<u>Hamdard Institute of Medical Sciences and Research</u> <u>Department of Medicine</u>

1. CLINICAL ELECTIVE

Name of the block	Block 2			
Name of the elective	Hematology – Anemia			
Location	Medical college hospital			
Name of the internal preceptor	Dr Rosmy Jose			
Name of the external preceptor				
Learning objectives of the	1. To identify anemia (based on history and physical			
elective	examination).			
	Knowledge of preliminary workup for anemia.			
	3. To counsel patient about dietary requirement.			
	4. To manage anemia on OPD basis.			
	To learn about indications for transfusion.			
Number of the student	2			
Prerequisites for elective	Must have received necessary immunization.			
List of activities of student	1. Participate in OPD.			
participation	2. Participate in teaching sessions in department.			
	3. Present two fully worked up case in teaching			
	session.			
Learning resources	Harrison's principle of internal medicine.			
Portfolio entries required	Documentation of worked up cases in log book.			
	Feedback from preceptor.			
Log book entry required	Completion of posting signed by preceptor.			
Assessment	Participation in OP evaluation of patients.			
	Case presentation.			
	Attendance.			
Other comments				

2. CLINICAL ELECTIVE

Name of Elective : Care of patients on mechanical ventilation

: HAHC Hospital, HIMSR

Name of the Supervisor : Dr. Arvind Kumar

Learning Objective

: Understand the indications, contraindications, and complications of mechanical ventilation.

Develop skills in setting up, managing, and weaning patients from mechanical ventilation.

Appreciate the importance of multidisciplinary teams in caring for mechanically ventilated patients.

Familiarize yourself with current guidelines and best practices for mechanical ventilation.

Number of students

: 5

Duration

: 2 weeks

Clinical Experience

Intensive Care Unit (ICU) rotations: Participate in ICU rounds to manage mechanically ventilated patients.

Mechanical ventilation management: Assist in setting up, adjusting, and troubleshooting mechanical ventilation systems.

Patient assessment: Develop skills in assessing patients' respiratory status, including interpreting arterial blood gases (ABGs) and chest radiographs.

Multidisciplinary team meetings: Attend meetings to understand the role of different healthcare professionals in caring for mechanically ventilated patients.

Indications for mechanical ventilation: Respiratory failure, cardiac arrest, neurosurgical procedures.

Modes of mechanical ventilation: Assist-control (AC), synchronized intermittent mandatory ventilation (SIMV), pressure support ventilation (PSV).

Ventilator settings: Tidal volume, respiratory rate, inspiratory pressure, positive end-expiratory pressure (PEEP).

Complications of mechanical ventilation: Ventilatorassociated pneumonia (VAP), barotrauma, volutrauma.

Topics to Cover

Weaning from mechanical ventilation: Criteria for weaning, weaning protocols, non-invasive ventilation.

Learning Resources

: Textbooks: "Mechanical Ventilation" by Martin J. Tobin, "Principles of Critical Care" by Hall, Schmidt, Wood.

Online resources: American Thoracic Society (ATS) website, Society of Critical Care Medicine (SCCM)

website.

Journals: "American Journal of Respiratory and Critical Care Medicine", "Critical Care Medicine", "Intensive Care

Medicine".

Assessment: : Attendance

: Log book entries

: Dialysis rounds

3. CLINICAL ELECTIVE

Name of Elective : Diabetes and its complications

HAHC Hospital, HIMSR

Name of the Supervisor : Dr. Saood Mailk

Learning Objective Understand the pathophysiology and clinical presentation

of diabetes-related complications.

Develop skills in diagnosing and managing diabetes-related

complications.

Appreciate the importance of multidisciplinary teams in

managing diabetes-related complications.

Familiarize yourself with current guidelines and treatment options for diabetes-related complications.

Number of students : 5

Duration : 2 weeks

Clinical Experience

- 1. Outpatient clinics: Attend diabetes clinics to observe and assist in patient consultations.
- 2. Ward rounds: Participate in ward rounds to manage hospitalized patients with diabetes-related complications.
- 3. Multidisciplinary team meetings: Attend meetings to understand the role of different healthcare professionals in managing diabetes-related complications.

Topics to Cover

- 1. Diabetic retinopathy: Pathophysiology, diagnosis, treatment options, and management strategies.
- 2. Diabetic nephropathy: Pathophysiology, diagnosis, treatment options, and management strategies.
- 3. Diabetic neuropathy: Pathophysiology, diagnosis, treatment options, and management strategies.
- 4. Diabetic foot: Pathophysiology, diagnosis, treatment options, and management strategies.
- 5. Cardiovascular disease in diabetes: Pathophysiology, diagnosis, treatment options, and management strategies.

Learning Resources

: Textbooks: "Joslin's Diabetes Mellitus" by C. Ronald Kahn,
"Diabetes Mellitus: A Fundamental and Clinical Text" by
Derek LeRoith.

Online resources: American Diabetes Association (ADA) website, International Diabetes Federation (IDF) website.

Journals: "Diabetes Care", "Diabetologia", "Journal of Clinical Endocrinology and Metabolism".

Assessment: : Attendance

: Log book entries

: Dialysis rounds

4. **ELECTIVE Gastroenterology**

Name of the block	Block B			
Name of the elective	Gastroenterology (upper gastrointestinal bleeding)			
Location	Medical college hospital			
Name of the internal preceptor	Dr Bilal Wani			
Name of the external preceptor				
Learning objectives of the	6. To diagnosis patients with upper GI bleeding on			
elective	the basis of history and examination			
	7. To diagnose and find etiology on the basis of			
	endoscopy.			
	8. Management of upper GI bleeding.			
	9. Introduce students to endoscopy lab.			
Number of the student	2			
Prerequisites for elective	Endoscopy lab			
List of activities of student	4. Participate in OPD& IPD patients			
participation	5. Participate in teaching sessions in department.			
	6. Present two fully worked up case in teaching			
	session.			
Learning resources	Harrison's principle of internal medicine.			
	Sleisenger and Fodtran"s Gastrointestinal and liver desease			
Portfolio entries required	Documentation of worked up cases in log book.			
	Feedback from preceptor.			
Log book entry required	Completion of posting signed by preceptor.			
Assessment	Participation in evaluation of patients.			
	Case presentation.			
	Attendance.			
Other comments				

5. CLINICAL ELECTIVE

1	Name of Block		
2	Name of Elective	Insulin storage, delivery and precautions	
3	Location of hospital Lab or Research facility	Dept of Medicine, HIMSR, Delhi	
4	Name of internal preceptor	Dr. Pratibha	
5	Name of external preceptor		
6	Learning objectives of elective	At the end of 2 weeks, 3rd year MBBS students should be able 1. To learn about different types of insulin. 2. To understand Indications of insulin therapy. 3. To learn patient education while prescribing insulin. 4. Side effects of insulin therapy	
7	Number of students that can be accommodated in this elective	02	
8	Prerequisites for elective	Must have received necessary immunizations, Basic Life Support training	
9	List of activities of student participation	 Participate in OP and IP rounds Participate in afternoon teaching sessions 	
9.1	Week-1	of the department.	
9.2	Week-2	3. Present at least two cases that are fully	
9.3 9.4	Week-3 Week-4	worked up in the teaching session. 4. Participate in patient education and multidisciplinary team meetings.	
10	Learning Resources	Harrison's Textbook of Medicine	
11	Portfolio entries required	Assignments provided Two worked up case records that have been presented	
12	Log book entry required	Satisfactory completion of posting by a preceptor with a "meets expectation 'M' grade"	

13	Assessment	Attendance		
		Formative: Participation in OP & IP rounds and		
		team activities		
		Presentation of worked up cases		
		Documentation of attendance and required		
		portfolio and log book entries		
14	Other comments			

Week	Activities
Week-1	
	To learn about different types of insulin
Day-1	About types of insulin
	Mechanism of Action
	Onset, peak and duration of action of different
Day-2	types of insulin
	Type of insulin to use in different medical
Day-3	conditions.
	To know the indications of insulin therapy
Day-4	Management of T1DM and T2DM not
	controlled on OAD
	Pregnancy
Day-5	DKA
	HHS
	Stress related hyperglycaemia - Non diabetic
	critically ill patients, admitted in ICU, post
	major surgical or trauma patients

Week- 2	
	To learn Patient education while prescribing
	insulin
Day-1	Insulin storage in refrigerator
	Appropriate dosing
	Need of optimisation of insulin therapy during
	pregnancy. weight gain or loss, major surgery
Day-2	or illness.
	Switch or rotate areas for insulin shot
	SMBG
Day-3	Take meal within 30 min of insulin intake.
	Warning signs of Hypoglycaemia
	3 - 3 - 3 - 3 - 4 - 3 - 4 - 3 - 4 - 4 -
	Side effects of insulin therapy
Day-4	Hypoglycaemia - signs, symptoms and
	management
	Electrolyte disturbance
	Weight gain
Day-5	Pain at injection site
	Lipodystrophy

6. CLINICAL ELECTIVE

Name of Elective : Renal Replacement HAHC Hospital, HIMSR

Name of the Faculty : HAHC Hospital Dialysis Unit

Name of the Supervisor : Dr. Mohd. Ashraf Khan

Learning Activity : Daily round on patients on hemodialysis

a) See wide range of renal and electrolyte disorders in

patients with AKI or CKD

b) Exposure to Hemodialysis unit

c) Participate in patients education

d) Prepare at least 2 cases

Learning Objective : At the end of posting students should be able to

(a) Know indications & criteria for renal replacement therapy

replacement therapy

(b) Type of renal replacement therapy

(c) Principals of hemodialysis & peritoneal dialysis

(d) Complications of hemodialysis

Number of students : 2 (Three)

Duration : 2 weeks

Learning Resources : Harrison text book of Medicine Brenner & Rector's text

book of nephrology

List of activities

i. Daily rounds of all patients with CKD

ii. See wide range of renal & electrolyte disorders in patients admitted with acute or chronic renal failure

iii. Exposure to Hemodialysis unit/ward

iv. Know types of renal replacement therapy

v. Criteria/ indications for hemodialysis

vi. Complications during dialysis

Assessment: : Attendance

: Log book entries

: Dialysis rounds

7. CLINICAL ELECTIVE

Name of Elective : Rheumatology and exposure to various rheumatic diseases

HAHC Hospital, HIMSR

Name of the Supervisor : Dr. Dharmander Singh

Learning Objective 1. Understand the diagnosis and management of common

rheumatic disease.

2. Develop skills in musculoskeletal examination.

3. Appreciate role of multi-disciplinary team in

rheumatology care

Familiarize yourself with rheumatology specific

investigations is and treatment.

Number of students : 5

Duration : 2 weeks

Learning Resources

: Textbooks: "Rheumatology" by Anthony J. Pinsonneault,
"Kelley's Textbook of Rheumatology" by Gary S. Firestein.
Harrison text book of Medicine

Online resources: American College of Rheumatology (ACR) website, European League Against Rheumatism (EULAR) website.

Journals: "Arthritis & Rheumatology", "The Lancet Rheumatology"

Clinical Experience

- 1. Outpatient clinics: Attend rheumatology clinics to observe and assist in patient consultations.
- 2. Ward rounds: Participate in ward rounds to manage hospitalized patients with rheumatic diseases.
- 3. Joint injections and aspirations: Assist in performing joint injections and aspirations under supervision.
- 4. Musculoskeletal examinations: Practice musculoskeletal examinations on patients with various rheumatic conditions.

Topics to Cover

- 1. Rheumatoid arthritis: Pathophysiology, diagnosis, treatment options, and management strategies.
- 2. Osteoarthritis: Epidemiology, diagnosis, treatment options, and management strategies.
- 3. Systemic lupus erythematosus (SLE): Pathophysiology, diagnosis, treatment options, and management strategies.
- 4. Gout and pseudogout: Diagnosis, treatment options, and management strategies.
- 5. Spondyloarthritis: Diagnosis, treatment options, and management strategies.

Learning Resources

: Textbooks: "Rheumatology" by Anthony J. Pinsonneault,
"Kelley's Textbook of Rheumatology" by Gary S. Firestein.
Harrison text book of Medicine

Online resources: American College of Rheumatology (ACR) website, European League Against Rheumatism (EULAR) website.

Journals: "Arthritis & Rheumatology", "The Lancet Rheumatology"

Assessment: : Attendance

: Log book entries

: Dialysis rounds

8. CLINICAL ELECTIVE

Name of the block	Block 2		
Name of the elective	Cardiology (Approach to patient with chest pain)		
Location	Medical college hospital		
Name of the internal preceptor	Dr Shreeraz Alam / Dr Ameen Jariya		
Name of the external preceptor			
Learning objectives of the	10. To take proper history of a patient with chest pain.		
elective	11. ECG corealtion with chest pain.		
	12. ECHO, TMT, HOLTER investigations done with		
	results and corelation		
Number of the student	2		
Prerequisites for elective	Cardiology OPD ECHO lab		
List of activities of student	7. Participate in OPD and IPD patients.		
participation	8. Participate in teaching sessions in department.		
	9. Present five fully worked up case in teaching		
	session.		
Learning resources	Harrison's principle of internal medicine.		
Portfolio entries required	Documentation of worked up cases in log book.		
	Feedback from preceptor.		
Log book entry required	Completion of posting signed by preceptor.		
Assessment	Participation in evaluation of patients.		
	Case presentation.		
	Attendance.		
Other comments			