

National Board of Examinations

Question Paper Name :	DrNB Clinical Immunology and Rheumatology Paper1
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Actual Answer Key :	No

DrNB Clinical Immunology and Rheumatology Paper1

Group Number :	1
Group Id :	3271871299
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

DrNB Clinical Immunology and Rheumatology Paper1

Section Id :	3271871302
Section Number :	1

Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions to be attempted :	10
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	3271871306
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 1 Question Id : 32718712042 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

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) Write mechanism of action of hydroxychloroquine (HCQ) with appropriate diagram. [5]
- b) Write utility of therapeutic drug monitoring of HCQ. [3]
- c) Enlist the factors associated with HCQ induced ophthalmic toxicity. [2]

Question Number : 2 Question Id : 32718712043 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Describe newer antibodies in systemic sclerosis. [5]

b) How do scleroderma antibodies guide therapeutic decisions and management? [5]

Question Number : 3 Question Id : 32718712044 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

a) Elaborate on type 1 interferon signalling pathway in rheumatic diseases with the use of diagram. [7]

b) What is the evidence for importance of this pathway in pathogenesis of systemic sclerosis? [3]

Question Number : 4 Question Id : 32718712045 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

a) Describe with diagram the structure of synovium. [3]

b) Discuss in detail the types and properties of synovial lining cells. [2+5]

Question Number : 5 Question Id : 32718712046 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

a) Describe with diagram the process of bone remodelling. [6]

b) Discuss in brief the markers of bone turnover. [4]

Question Number : 6 Question Id : 32718712047 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

a) Describe in brief classification of dendritic cells. [3]

b) How does dendritic cell serve as a bridge between innate and adaptive immune system, discuss with diagram? [4]

c) Briefly discuss dendritic cell vaccines in autoimmune rheumatic diseases. [3]

Question Number : 7 Question Id : 32718712048 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Discuss the outcome measures, strengths, and weakness of case control study. [1+2+2]
- b) What are methods to minimise weaknesses of a case control study? [3]
- c) How is case control study different from a self-controlled study? [2]

Question Number : 8 Question Id : 32718712049 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

A 30-year-old lady presented with pain and swelling of multiple joints. She was tested for anti-citrullinated protein antibodies (ACPA):

- a) Enlist different ACPA in patients with Rheumatoid arthritis. [3]
- b) Discuss clinical relevance of ACPA in Rheumatoid arthritis. [5]
- c) What is the utility of ACPA in preclinical Rheumatoid arthritis? [2]

Question Number : 9 Question Id : 32718712050 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

- a) Describe T cell receptor with appropriate diagram. [5]
- b) Write a brief note on CART cell. [3]
- c) List the autoimmune rheumatic diseases with potential use of CART therapy. [2]

Question Number : 10 Question Id : 32718712051 Question Type : SUBJECTIVE Consider As Subjective : Yes Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 10

a) Write briefly on mature B cell subsets. [6]

b) Discuss the role of mature B cell subsets as biomarkers in systemic vasculitis. [4]