69 which has a relative weight of 1.0005. Calculate the total relative weight of the cases (3 marks)
 - ii. The top ten DRG surgical procedures performed by a facility have a total CMS Relative Weight of 245.8775. If the total number of patients served is 129. Calculate the case mix Index for the facility? (3marks)