

PAPER – I

RHM/D/14/43/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.	IL-1 cytokine and receptor family and pathway involved in its secretion.	10
2.	Gene expression profiling - definition, methods available, DNA arrays and RNA arrays.	2+2+4+2
3.	Developmental sequence of B cells - stages, environment and surface markers.	3+3+4
4.	Osteophyte - definition, sites, disease assessment and pathophysiology.	1+1+2+6
5.	Mechanism of action of methotrexate - cellular entry, polyglutamation and enzyme inhibition.	2+3+5
6.	Facet joints – anatomy, disease affliction, and presentation.	3+3+4
7.	Soluble mediators in pathophysiology of RA.	10
8.	Immunoglobulins in therapy of rheumatic diseases.	10
9.	Classifications of amyloidosis.	10
10.	Levels of evidence in clinical research.	10
