

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch IX — Rheumatology

(Revised Regulations)

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Antineutrophil cytoplasmic antibodies (ANCA) are useful in the diagnosis and management of certain vasculitides. Discuss the antigen specificities of ANCA and their relation to the spectrum of immunologic diseases. (25)
2. Outline the salient differences between autoimmune diseases with onset in childhood versus the same diseases in adult life. (25)
3. Briefly discuss
 - (a) Arthritis in lyme disease
 - (b) The disabling complications of Behcets disease
 - (c) The differences between polyarticular versus monoarticular gout
 - (d) Rheumatic manifestations of Lymphomas
 - (e) Arthritis in Hansen's disease. (5 × 10 = 50)

November-2001

[KE 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

**Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions

Marks for each question are given in brackets.

1. Describe the variants and prognosis of Rheumatoid arthritis (30)
 2. Discuss the differential diagnosis of Pulmonary Renal Syndrome. (30)
 - 3 Write short notes on :
 - (a) HIV and Non HIV related Reiter's Syndrome (10)
 - (b) Milwaukee Shoulder (10)
 - (c) Sjogren's Syndrome and Lymphoma (10)
 - (d) Sarcoidosis in India. (10)
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[KG 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION.

(Higher specialities)

(Revised Regulations)

Branch IX — Rheumatology

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours

—Maximum : 100 marks

Answer ALL questions

Marks for each question are given in brackets.

1. Describe the clinical features and classification of Psoriatic arthritis. (30)
2. Discuss the classification and clinical features of CPPD crystal deposition disease. (30)
3. Write short notes on :
 - (a) Scleroderma like illnesses. (10)
 - (b) Pigmented villonodular synovitis (10)
 - (c) Clubbing Index. (10)
 - (d) Tuberculous arthritis (10)

[KK 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

A. Essay Question : (2 × 15 = 30)

(1) Classify scleroderma and discuss management strategies in scleroderma.

(2) Discuss differential diagnosis of shoulder pain and its management.

B. Short notes. (10 × 5 = 50)

(1) Enthesitis syndrome

(2) Disease Activity Score (DAS)

(3) Multicentric reticulohistocytosis

(4) End-stage joint disease

(5) Rheumatoid lung

(6) Hemophilic arthritis

(7) Sickle cell disease and rheumatic manifestation

(8) Rehabilitation of advanced RA

(9) Reflex sympathetic osteo-dystrophy

(10) Reiter's syndrome.

[KM 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essay : (2 × 15 = 30)

(1) List Mitochondrial myopathies - describe clinical presentation, diagnostic evaluation and differential diagnosis.

(2) Describe the clinical spectrum, pathophysiology and management of chronic pain disorders.

II. Short notes : (10 × 5 = 50)

- (a) Piriformis Syndrome.
- (b) Beighton's score.
- (c) RS₃PE.
- (d) Psoriatic onychopachydermoperiostitis (POPP) and other Psoriatic arthropathy variants.
- (e) Camptocormia.
- (f) Fibroblast function and Fibrosis.
- (g) Radio isotopic assessment of metabolic bone diseases.
- (h) Benign hypermobility syndrome.
- (i) Scleroderma Renal crisis.
- (j) Complete curable causes of arthritis.

[KP 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essays :

(1) Describe in detail about the pathogenesis, clinical features and current management strategies for Antiphospholipid Antibody (APLA) syndrome. Briefly mention the problems and prospects in the treatment of catastrophic APLA syndrome. (20)

(2) Discuss the various factors responsible for the increasing spread of HIV infection in India and for the failure of control measures initiated. If you were asked to prepare a programme for control – what steps would you take? (15)

(3) Describe the treatment of the various syndromes that constitute Neuropsychiatric systemic lupus erythematosus. What are the major problems faced in the diagnosis of these conditions? (15)

II. Write short notes on : (6 × 5 = 30)

(a) Diagnostic criteria for relapsing polychondritis.

(b) Non-pharmacologic treatment of pain.

