

National Board of Examinations

Question Paper Name : DrNB Clinical Immunology and Rheumatology Paper2
Subject Name : DrNB Clinical Immunology and Rheumatology Paper2
Duration : 180
Total Marks : 100
Display Marks: No

Maximum Instruction Time : 0

Question Number : 1 Question Id : 32718740674 Consider As Subjective : Yes

Please write your answers in the answer booklet within the allotted pages as follows:-

Question Number	Answer to be attempted within	Question Number	Answer to be attempted within
Q. 1	Page 1-5	Q. 6	Page 26-30
Q. 2	Page 6-10	Q. 7	Page 31-35
Q. 3	Page 11-15	Q. 8	Page 36-40
Q. 4	Page 16-20	Q. 9	Page 41-45
Q. 5	Page 21-25	Q. 10	Page 46-50

1. A 28-year-old man presents with a 3-year history of intermittent severe disabling pain and swelling in the right knee and left ankle and a few small joints of the feet. There is a family history of similar inflammatory arthritis.

- What are the likely differential diagnosis? [3]
- Discuss the immediate and prophylactic management of such episode, assuming it is gout. [4]
- Discuss the renal toxicity of uric acid. [3]

Question Number : 2 Question Id : 32718740675 Consider As Subjective : Yes

Regarding MRI in the assessment of inflammatory hand arthritis:

- List the findings seen in early rheumatoid arthritis. [3]
- What is OMERACT? [2]

c) What is the RAMRIS score? [5]

Question Number : 3 Question Id : 32718740676 Consider As Subjective : Yes

- a) Immunological events and mucosal origins implicated in the initiation of preclinical rheumatoid arthritis. [5]
- b) Explain the role of autoantibodies and epitope spreading in the transition from asymptomatic autoimmunity to clinical synovitis. [5]

Question Number : 4 Question Id : 32718740677 Consider As Subjective : Yes

Osteoarthritis (OA):

- a) Important animal models used to study OA. [2]
- b) Describe the pathogenetic insights derived from these models. [3]
- c) Discuss the advantages and limitations of these animal models in translating findings to human. [2]
- d) Advances in the management (medical and surgical) of OA. [3]

Question Number : 5 Question Id : 32718740678 Consider As Subjective : Yes

Regarding anti-phospholipid antibody syndrome:

- a) Discuss the beta-2 glycoprotein molecule with reference to its role in pathogenesis of the syndrome. [3]
- b) Discuss the tests included under the lupus anti-coagulant assay. [4]
- c) What are the newer antibodies being explored in seronegative anti-phospholipid antibody syndrome? [3]

Question Number : 6 Question Id : 32718740679 Consider As Subjective : Yes

A 55-year-old woman with 3 years history of inflammatory polyarthritis, on methotrexate and corticosteroids, presents with 3 month history of shortness of breath and dry cough. She denies any hemoptysis. There are basal and scattered crepitations in the lungs:

- a) List relevant differentials. [4]
- b) Discuss the thoracic imaging findings of the differentials. [3]
- c) What treatment options are available for progressive autoimmune ILD? [3]

Question Number : 7 Question Id : 32718740680 Consider As Subjective : Yes

A 70-year-old postmenopausal woman presents with a history of recurrent vertebral fragility fracture. She has undergone previous vertebroplasty. She has received teriparatide daily subcutaneously for 2 years:

- a) Discuss how osteoporosis can be quantified in her. [2]
- b) What assessments can be done to identify modifiable factors for secondary prevention? [2]
- c) What is the FRAX score? [2]
- d) Assuming it is postmenopausal osteoporosis, what is the next best pharmacologic interventions that can be offered to her and why? [4]

Question Number : 8 Question Id : 32718740681 Consider As Subjective : Yes

A 32-year-old woman with ulcerative colitis for 6 years presents with recurrent swelling and pain in her knees and ankles, associated with active diarrhea. On examination, she has asymmetric oligoarthritis involving large joints:

- a) Describe the musculoskeletal manifestations associated with inflammatory bowel disease. [3]
- b) Explain the pathophysiological links between gut inflammation and joint disease. [3]
- c) Write about therapeutic considerations, especially with respect to anti-TNF, IL-17, and JAK inhibitors. [4]

Question Number : 9 Question Id : 32718740682 Consider As Subjective : Yes

Discuss rheumatologic manifestations of any two non-diabetic endocrine disorders. [5+5]

Question Number : 10 Question Id : 32718740683 Consider As Subjective : Yes

- a) Musculoskeletal paraneoplastic syndromes. [3]
- b) Musculoskeletal features of leukemia and lymphoma. [4]
- c) Evidence and mechanism of how therapy of rheumatic disease can increase the risk of malignancy. [3]