

THE APOLLO UNIVERSITY

Saketa, Chittoor, AP

AHS- IV Semester End Examination, June, 2024

PAPER -II - RTTT2505 - DIAGNOSTIC TECHNIQUES IN PULMONARY DISEASES - I

Time: 3 hours

Max. Marks: 60

Section –A (10x2=20 marks)

Answer all Questions with Short Answers

1. Draw a neat label flow-volume loop and brief note on obstructive pulmonary disease in spirometry?
2. What are the accessory muscles of expiration?
3. Define nitrogen washout test?
4. Mention the procedure of DLCO?
5. Mention the pregame of how to perform a spirometry?
6. What is the solution of “Glottis closure” error in spirometry quality assurance?
7. What is Bruce protocol in CPET?
8. What is shuttle walk test?
9. Define allergic skin prick test?
10. What is sweat chloride test?

Section –B (5X8=40 marks)

Answer all Questions either A or B in 400 words each

11. A) Explain in detail about the muscles of inspiration, muscles of expiration and its movements during respiration.

OR

B) What is spirometer? Discuss in detail about the PFT interpretation based on GOLD criteria and Classification of airflow limitation severity.

12. A) Write a detail note on apparatus required, indications, procedure, measurement and contraindications of He-dilution test.

OR

B) Explain briefly about a) Helium dilution test, b) Nitrogen wash-out test, c) Body plethysmography, c) Diffusing capacity for carbon-monoxide test.

Cont....

13. A) Discuss in detail about the problem, flow-volume graph, volume-time graph, identification and solution of “Cough in First Second” in spirometry.

OR

B) Explain in detail about the “Negative Zero flow error” in spirometry

14. A) Explain in detail about apparatus required, procedure, formula and contraindications of six-minute walk test.

OR

B) Write a detail note on the equipment’s, and the procedure of cardiopulmonary exercise testing.

15. A) What is methacholine challenge test? Discuss in detail about the indications, apparatus required and procedure of methacholine challenge test.

OR

B) What is saccharine test? Discuss in detail about the indications, procedure and contraindications of saccharine test.