(c) The Chapel Hill classification of vasculitides.

(d) Precautions of hormone replacement therapy in women.

(e) Jaundice in patient with rheumatoid arthritis.

(f) Treatment of multicentric reticulo histiocytosis.

[KR 022]

Sub. Code : 1352

D.M. DEGREE EXAMINATION.

Branch IX — Rheumatology

Paper II — CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Essays :

1. Discuss refractory rheumatoid arthritis. (20)
2. Discuss dermatologic manifestations of various
rheumatic diseases. (15)
3. Discuss diagnosis and management of renal
osteodystrophy. (15)

II. Write short notes on : (6 × 5 = 30)

- (a) Outcome measures in vasculitis.
- (b) Proinflammatory cytokines in psoriatic
arthritis.

(c) Management of pregnancy with systemic
lupus erythematosus.

(d) Approach of knee pain in osteo arthritis of
knee.

(e) Viral arthritis.

(f) Chronic fatigue syndrome.

August 2008

[KT 022]

Sub. Code: 1352

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch IX – Rheumatology

**Paper II– CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

- 1. Discuss pulmonary-renal syndromes.**
- 2. Discuss mechanisms and clinical features of kidney involvement in rheumatic diseases. Describe the present day management of lupus nephritis.**

II. Write short notes on:

10 x 6 = 60 Marks

1. Pulmonary Hypertension in systemic sclerosis.
 2. Hemophilia joint disease.
 3. Catastrophic antiphospholipid antibody syndrome.
 4. Complex Regional pain syndromes.
 5. Undifferentiated arthritis.
 6. Outcome measures in rheumatoid arthritis.
 7. Eye in Spondarthritis.
 8. Hypermobility Syndrome.
 9. Refractory Gout.
 10. DISH (Diffuse idiopathic skeletal hyperostosis).
-

August 2009

[KV 022]

Sub. Code: 1352

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch IX – RHEUMATOLOGY

(Revised Regulations)

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three hours

Maximum: 100 Marks

Answer ALL questions

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40

1. Discuss in detail about the pathogenesis, clinical features, diagnosis and current management strategies of Behcet's syndrome.
2. Discuss in detail about the musculo skeletal manifestations, radiological changes, diagnosis and treatment of hypoparathyroidism.

II. Write short notes on:

10 x 6 = 60

1. Multicentric reticulo histiocytosis.
2. Chikungunya arthritis.
3. Treatment of pigmented villonodular synovitis.
4. Reflex sympathetic dystrophy syndrome.
5. Disease activity score 28 (DAS – 28).
6. Management of psendogout.
7. Palindromic rheumatism.
8. Plasmapheresis in rheumatology.
9. Macrophage activation syndrome.
10. Western blot test in HIV infection.

AUGUST 2010

[KX 022]

Sub. Code: 1352

D.M. DEGREE EXAMINATION

**(Higher Specialities)
(Revised Regulations)**

Branch IX – RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Discuss in detail about the pathogenesis, clinical features, classification, diagnosis and management of Takayasu Arteritis.

2. Describe the musculoskeletal manifestations, diagnosis and management of Human Immunodeficiency Virus (HIV) infection.

II. Write short notes on:

10 X 6 = 60 Marks

1. Causes and manifestations of viral arthritis in south India.
2. SF – 36 (Short form 36)
3. Management of systemic sclerosis.
4. Health Assessment Questionnaire (HAQ) Indian version.
5. Diagnosis of Dermatomyositis.
6. Ocular manifestations of Ankylosing spondylitis.
7. Clinical variants of psoriatic arthritis.
8. Spondylo epiphyseal dysplasia's.
9. Anti Neutrophil Cytoplasmic Antibodies (ANCA's).
10. Ochronosis.

