

Practice Test 13

READING SUB-TEST – PART A

Text A – Antibiotic Responsiveness in Paediatric Patients

A recent multi-centre European study involving approximately 1,520 children investigated the relationship between antibiotic exposure and treatment effectiveness. Findings indicated that children who had received repeated antibiotic courses were significantly less responsive to commonly prescribed medications, suggesting the development of resistance. However, responsiveness varied depending on factors such as infection type and prior treatment history. Despite concerns regarding reduced effectiveness, clinical experts emphasised that antibiotics should continue to be used where clearly indicated, although prescribing practices may need to be more carefully regulated.

Text B – Genetic Factors in Infection Susceptibility

Researchers from a German university conducted a large-scale comparative study involving 1,200 patients diagnosed with bacterial infections and a matched group of 1,200 healthy individuals. Using advanced genetic sequencing methods, including the analysis of specific markers, the team identified a genetic variant, GENE-X21, which appeared more frequently among infected patients. The marker is believed to influence immune system response, although its precise function remains unclear. Researchers noted that genetic predisposition alone does not fully explain infection risk, as environmental and behavioural factors also play a significant role.

Text C – Nebuliser Device Information

Before using a nebuliser, patients are advised to read all instructions carefully and ensure that the device is correctly assembled. A nebuliser functions by converting liquid medication into a fine mist that can be inhaled into the lungs, offering an alternative to inhaler-based delivery methods. Unlike inhalers, nebulisers require an external power source to operate, which may limit their portability. In some cases, particularly among younger patients or those with severe symptoms, nebulisers may be preferred for more effective medication delivery.

Text D – Nebuliser Usage Procedure

Proper use of a nebuliser involves several sequential steps to ensure effective delivery of medication. Initially, the device must be assembled following hygiene precautions such as handwashing. Medication is then added to the chamber before inhalation begins. During use, patients should breathe steadily through the mouthpiece until the medication has been fully administered. After use, the device must be disassembled and cleaned thoroughly to prevent contamination and maintain functionality.