Write short notes on:

1. Fundamental differences between transgenic and knockout mice.  
2. Toll like receptors.  
3. Structure and function of Bone Morphogenic Protein.  
5. Anti-nucleosome antibodies – target antigens and clinical applicability.  
6. Immunogenetics of idiopathic inflammatory myositis – concepts and different entities.  
7. IL-17 and Th-17 cells in inflammatory rheumatic diseases:  
   a) Cells and cytokines  
   b) Interactions  
   c) Clinical relevance  
9. a. Mean  
   b. Mode  
   c. Median  
   d. Sample size  
    a. Principle  
    b. Various kinase inhibitors  
    c. Clinical relevance

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Write short notes on:

1. Reactive arthritis. 10

2. How do you diagnose CPPD crystal deposition disease? What are the common risk factors? Outline the management strategies. 4+4+3

3. Ultrasound in Rheumatoid arthritis. 10

4. Autoimmune rheumatic diseases and vitamin D:
   a. Concept 4
   b. Epidemiology/extent of problem 4
   c. Clinical relevance 2

5. Tumour necrosis factor associated periodic syndromes:
   a. Entities 5
   b. Clinical features 5

6. Enumerate acute phase reactants and describe role of C-Reactive Protein in health and disease. What are its advantages over ESR? 3+4+3

7. Prevalence of musculo-skeletal pain and various rheumatic diseases in India. 4+6

8. What is obstetric anti-phospholipid syndrome? How to stratify the risk? Write plan for management strategy. 3+4+3

9. Enumerate common causes of back pain. Write important clinical features for each cause. 3+7

10. a. How do you evaluate the cardio-vascular risk factors in rheumatoid arthritis? 4+6
    b. Mention current knowledge for addressing this problem.
RHEUMATOLOGY

PAPER- III

Time : 3 hours
Max. Marks : 100

Attempt all questions in order.
Each question carries 10 marks.

Write short notes on:

1. a. Trigger finger  
b. Neuropathic joint  
c. Carpal tunnel syndrome  
d. Enthesisopathy around elbow joint  
e. Complications of intra-articular injections.

2. Various presentations of tubercular arthritis

3. Value of ASO testing.

4. What are the extra-articular manifestations of chronic arthritis in children? What are the important issues in reference to abnormalities of growth and development in JIA (Juvenile Idiopathic Arthritis)?

5. List "Emergencies in Rheumatology practice" and describe clinical presentations of pulmonary hemorrhage in lupus.


7. How will you evaluate interstitial lung disease in connective tissue disease? Outline the important pathological features.

8. Mention the lung manifestations of Wegener's granulomatosis. How does ANCA help in evaluating the disease?

9. What is osteo-necrosis? Describe the radiological changes. Mention the important risk factors.

10. What is autoimmunity? Mention the mechanisms of autoimmunity and its impact on tissue damage.

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