August 2011

[KZ 022]

Sub. Code: 1352

**DOCTORATE OF MEDICINE (D.M.) DEGREE EXAMINATION
(SUPER SPECIALITIES)**

BRANCH IX – RHEUMATOLOGY

CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|----|----|
| 1. Discuss the epidemiology, etiology, pathogenesis, clinical features, diagnostic tests and treatment of Hughes syndrome. | 11 | 35 | 15 |
| 2. Describe the pathogenesis, clinical features, diagnosis and management of osteoarthritis. | 11 | 35 | 15 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. Occupation related rheumatic diseases. | 4 | 10 | 7 |
| 2. Management of Fibromyalgia. | 4 | 10 | 7 |
| 3. Intrinsic factors causing shoulder pain. | 4 | 10 | 7 |
| 4. en coup de bande. | 4 | 10 | 7 |
| 5. Clinical utility of antinuclear antibodies. | 4 | 10 | 7 |
| 6. Neuropathic osteoarthropathy. | 4 | 10 | 7 |
| 7. β 2 microglobulin amyloidosis. | 4 | 10 | 7 |
| 8. Basic mechanisms of glucocorticoids. | 4 | 10 | 7 |
| 9. Allergic arthritis. | 4 | 10 | 7 |
| 10. Relapsing polychondritis. | 4 | 10 | 7 |

[LB 022]

AUGUST 2012

Sub. Code: 1352

D.M – RHEUMATOLOGY

Paper – II CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

**Time: 3 hours
(180 Min)**

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|---|----|----|----|
| 1. Discuss the cause, pathogenesis, clinical features, laboratory investigations and the management of inflammatory myopathies. | 16 | 35 | 15 |
| 2. Discuss the pathogenesis of Systemic Lupus Erythematosus in detail. | 16 | 35 | 15 |

II. Write notes on:

- | | | | |
|--|---|----|---|
| 1. What is carcinomatous polyarthritis? Discuss the clinical features. | 4 | 10 | 7 |
| 2. What are the clinical features of Hemophilic Arthropathy? | 4 | 10 | 7 |
| 3. What are the rheumatological problems in A β 2M amyloidosis? | 4 | 10 | 7 |
| 4. What are the musculoskeletal symptoms in Lyme Disease? | 4 | 10 | 7 |
| 5. What are the nonpharmacologic interventions for the management of osteoarthritis? | 4 | 10 | 7 |
| 6. What is secondary gout? Discuss the various causes in brief. | 4 | 10 | 7 |
| 7. What are the vasculitides caused by viral infection? Discuss them in brief. | 4 | 10 | 7 |
| 8. What are the genetic risk factors in vasculitis? | 4 | 10 | 7 |
| 9. What are the mimics of myositis? | 4 | 10 | 7 |
| 10. What is en coupe de sabre and en coup de bande? | 4 | 10 | 7 |

D.M. – RHEUMATOLOGY
Paper – II CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY
Q.P.Code: 161352

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Classification criteria of Mixed Connective Tissue Disease (MCTD).
Mention the Differences with Lupus. Write briefly management plans including treatment for specific organ damage.
2. Pathology, outcome and management of class V Lupus Nephritis.

II. Write notes on:

(10X7=70)

1. Rheumatoid Arthritis in HIV infected individual.
2. Variants of Psoriatic Arthritis.
3. Causes, presentation, stages and management of Osteonecrosis.
4. Post Streptococcal reactive Arthritis.
5. Neuro Sarcoidosis.
6. Musculoskeletal Mycobacteriosis.
7. Pregnancy outcome of Systemic Sclerosis.
8. Anti Synthetase Syndrome.
9. Isolated CD4 Lymphocytopenia.
10. Malignancies in Rheumatoid Arthritis.

[LF 022]

AUGUST 2014

Sub. Code: 1352

D.M. – RHEUMATOLOGY

Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q. P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions in the same order.

I. Elaborate on:

(2 x 15 = 30)

1. Discuss in detail about the aetiopathogenesis, clinical manifestations, Investigations and treatment of Psoriatic Arthritis.
2. Discuss in detail about Rheumatoid Lung Disease.

II. Write notes on:

(10 x 7 = 70)

1. Hemochromatosis.
2. Scleroderma mimics.
3. Shoulder pain.
4. Synovial Chondromatosis.
5. Parathyroid and Rheumatic diseases.
6. Macrophage Activation Syndrome.
7. Infective Myositis.
8. Management of Behcet's Disease.
9. Glucocorticoid Induced Osteoporosis.
10. Role of Innate immune, gamma delta T cells and natural killer cells in Spondyloarthropathy.

[LH 022]

AUGUST 2015

Sub. Code: 1352

D.M. – RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P.Code: 161352

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Classification criteria for vasculitides. Describe the characteristic clinical features, laboratory and imaging features of ANCA associated Vasculitis (AAV). Management of AAV with treatment algorithm and various recommendations for management of AAV.
2. Discuss etiopathogenesis, clinical features and subtypes of scleroderma. Also describe serological findings. Evaluation for organ involvement and treatment of scleroderma.

II. Write notes on :

(10 x 7 = 70)

1. Classification and disease activity in Takayasu arteritis.
2. Drug induced lupus.
3. Amyloidosis.
4. Animal models of Sjogrens syndrome.
5. Musculoskeletal manifestations of sickle cell disease.
6. SAPHO syndrome.
7. Non-thrombotic manifestations of Antiphospholipid syndrome.
8. Leprosy and rheumatologic manifestations.
9. Common variable Immunodeficiency (CVID).
10. Rheumatic complication of Diabetes Mellitus.

[LI 022]

FEBRUARY 2016

Sub. Code: 1352

D.M. – RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Studies on early undifferentiated arthritis. Write about the predictors of transition of undifferentiated arthritis to Rheumatoid arthritis. Discuss in brief about treatment of undifferentiated arthritis.
2. Genetics of Ankylosing spondylitis. Classification criteria of spondyloarthritis.

II. Write notes on :

(10 x 7 = 70)

1. Neurolupus.
2. Cardiovascular morbidity in lupus.
3. Rheumatoid vasculitis.
4. Treatment of eye involvement in Behcet's disease.
5. Nephrogenic systemic fibrosis.
6. Treatment of Raynaud's phenomenon.
7. Amyopathic dermatomyositis.
8. Assessing disease activity and outcome in myositis.
9. Biologics in treatment of Psoriatic arthritis.
10. Eye in rheumatoid arthritis.

D.M. – RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P.Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write an essay on the names of Immune Complex Vasculitis and discuss in detail about Cryoglobulinemic Vasculitis.
2. Discuss in detail about the aetiopathogenesis, clinical features and treatment of adult polymyositis.

II. Write notes on:

(10 x 7 = 70)

1. SAPHO Syndrome.
2. Hypertrophic Pulmonary Osteoarthropathy.
3. Treatment of Raynaud's Phenomenon and Digital ischemia.
4. Diffuse Idiopathic Skeletal Hyperostosis.
5. Rheumatological manifestations of Malignancies.
6. Differential diagnosis of Relapsing Polychondritis.
7. Scleromyxoedema.
8. Kashin – Beck disease.
9. Milwaukee shoulder.
10. Types of Mucopolysaccharidoses and their management.

(LL 022)

AUGUST 2017

Sub. Code:1352

D.M. – RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P.Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write an essay on auto antibodies and associated phenotypes in Scleroderma.
2. Discuss in detail about Primary Angitis of the Nervous system.

II. Write notes on:

(10 x 7 = 70)

1. Assessment of disease in ANCA associated vasculitis.
2. Haemophilic Arthropathy.
3. Septic and Pseudoseptic arthritis.
4. Cervical spine in Rheumatoid Arthritis.
5. Diffuse Infiltrative Lymphocytosis syndrome.
6. Management of class II Lupus Nephritis.
7. Pigmented villonodular synovitis.
8. Foot pain.
9. Erythema Elevatum Diutinum.
10. Management of Takayasu's arteritis.

