

April-2001

[KD 023]

Sub. Code : 1353

D.M. DEGREE EXAMINATION.

(Higher Specialities)

Branch IX — Rheumatology

(Revised Regulations)

Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY, SPECIAL
PROBLEMS RELATED TO RHEUMATIC DISEASES
PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the major ethical issues that must be addressed in devising a clinical drug trial of a new NSAID (non steroidal anti inflammatory drug) in human subjects. How is a double blind cross over controlled trial done? (25)
2. The role of synovectomy in the management of knee arthritis. Indications — contraindications, results. (25)
3. Briefly discuss
 - (a) Corticosteroids use in the treatment of Rheumatoid arthritis.
 - (b) Bone scans in the investigation of arthritis.
 - (c) Complications and management of Dry eye and mouth.
 - (d) Bisphosphonates, mechanism of action and adverse effects
 - (e) George Still and his contribution to rheumatology. (5 × 10 = 50)

November-2001

[KE 023]

Sub. Code : 1353

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

**Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY, SPECIAL PROBLEMS
RELATED TO RHEUMATIC DISEASES —
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Marks for each question are given in brackets.

1. Discuss the ILAR classification of Juvenile Rheumatic Diseases. How does it differ from the American and European criterias? (30)
2. Discuss disease modifying anti osteoarthritic therapies. (30)
3. Write short notes on :
 - (a) Drugs which increase urate levels. (10)
 - (b) Safety of anti rheumatic drugs in Pregnancy. (10)
 - (c) Cox 2 Concept. (10)
 - (d) Hand joint replacement surgery. (10)

March-2002

[KG 023]

Sub. Code : 1353

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

**Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY, SPECIAL PROBLEMS
RELATED TO RHEUMATIC DISEASES –
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Marks for each question are given in brackets.

1. Discuss the management of End Stage Joint Disease. (30)
2. Discuss the management of SLE in a pregnant patient. (30)
3. Write short notes on :
 - (a) Childhood dermatomyositis. (10)
 - (b) Stills disease. (10)
 - (c) Physiotherapy for OA knee. (10)
 - (d) Sulfasalazine. (10)

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Sub. Code : 1353

D.M. DEGREE EXAMINATION.

(Higher Specialities)

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Branch IX — Rheumatology

Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY, SPECIAL PROBLEMS
RELATED TO RHEUMATIC DISEASES —
PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES

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 Questions.

(2 × 15 = 30)

(1) Discuss on classification and criteria of childhood arthritis.

(2) Discuss on rheumatological manifestation of HIV infection.

B. Short notes :

(10 × 5 = 50)

- (1) Steroid induced osteoporosis
- (2) Physiotherapy in osteoarthritis
- (3) Oral anti-coagulant
- (4) Acilomophenac
- (5) Methotroxate-pulmonary toxicity
- (6) Eye and mouth care in sjogern's syndrome
- (7) Mycophendate mefatil
- (8) SLE and pregnancy
- (9) Henoch-Schdin purpura-management.
- (10) Adult onset stills disease.

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II. Short notes : (10 × 5 = 50)

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REHABILITATION SURGERY, SPECIAL PROBLEMS
RELATED TO RHEUMATIC DISEASES —
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES

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) Classification of Juvenile inflammatory arthritis. List common differential diagnosis and management issues.

(2) Describe the health benefits of Omega - 3 fatty acids in systemic autoimmune rheumatic diseases. Briefly mention their pharmacological action.

- (a) Multifocal sterile osteomyelitis
- (b) Hip protectors
- (c) Utility of arthroscopy in Rheumatology – List definitive indications
- (d) Endothelin – 1 receptor antagonist
- (e) Complex regional pain syndromes (CRPS)
- (f) Discovery of Aspirin
- (g) Management of drug induced gastropathy
- (h) Splinting the Rheumatology practice
- (i) Place of antibiotics in Rheumatology
- (j) Cox-2 selectivity.

[KP 023]

Sub. Code : 1353

D.M. DEGREE EXAMINATION.

(Higher Specialities)

(Revised Regulations)

Branch IX — Rheumatology

Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY SPECIAL PROBLEMS
RELATED TO RHEUMATIC DISEASES —
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES

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. Essay questions :

(1) Discuss in detail about the pharmacology pharmacokinetics, uses and side effects of methotrexate in rheumatology. Describe the suggested guidelines for monitoring the hepatic and pulmonary toxicities of methotrexate. (20)

(2) Discuss the aetiopathogenesis clinical features and current management of Kawasaki disease. (15)

(3) Critically discuss the use and abuse of steroids in Rheumatology. (15)

II. Short notes : (6 × 5 = 30)

(a) Anti Rheumatic medications during pregnancy.

(b) Toxicity of d-Penicillamine.

(c) The use of dapsone in Rheumatic diseases.

(d) Complication of systemic onset juvenile rheumatoid arthritis.

(e) Haemophilia and the joints – management.

(f) Thomas Sydenham's contribution to Rheumatology.

[KR 023]

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D.M. DEGREE EXAMINATION.

Branch IX — Rheumatology

Paper III — CLINICAL PHARMACOLOGY,
REHABILITATION SURGERY SPECIAL PROBLEM
RELATED TO RHEUMATIC DISEASES —
PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES

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 questions :

1. Write changing concepts of non-steroidal anti inflammatory drugs. (20)
2. Describe management of Juvenile idiopathic arthritis. (15)
3. Discuss rehabilitation of the following : Hip and Knee arthroplasty. (15)

II. Short notes : (6 × 5 = 30)

- (a) Disease modifying anti rheumatic drugs (DMARDs) in pregnancy.
 - (b) Reflex sympathetic dystrophy.
 - (c) Orthotic management in rheumatology.
 - (d) Evaluation of prosthetic knee joint.
 - (e) Infections in systemic Lupus Erythematosus (SLE).
 - (f) Management of Takayasu's arteritis.
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August 2008

[KT 023]

Sub. Code: 1353

D.M. DEGREE EXAMINATION

(Higher Specialities)

(Revised Regulations)

Branch IX – Rheumatology

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY SPECIAL PROBLEMS RELATED TO
RHEUMATIC DISEASES – PAEDIATRIC
RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Discuss biologic therapies for systemic lupus erythematosus.
2. Describe the various nonpharmacologic treatment options in osteoarthritis.

II. Write short notes on:

10 X 6 = 60 Marks

1. Disease modifying antirheumatic drugs (DMARDs) during lactation.
 2. Disease modifying osteoarthritic drugs (DMOADs)
 3. Unicompartamental knee arthroplasty.
 4. Vertebral Kyphoplasty.
 5. RANK-RANK ligand and its therapeutic manipulation in osteoporosis.
 6. Glucocorticoid induced osteoporosis.
 7. Sitaxsentan.
 8. Systemic onset Juvenile Idiopathic Arthritis.
 9. Intra-articular therapies.
 10. Macrophage activation Syndrome.
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August 2009

[KV 023]

Sub. Code: 1353

D.M. DEGREE EXAMINATION

(Higher Specialities)

Branch IX – RHEUMATOLOGY

(Revised Regulations)

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES**

Q.P. Code: 161353

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 immunological and clinical changes in systemic lupus erythematosus during pregnancy. Briefly mention the differential diagnosis of flare up of lupus nephritis in pregnancy and its management strategies.
2. Describe in detail about the mechanism of action, potential uses, side effects and major clinical trials of Rituximab in various rheumatological disorders. Discuss the problem and prospects of its use in India.

II. Write short notes on:

10 x 6 = 60

1. Core sets of outcome measures in clinical trials of ankylosing spondylitis.
2. Current role of synovectomy in rheumatic diseases.
3. Periodic fever syndromes in children.
4. Management of polyarticular juvenile idiopathic arthritis.
5. Rheumatological manifestations of hepatitis B infection.
6. Diagnosis of Kawasaki disease.
7. Management of neonatal lupus syndrome.
8. Shin splints.
9. Primary cementless total hip arthroplasty.
10. Abatacept.

AUGUST 2010

[KX 023]

Sub. Code: 1353

D.M. DEGREE EXAMINATION

**(Super Specialities)
(Revised Regulations)**

Branch IX – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three hours

Maximum: 100 Marks

ANSWER ALL QUESTIONS

Draw suitable diagrams wherever necessary.

I. Essays:

2 x 20 = 40 Marks

1. Discuss classification and Epidemiology of Juvenile Arthritis.
2. Discuss current concepts of Neuropsychiatric Lupus.

II. Write short notes on:

10 X 6 = 60 Marks

1. Bosentan.
2. Radiology scoring in RA.
3. Disease modifying drugs in Osteoarthritis.
4. Principles of arthritis surgery.
5. Uveitis in spondyloarthropathies.
6. Kawasaki's disease.
7. Strontium Ranelate.
8. Acid Loading Test.
9. Steroid induced osteoporosis.
10. Rehabilitation in Juvenile idiopathic arthritis.

August 2011

[KZ 023]

Sub. Code: 1353

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

BRANCH IX – RHEUMATOLOGY

**CLINICAL PHARMACOLOGY, REHABILITATION SURGERY, SPECIAL
PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC
RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES**

Q.P. Code: 161353

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

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss in detail about the principles of arthritis surgery.	11	35	15
2. Discuss the epidemiology, etiology, pathogenesis, Clinical features, diagnosis and treatment of familial Mediterranean fever.	11	35	15

II. Write notes on :

1. Rheumatic diseases and pregnancy.	4	10	7
2. Joint play techniques.	4	10	7
3. Stinchfield test.	4	10	7
4. Transient osteoporosis of the hip.	4	10	7
5. Complex regional pain syndrome (Type I).	4	10	7
6. Talo-crural joint arthritis.	4	10	7
7. Leeds Early Arthritis Project (LEAP).	4	10	7
8. Child Health Assessment Questionnaire.	4	10	7
9. Efalizumab.	4	10	7
10. Proteomics in antiphospholipid syndrome.	4	10	7

[LB 023]

AUGUST 2012

Sub. Code: 1353

D.M – RHEUMATOLOGY

**Paper – III CLINICAL PHARMACOLOGY, REHABILITATION SURGERY,
SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC
RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES**

Q.P. Code: 161353

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

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss criteria, cause, pathogenesis, clinical features, investigations and treatment of Juvenile Dermatomyositis.	16	35	15
2. Write essay on criteria, epidemiology, clinical features, investigations and treatment of Henoch – schonlein purpura.	16	35	15

II. Write notes on:

1. What are neonatal lupus syndromes? Discuss in brief.	4	10	7
2. What are the common causes of forefoot pain?	4	10	7
3. What are the causes of arthritis of the temporomandibular joint? Discuss its internal derangement.	4	10	7
4. How can you divide scleritis? Discuss scleritis in relation to rheumatic diseases.	4	10	7
5. What are the skin manifestations of sjogren's syndrome?	4	10	7
6. How will you classify panniculitis?	4	10	7
7. What are the cardiac manifestations of Rheumatoid Arthritis?	4	10	7
8. What are the respiratory manifestations of Relapsing Polychondritis?	4	10	7
9. Isotonic and Isometric Exercises.	4	10	7
10. Febuxostat.	4	10	7

D.M. – RHEUMATOLOGY
Paper – III CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES

Q.P.Code: 161353

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Describe the genetics, pathogenesis, clinical manifestations, investigations, diagnosis and treatment of hyperimmunoglobulinemia D with recurrent fever syndrome.
2. Describe the proposed criteria, cause, pathogenesis, clinical features, diagnosis, diagnostic tests and treatment of Calcium Pyrophosphate Dihydrate (CPPD) deposition disease.

II. Write notes on:

(10X7=70)

1. What are the cytokines involved in reactive arthritis? Add a note on them.
2. What are the major postulated candidate genes in osteoarthritis?
3. What is Alefacept? Add a note on it.
4. What is Freiberg's disease? Write briefly on it.
5. What is Yunus and Masi criteria for childhood fibromyalgia?
6. What is trigger point therapy? Add a note on it.
7. What are the newer modalities of treatment of osteonecrosis?
8. How many types of osteogenesis imperfecta are there? Name them.
9. What is juvenile fibromatosis?
10. What is the molecular pathology of vascular type of Ehlers-Danlos syndrome?

[LF 023]

AUGUST 2014

Sub. Code: 1353

D.M. – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY,
SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES –
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q. P. Code: 161353

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 criteria, aetio-pathogenesis, investigations and treatment of Sjogren's syndrome.
2. Write an essay on Eye and Rheumatic Diseases.

II. Write notes on:

(10 x 7 = 70)

1. Hand and Wrist surgery in Rheumatoid arthritis
2. Physiotherapy of Osteoarthritis
3. Antiphospholipid Syndrome in Pregnancy
4. Childhood Scleroderma
5. Tumour Necrosis Factor Receptor -Associated Periodic Syndrome (TRAPS)
6. Vaccinations in Rheumatic Diseases
7. Pauciarticular Juvenile Idiopathic Arthritis
8. Myofascial pain syndromes
9. Non-steroidal Anti-inflammatory drugs in kidney disease
10. Kawasaki disease.

[LH 023]

AUGUST 2015

Sub. Code: 1353

D.M. – RHEUMATOLOGY

**PAPER III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY,
SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC
RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES**

Q.P. Code: 161353

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Classification, and Etiopathogenesis of Pulmonary arterial hypertension (PAH); describe PAH in rheumatological conditions in detail. Evaluation and work up for PAH. Therapeutics in PAH.
2. Mechanism of action of Glucocorticoids.

II. Write notes on :

(10 x 7 = 70)

1. Familial Mediterranean Fever.
2. Vaccination in rheumatology.
3. Management of osteoporosis.
4. Complex regional pain syndrome (CRPS).
5. Hepatitis B and Hepatitis C in autoimmunity.
6. Interleukin 1 (IL1) trap.
7. Management of gout.
8. Trials in Juvenile idiopathic arthritis (JIA).
9. Biologics in pregnancy.
10. Neonatal lupus.

[LI 023]

FEBRUARY 2016

Sub. Code: 1353

D.M. – RHEUMATOLOGY

**PAPER III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY,
SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES –
PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES**

Q.P. Code: 161353

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 15 = 30)

1. Write an essay on musculoskeletal syndromes in malignancy.
2. Write an essay on drugs targeting IL17/23 axis.

II. Write notes on :

(10 x 7 = 70)

1. Disease modifying anti osteoarthritis drugs (DMAODS).
2. Mechanism of action of hydroxychloroquine.
3. Clinical features and management of Relapsing Polychondritis.
4. Diffuse Skeletal Idiopathic Hyperostosis.
5. Progressive pseudo-rheumatoid dysplasia.
6. Alphavirus arthritis.
7. Diffuse infiltrative lymphocytosis syndrome.
8. Classify familial auto-inflammatory diseases.
9. Approach to a patient with corneal melt.
10. Congenital heart block.

D.M. – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P.Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write an essay on Still's Disease in Children.
2. Discuss in detail about the Heart in Rheumatic diseases.

II. Write notes on:

(10 x 7 = 70)

1. Surgery for Osteonecrosis.
2. Physiotherapy for myositis.
3. Rheumatoid Arthritis and Pregnancy.
4. Cryopyrin associated Periodic syndromes.
5. Ustekinumab.
6. Reactive arthritis in children.
7. Transient Synovitis of the Hip.
8. Biologics in pregnancy.
9. IL I Receptor antagonists.
10. Pyoderma Gangrenosum.

D.M. – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P.Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write an Essay on kidney and Rheumatic Diseases.
2. Discuss in detail about the PRES criteria for classification of Childhood Vasculitis and discuss in detail about Henoch- Schonlein Purpura.

II. Write notes on:

(10 x 7 = 70)

1. T cell Targeted Therapies.
2. Spine surgery in Rheumatology.
3. Disease modifying agents in pregnancy.
4. Osteochondritis dissecans.
5. Enthesitis Related Arthropathy.
6. Calcineurin inhibitors.
7. Splints in Rheumatology.
8. Osgood Schlatter disease.
9. Management of Acute Rheumatic Fever.
10. Palmoplantar fasciitis.

D.M. – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P.Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss mechanisms of action, indications, contraindications, side effects and advantages of intravenous immunoglobulin (IVIG) in autoimmune and primary immunodeficiency disorders in rheumatology.
2. What are regulatory B cells? Discuss B cells blockade in rheumatology with mention of important trials.

II. Write notes on:

(10 x 7 = 70)

1. Juvenile dermatomyositis, compare and contrast with adult onset disease.
2. Assessment of Fibromyalgia severity.
3. Dietary modification of arthritic and autoimmune diseases.
4. Toxicity of immunosuppressive drugs in pregnancy and lactation. Mention safer ones in everyday practice.
5. Ehler-Danlos syndrome.
6. Pyoderma gangrenosum.
7. Cardiovascular risk in rheumatic diseases.
8. Pharmacogenomics in rheumatology.
9. Pathogenesis and management of Kawasaki disease.
10. Rheumatic manifestations of cocaine use.

D.M. – RHEUMATOLOGY

Paper III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES

Q.P.Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Genetics of gout. Write briefly on ACR 2012 recommendation of treatment of gout. Mention the major trials on biologics in the treatment of gout.
2. Classify Juvenile idiopathic arthritis (JIA). Describe briefly on pathogenesis of juvenile idiopathic arthritis. Write note on diagnosis and management of enthesopathy related arthritis (ERA).

II. Write notes on:

(10 x 7 = 70)

1. Imaging in osteoarthritis.
2. Mechanism of action of methotrexate.
3. Compare and contrast therapeutic efficacy and toxicity between Mylophenolate (MMF) and cyclophosphamide.
4. Hypertrophic osteoarthropathy.
5. Non pharmacological therapy of chronic pain disorders.
6. Rheumatic manifestation of diabetes mellitus.
7. Post streptococcal reactive arthritis.
8. Palmoplantar fasciitis.
9. Physical therapy in ankylosing spondylitis.
10. Intended copy versus biosimilars.

D.M. – RHEUMATOLOGY

Paper III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Describe structure mechanisms of action, pharmacology, indication and contraindication of mycophenolate.
2. Long term outcome of IgA related vasculitis in adults and children.

II. Write notes on:

(10 x 7 = 70)

1. Strontium.
2. Assessing joint hypermobility and their differentials .
3. Jacobson's relaxation technique.
4. Synoviorthesis.
5. Pregnancy outcome of systemic sclerosis.
6. Compare and contrast enthesopathy related arthropathy (ERA) vs Juvenile ankylosing Spondylitis.
7. Leukaemic arthropathy.
8. Differentials and treatment of Renal tubular acidosis.
9. Thio purine methyl transferase.
10. Cock up splint.

(LR 023)

NOVEMBER 2020
(AUGUST 2020 SESSION)

Sub. Code: 1353

D.M. – RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss about JAK - STAT pathway and various therapies available in detail with appropriate trial.
2. Etiology, pathogenesis, classification and treatment of juvenile idiopathic arthritis.

II. Write notes on:

(10 x 7 = 70)

1. Post streptococcal arthritis
2. Benepali(SB4)
3. Ixekizumab
4. Impulse oscillometry in systemic sclerosis
5. Inflammatory myositis in pregnancy
6. SERENE study
7. Terminal adrenal insufficiency
8. Management of cytokine storm syndrome in Covid19
9. DMARDs usage and total joint arthroplasty
10. Denosumab

D.M. – RHEUMATOLOGY**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES***Q.P. Code: 161353***Time: Three Hours****Maximum: 100 Marks****I. Elaborate on: (2 x 15 = 30)**

1. Describe in brief about the JAK-STAT signalling pathways and the various therapies available till date related to this pathway. Write in detail about first of these molecules being used in Rheumatology with the appropriate trials.
2. Classify Juvenile idiopathic arthritis as per ILAR criteria. Explain the management and complications of systemic onset JIA.

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

1. Genetics, clinical features and management of progressive Pseudo-rheumatoid dysplasia.
2. Classify cryopyrin associated periodic syndromes and write a note on clinical features, diagnosis and management of each of them.
3. Indications, surgical procedure in brief and post operative care in primary cementless total hip arthroplasty.
4. What are the non-pharmacological management strategies for axial spondyloarthritis?
5. Enumerate the rheumatological causes of corneal melt. How would you investigate and what are the management options for corneal melt?
6. A 32-year-old lady is diagnosed to have SLE with lupus nephritis class IV. She presents to your clinic with hypertension and facial swelling, with a sub-nephrotic range proteinuria at 28 weeks of gestational age. What differential diagnoses would you consider and how would you differentiate these conditions? How will you manage this lady?
7. Mention the clinical features, diagnostic approach and management of pigmented villonodular synovitis.
8. Adult vaccination in patients with autoimmune rheumatic diseases, with focus on biological and small molecule DMARD initiation.
9. Elaborate on the mechanisms of action of hydroxychloroquine.
10. What are the musculoskeletal syndromes that develop as a manifestation of paraneoplastic process? Briefly mention the malignancies and the clinical setting of each syndrome.

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

[DM 0822]

AUGUST 2022

Sub. Code :1353

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**Paper III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

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

1. Write in detail about the management of rheumatic diseases during pregnancy, use of immunomodulants and the management and outcome of pregnancy in SLE with secondary antiphospholipid antibody syndrome.
2. Clinical features, complications of childhood SLE and enumerate various disease activity indices used in follow up of disease in children.

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

1. Drugs acting on Calcineurin pathway and uses in Rheumatological practice.
2. Neonatal Lupus.
3. Osteoarticular brucellosis.
4. Chronic inflammatory viral arthritis.
5. Tuberculous spondylodiscitis.
6. Beta2 microglobulin Amyloidosis.
7. Pulmonary Sarcoidosis.
8. HIV Vasculitis.
9. Discuss Interferon signature diseases and Interferonopathies.
10. Pathogenesis of fibromyalgia and treatment.

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[DM 0223]

FEBRUARY 2023

Sub. Code :1353

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**PAPER III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES – PAEDIATRIC RHEUMATOLOGY, PREGNANCY
AND RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

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

1. Treat to target in juvenile idiopathic arthritis.
2. Target specific small molecules in rheumatology-Elaborate mechanism of actions, current evidence and future perspectives.

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

1. Approach to patients with recurrent foetal heart blocks.
2. How would you manage a patient of rheumatoid arthritis with atlanto-axial dislocation.
3. Chalk out a plan to prevent steroid induced osteoporosis in your patients receiving high dose glucocorticoids.
4. Hydroxychloroquine: Mechanisms of therapeutic action and adverse events.
5. Discuss the extra criteria manifestations of primary antiphospholipid antibody syndrome and their treatment.
6. Discuss the optimum approach to identify and treat cardiovascular risk in patients with autoimmune diseases.
7. Mechanism of action of high dose IVIG.
8. Elaborate rehabilitation measures for various hand deformities in Rheumatoid arthritis.
9. Interferonopathies.
10. Role of surgical management in large vessel vasculitis.

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

[DM 0823]

AUGUST 2023

Sub. Code :1353

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**PAPER III – CLINICAL PHARMACOLOGY, REHABILITATION
SURGERY, SPECIAL PROBLEMS RELATED TO RHEUMATIC
DISEASES, PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND
RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Write in detail about Anticytokine therapies in pregnancy associated Rheumatic diseases and Paediatric Rheumatic Diseases.
2. Elaborate on Rheumatic Paraneoplastic syndromes-Link between Malignancy and Autoimmunity.

II. Write notes on:

(10 x 7 = 70)

1. Modified release Prednisolone.
2. Differentiate trigger and tender points.
3. Hip Rheumatoid arthritis and hip protectors.
4. Bisphosphonates therapy.
5. Lupus Vasculitis.
6. Wild type – Transthyretin Amyloidosis.
7. Juvenile Scleroderma.
8. Uricosuric agents used in gout.
9. Surgical therapy for Primary osteoarthritis of knees.
10. Covid related Paediatric Hyperinflammatory syndrome.

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

[DM 0124]

JANUARY 2024

Sub. Code :1353

D.M. - CLINICAL IMMUNOLOGY AND RHEUMATOLOGY

**PAPER III – CLINICAL PHARMACOLOGY, REHABILITATION SURGERY,
SPECIAL PROBLEMS RELATED TO RHEUMATIC DISEASES,
PAEDIATRIC RHEUMATOLOGY, PREGNANCY AND RHEUMATIC DISEASES**

Q.P. Code: 161353

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Discuss the various trials in Lupus nephritis.
2. Discuss the comprehensive rehabilitation program in the management of Rheumatoid arthritis.

II. Write notes on:

(10 x 7 = 70)

1. Localised scleroderma.
2. Discuss the preventive strategies in Rheumatic diseases and caveats.
3. Ocular manifestations of Sarcoidosis.
4. Discuss pregnancy outcome in Scleroderma.
5. Treatment of Chronic Kidney disease associated Mineral and bone disorders.
6. Management of BCP crystal deposition disease.
7. Genomic effects of Glucocorticoids.
8. Neuro Behcet's syndrome.
9. Topiroxostat.
10. Vaccination recommendations in Auto immune inflammatory rheumatic diseases.
