## **TUBERCULOSIS & RESPIRATOY DISEASES / PULMONARY MEDICINE**

## PAPER – I

RPD/J/15/42/I

Time : 3 hours

Max. Marks : 100

## Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1.	Definition of asthma and methods used for epidemiological surveys of this disorder.	2+8
2.	<ul><li>a) Anti-neutrophilic cytoplasmic antibodies (ANCA).</li><li>b) Importance of ANCA in respiratory diseases.</li></ul>	7+3
3.	<ul><li>a) What are small airways?</li><li>b) Tests utilized in the detection of small airways dysfunction.</li></ul>	4+6
4.	<ul><li>a) Molecular targets used in the treatment of lung cancer.</li><li>b) Principles of gene therapy in lung cancer.</li></ul>	5+5
5.	<ul><li>a) Define chylothorax and enumerate its causes.</li><li>b) Anatomy and physiology of thoracic duct.</li></ul>	(2+2)+6
6.	<ul> <li>a) Co-oximetry.</li> <li>b) Principles of pulse oximetry.</li> <li>c) Factors affecting the oxyhemoglobin dissociation curve.</li> </ul>	3+4+3
7.	Alveolar macrophages: their morphology and functions.	5+5
8.	<ul> <li>a) Enlist the anomalies of pulmonary vasculature.</li> <li>b) Scimitar syndrome: Etiopathogenesis and its clinico- radiological presentation.</li> </ul>	3+(3+4)
9.	Pathogenesis of respiratory failure during sleep.	10
10.	Enumerate the molecular methods for diagnosis of tuberculosis and describe their clinical utility.	4+6