D.M. – RHEUMATOLOGY

Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P.Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Classification criteria for Spondyloarthritis with pitfalls in ASAS criteria. Describe the etiopathogenesis, characteristic clinical features, subtypes and imaging features. Discuss various recommendations for evaluation, monitoring of disease activity and management options.
2. Discuss etiopathogenesis of SLE. Compare and contrast the ACR 1987 and SLICC criteria of lupus. Describe classification of neuropsychiatric lupus and management.

II. Write notes on:

(10 x 7 = 70)

1. Pagets Disease.
2. Overlap syndromes.
3. Eye involvement in rheumatic diseases.
4. Malignancy risk in rheumatic diseases.
5. Proliferative Bone diseases.
6. Stills Disease – classification criteria, complications, outline of management.
7. Pigmented villonodular synovitis.
8. PET CT in rheumatology.
9. Chikungunya arthritis.
10. Cryoglobulinemic vasculitis.

D.M. – RHEUMATOLOGY

Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P.Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Pathogenesis and genetics of Primary Sjogrens Syndrome. Mention the latest criteria of Sjogrens syndrome and discuss about the differentials of Sjogrens syndrome. List all the extra-glandular manifestation.
2. Diagnosis of antiphospholipid antibody syndrome. Name the full spectrum of antiphospholipid antibodies and their significance. Discuss management of APS.

II. Write notes on:

(10 x 7 = 70)

1. Non B27 genes in spondyloarthritides.
2. Lupus membranous nephropathy.
3. Cryoglobulinemic vasculitis.
4. Clinical features of Behcet's disease.
5. Overlap syndromes.
6. Cardiac sarcoidosis.
7. Role of mesandrymal stem cell therapy in systemic sclerosis.
8. Antisynthetase syndrome.
9. Drug induced myopathies.
10. Outcome domains and instruments in Psoriatic Arthritis.

D.M. – RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. List common viral arthropathies, their mechanisms in pathogenesis, diagnosis and management options.
2. Discuss infections in immunocompromised host in the setting of a rheumatological illness.

II. Write notes on:

(10 x 7 = 70)

1. Management of cutaneous PAN.
2. Kawasaki's disease.
3. Musculoskeletal manifestations of diabetes mellitus.
4. Primary immunodeficiency in adults - their rheumatological manifestations and management.
5. Rheumatological emergencies.
6. Localised scleroderma-types and management.
7. Vaccination in rheumatology - prepare a broad outline.
8. Brucellosis – musculoskeletal manifestations, diagnosis and management.
9. Anterior uveitis in rheumatology - differential diagnosis and management.
10. Lyme disease – diagnosis and management.

(LR 022)

NOVEMBER 2020
(AUGUST 2020 SESSION)

Sub. Code: 1352

D.M. – RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on: (2 x 15 = 30)

1. Write in detail about proliferative bone diseases and their management.
2. Genetics, clinical manifestations, diagnosis and treatment of anti neutrophil cytoplasmic antibody (ANCA) associated vasculitis.

II. Write notes on: (10 x 7 = 70)

1. Classification of hyperuricemia and gout.
2. Assessment tools in inflammatory myositis.
3. Scleroderma fibroblast.
4. Calcineurin inhibitors in the treatment of systemic lupus erythematosus.
5. Discuss osteoporeosis in ankylosing spondylytis.
6. IL23 and the spondyloarthritis Phenotype.
7. Rheumatoid vasculitis.
8. TEAR trail.
9. Unmet needs in Rheumatoid arthritis.
10. Parasitic Rheumatism

D.M. – RHEUMATOLOGY

Paper II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. How do you classify panniculitis? what are the causes? how will you evaluate and diagnose a patient with panniculitis? what are the treatment approaches?
2. What is macrophage activation syndrome (MAS)? Explain the causes of MAS and approach to diagnosis and treatment of MAS.

II. Write notes on:

(10 x 7 = 70)

1. Describe pleuropulmonary diseases in lupus.
2. Discuss osteoporosis in ankylosing spondylitis.
3. Name the mycobacteria that can lead to musculoskeletal manifestations.
4. Write in detail about the various ocular staining scores available in assessment of ocular symptoms in patients with Sjogren's syndrome. Also mention about the classification criterias where they are included.
5. Clinical manifestations, diagnosis and treatment of neurosarcoidosis.
6. What are the causes of enteropathic arthritis? write on types and treatment of inflammatory bowel disease related arthritis.
7. List the non-criteria manifestations of antiphospholipid syndrome (APS)
Explain the diagnosis and treatment of cardiac involvement in APS.
8. Elaborate on differences in presentation, outcomes and management of hepatitis B vs non- hepatitis B virus related polyarteritis nodosa.
9. Clinical manifestations and evidence based management of neonatal lupus.
10. Name clinical subtypes of osteoarthritis. What is the OARSI?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0822]

AUGUST 2022

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**Paper II – CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY**

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about immunological response of cell death. Give an account of apoptosis in osteoarthritis.
2. Give a detailed account of Fungal infections of bone and joints and about fungal infections as a consequence of anti rheumatic therapy.

II. Write notes on:

(10 x 7 = 70)

1. Medications promoting hyperurecemia.
2. Basilar invagination.
3. Clinical features and management of Crohn's Disease.
4. Scleroderma mimics.
5. Tumour induced Osteomalacia.
6. Treatment of rheumatologic immune mediated adverse events during use of check point inhibitors for cancer.
7. Rituximab and belimumab in SLE.
8. Myositis specific auto antibodies and their clinical relevance.
9. Diagnostic criteria for Behcet's disease.
10. Tumour lysis syndrome.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0223]

FEBRUARY 2023

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL
IMMUNOLOGY**

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about arthritis accompanying endocrine and metabolic diseases.
2. Elaborate on Immune Complex Mediated Small Vessel Vasculitis.

II. Write notes on:

(10 x 7 = 70)

1. Immunotherapy of systemic sclerosis.
2. Susac Syndrome.
3. RACAT Trail.
4. Biologic therapies for Systemic Lupus.
5. Mitogen Activated Protein Kinase.
6. RS3PE Syndrome.
7. Calcineurin inhibitors in SLE.
8. Endocrine involvement in Scleroderma.
9. Calcinosis Cutis.
10. Dyferlinopathy.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0823]

AUGUST 2023

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**PAPER II – CLINICAL RHEUMATOLOGY AND
CLINICAL IMMUNOLOGY**

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss and critically analyse the trials of Belimumab in the treatment of Systemic Lupus Erythematosus.
2. Diagnostic and therapeutic approach to a case of Amyloidosis.

II. Write notes on:

(10 x 7 = 70)

1. Drug withdrawal in Spondyloarthritis. Discuss rationale and evidence.
2. Elaborate upon the impact of Metabolic Syndrome in psoriatic arthritis.
3. Complements as targets for treatment in ANCA associated vasculitis.
4. Diagnostic approach to a case of episodic arthritis.
5. Description and treatment of musculoskeletal manifestations in malignancies.
6. Describe management approach of the various renal manifestations in Primary Sjogren's syndrome.
7. Difficult to treat Rheumatoid arthritis. Define and elaborate treatment plans.
8. Role of musculoskeletal ultrasound in clinical practice.
9. Classify primary CNS vasculitis and elaborate the diagnostic approach.
10. Cardiovascular risks and benefits in the treatment of Gout.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0124]

JANUARY 2024

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the various trials in the management of ANCA associated Vasculitis.
2. Discuss the role of epigenetics in SLE.

II. Write notes on:

(10 x 7 = 70)

1. Enumerate the autoantibodies in Systemic sclerosis and describe the clinical implication of each one.
2. Rheumatic diseases associated with HIV infection.
3. Discuss the etiopathogenesis of Crystal Arthropathy.
4. Reversible cerebral vasoconstriction syndrome.
5. Approach to Temporomandibular joint pain.
6. Neurological manifestations of Primary Sjogren syndrome.
7. Discuss briefly about the Proliferative bone diseases.
8. Criteria of Osteonecrosis and its management.
9. Discuss the various musculoskeletal manifestations of Sickle cell disease.
10. Mimics of axial spondyloarthritis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0824]

AUGUST 2024

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Elaborate on the role of HLA B27, ERAP and IL123/IL17 axis in Spondyloarthritis. Mention about the differences in phenotype and outcome of Spondyloarthritis in men and women. List the various improvement criteria used in Spondyloarthritis in clinical trials.
2. Write down the 2012 International Chapel Hill consensus conference classification of Vasculitis. Write down the classification criteria for Polymyalgia Rheumatica (PMR). What are all the differences between PMR and Takayasu's arteritis?

II. Write notes on:

(10 x 7 = 70)

1. Different IgG4 related disease classification criteria and IgG4 related disease responder index. Potential biomarkers of IgG4 related disease.
2. Progressive pseudo rheumatoid dysplasia and its management.
3. Mention the causes for Avascular Necrosis of Hip and discuss about its management.
4. Write in detail about the various ocular staining scores available in assessment of ocular symptoms in patients with Sjogren's syndrome. Also mention about the classification criterias where they are included.
5. Enumerate the clinical manifestations of Polyarteritis Nodosa (PAN). How to evaluate a patient with suspected PAN?
6. Mention the Indications for DMARDs, Cytotoxic therapy, antimetabolites, calcineurin Inhibitors and biologic therapies in SLE.
7. Name the mycobacteria that can lead to musculoskeletal manifestations. Write on three manifestations occurring as a result of direct involvement of the musculoskeletal system by mycobacteria.
8. Clinical manifestations, diagnosis and treatment of neurosarcoidosis.
9. What are the causes of enteropathic arthritis? Write on types and treatment of inflammatory bowel disease related arthritis.
10. List the non-criteria manifestations of Antiphospholipid syndrome (APS). Explain the diagnosis and treatment of cardiac involvement in APS.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0225]

FEBRUARY 2025

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write down the 2012 International Chapel Hill Consensus Conference classification of Vasculitis. Write down the new classification criteria for Polymyalgia Rheumatica (PMR). What are all the differences between Giant Cell Arteritis and Takayasu's arteritis?
2. Pulmonary Hypertension in Connective Tissue diseases, definition, risk factors, diagnosis and treatment options

II. Write notes on:

(10 x 7 = 70)

1. How do you classify panniculitis? What are the causes?
2. Cardiac manifestations of idiopathic inflammatory myositis. Write a note on screening and treatment of these manifestations.
3. List the different clinical presentations of Calcium PyroPhosphate Disease (CPPD). What is Familial CPPD?
4. Explain fibromyalgia under the following headings:
 - a) Symptom severity score
 - b) Nonpharmacological interventions
5. Eye involvement in Behcet's syndrome.
6. Scleroderma mimics.
7. Macrophage activation syndrome – causes and approach to diagnosis and treatment.
8. Non-Radiographic Imaging in Knee osteoarthritis.
9. Biases in study design.
10. Management of chronic synovitis in Hemophilia.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[DM 0126]

JANUARY 2026

Sub. Code :1352

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

PAPER II – CLINICAL RHEUMATOLOGY AND CLINICAL IMMUNOLOGY

Q.P. Code: 161352

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the causes, pathogenesis, and treatment of Chronic fatigue Syndrome.
2. Discuss the various clinical features, laboratory evaluation and management of Sarcoidosis.

II. Write notes on:

(10 x 7 = 70)

1. Ocular complications of Systemic Vasculitis.
2. Wilson's arthropathy.
3. Musculoskeletal syndromes associated with Diabetes Mellitus.
4. Post-streptococcal non-rheumatic reactive arthritis.
5. Musculoskeletal manifestations of Lyme disease.
6. Management of Refractory DLE.
7. Kikuchi's disease.
8. Vexa's Syndrome.
9. Approach to Hip pain.
10. Catastrophic APS.
