RHEUMATOLOGY

PAPER – I

RHEUM/D/16/43/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. Number needed to treat: Concept and derivation. 5+5

2. Prevalence of musculosketal pain and various rheumatic diseases in India. 10

3. a) What are biomarkers for degeneration and synthesis of bone and cartilage? 4+6
    b) What is their use in diagnosis of diseases and response to treatment?

4. Principles of reading MR images for inflammation in joints. 10

5. Similarities and dissimilarities in pathogenesis of inflammation in gout and familial Mediterranean fever. 10

6. What are natural killer cells? Describe brief outline of effector function of natural killer cells. 4+6

7. a) Anatomy of Rotator cuff. 4+3+3
    b) Mechanism of rotator cuff injuries.
    c) What are the clinical signs of Rotator cuff injury?

8. a) Mention briefly the vitamin D metabolism in health. 3+(3+4)
    b) Vitamin D deficiency in India: Its causes and effects.

9. a) Classify proteinases and matrix metalloproteinases (MTPs). 5+5
    b) Role of MMPs in osteoarthritis.

10. a) Define innate immunity. 1+3+6
    b) What are its components?
    c) Enumerate differences between innate and adaptive immunity.

****

POSSESSION / USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL.