Clinical Pathology Appointment

2012/13 Batch – Group 1

Programme

08.01.2018 – 8.30 am – 9.00 am - Introduction

1st Week	Groups assigned to lab work	Groups assigned to blood bank
9.00 – 11.00 am	Lab work	Blood bank
11.00 – 12.00 noon	Lecture	

2nd Week	Groups assigned to lab work	Groups assigned to blood bank
8.00 – 9.00 am	THP Lab Demonstration	Blood bank
9.00 – 11.00 am	Lab work	Blood bank
11.00 – 12.00 noon	Lecture	

3rd Week	Groups assigned to lab work	Groups assigned to blood bank
8.00 – 9.00 am	THP Lab Demonstration	Blood bank
9.00 – 11.00 am	Lab work	Blood bank
11.00 – 12.00 noon	Lecture	

Please find attached the details of the

- Lectures
- Laboratory demonstrations
- Small groups and their assigned sections

- Objectives and Tasks to be completed are uploaded on the moodle in Year 3.

Clinical Pathology Appointment 2012/13 Commencing on 08.01.2018 (6th Clerkship)
Teaching Programme - Lecture

	Date	Time	Lecture Topic	Lecturer	Venue
1st Week	08.01.2018	8.30 - 9.00 am	Introduction	Dr. E. Siriweera	THP Learning Room 1/2 or Old Auditorium
	09.01.2018	11.00 - 12.00 noon	Specimen collection in histopathology	Dr. E. Siriweera	Pathology Seminar Room
	10.01.2018	11.00 - 12.00 noon	Clinical use of blood and blood components	Dr. G. Karunadhipathy	Pathology Seminar Room
	11.01.2018	11.00 - 12.00 noon	Basic tests in haematology	Dr. M. Ratnayake/SR Haemat	Pathology Seminar Room
	12.01.2018	11.00 - 12.00 noon	Special tests in haematology	Dr. M. Ratnayake/SR Haemat	Pathology Seminar Room
2nd Week	15.01.2018	11.00 – 12.00 noon	Transfusion reaction and management	Dr. G. Karunadhipathy	Pathology Seminar Room
	16.01.2018	11.00 - 12.00 noon	CSF Analysis	Dr. R. Waduge	Pathology Seminar Room
	17.01.2018	11.00 - 12.00 noon	Universal precautions and laboratory safety	Dr. N. Dissanayake/ Dr. V. Liyanapathirana	Com: Med: Seminar Room
	18.01.2018	11.00 - 12.00 noon	Specimen collection in cytology	Dr. S. Wijetunge	Pathology Seminar Room
	19.01.2018	11.00 - 12.00 noon	Liver function tests	Dr. S. Jayasinghe	Pathology Seminar Room
3rd Week	22.01.2018	11.00 - 12.00 noon	Renal function tests	Dr. S. Jayasinghe	Pathology Seminar Room
	23.01.2018	11.00 - 12.00 noon	Specimen collection, transport and lab processing in microbiology	Dr. N. Dissanayake/ Dr. V. Liyanapathirana	Com: Med: Seminar Room
	24.01.2018	11.00 - 12.00 noon			
	25.01.2018	11.00 - 12.00 noon	OSPE	Dr. E. Siriweera	Pathology Practical Lab
	26.01.2018	11.00 - 12.00 noon	OSPE discussion	Dr. E. Siriweera	Pathology Seminar Room

Dr. E. Siriweera

Module Coordinator/Clinical Pathology Appointment

Small groups and their assigned sections for lab work from 9.00 - 11.00 am

Small Group	1st Week Mon 08.01	Tue 09.01	Wed 10.01	Thu 11.01	Fri 12.01	2nd Week Mon 15.01	Tue 16.01	Wed 17.01	Thu 18.01	Fri 19.01	3rd Week Mon 22.01	Tue 23.01	Wed 24.01	Thu 25.01	Fri 26.01
1 - 13	BB	BB	BB	BB	BB	Bio Chem	Bio Chem	Urine	Histo	Histo	Haemat	Haemat	Haemat	Micro	Micro
14 - 25	Haemat	Haemat	Haemat	Micro	Micro	BB	BB	BB	BB	BB	Bio Chem	Bio Chem	Urine	Histo	Histo
26 - 34	Bio Chem	Bio Chem	Urine	Histo	Histo	Haemat	Haemat	Haemat	Micro	Micro	BB	BB	BB	BB	BB

BB	Blood Bank
Haemat	Haematology Lab/Practical lab Path department
Micro	Microbiology Lab
Histo	Histopathology, Department of Pathology, Faculty of Medicine
Urine	Urine Lab/ Practical lab Path department
Bio Chem	Biochemistry Lab/Practical lab Path department

Dr. E. Siriweera
Module Coordinator/Clinical Pathology Appointment

Clinical Pathology Appointment 2012/13 Commencing on 08.01.2018 (6th Clerkship)
Laboratory demonstrations

2nd Week -

Monday (15.01.2018)	Tuesday (16.01.2018)	Wednesday (17.01.2018)	Thursday (18.01.2018)	Friday (19.01.2018)
8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am Histo Lab/Department of Pathology
Specimen collection Mrs. C. S. Herath	Haematology Mrs. R. Gafoor	Urine Analysis Mrs. J. Gunawardena	CSF Analysis Mrs. C. Samarakoon	Histopathology & Cytopathology Mrs. C. K. Jayasena

3rd week

Monday (22.01.2018)	Tuesday (23.01.2018)	Wednesday (24.01.2018)	Thursday (25.01.2018)	Friday (26.01.2018)
8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am THP Laboratory	8.00 - 9.00 am Histo Lab/Department of Pathology
Specimen collection Mrs. C. S. Herath	Haematology Mrs. N. D. Karunaratna	Urine Analysis Mr. P. U. B. Harangala	CSF Analysis Mrs. R. Jinasena	Histopathology & Cytopathology Mr. S. Weerasekara

Only for the two groups assigned to the laboratory/ Faculty Teaching Hospital Peradeniya.
The group doing Blood Bank will proceed to the blood back at 8.00am daily.

Dr. E. Siriweera
Module Coordinator/Clinical Pathology Appointment

Clinical Pathology appointment

Objectives

The students will rotate through haematology, biochemistry, histopathology and microbiology sections of the laboratory and the blood bank.

Duration – 3 weeks

At the end of the appointment the student is expected to

(1) Achieve the objectives stated under each section.
(2) Complete tasks in each section and submit a written report.

General objectives

1. Describe the universal precautions and laboratory safety procedures.
2. List the equipment and material needed in venipuncture
3. Observe and describe the correct procedure of venipuncture
4. List different kinds of specimen collection tubes and the samples collected for each tube
5. State how to correctly label the specimen container
6. State the details to be included in a request form
7. Name the anticoagulants and other chemicals used in collection tubes and their action
8. State the quantity of the samples collected for different tests.
9. Describe the process of specimen handling within the laboratory

Haematology Laboratory

Pre-requisite knowledge

1. Physiology of normal haemopoiesis
2. Response of the erythrocytes, leukocytes, and platelets to pathologic stimuli
3. physiology of coagulation
4. pathological basis of coagulation disorders

Students should be able to

1. Identify the following basic tests performed in the haematology lab
   - Full blood count
   - Blood picture
   - ESR
   - Basic coagulation tests (PT, APTT, BT)
2. List the indications for requesting the tests mentioned in 1
3. Describe the collection methods and errors of the test mentioned in 1
4. Describe how you would prevent the collection errors mentioned in 3
5. To interpret results of the tests mentioned in 1
6. List the equipments used in basic tests mentioned in 1
7. Know the normal reference ranges of the tests mentioned in 1

Biochemistry laboratory

Pre requisite knowledge

1. Physiological functions of the body
2. Normal constituents of body fluids
3. Pathological basis of the diseases of organ systems

The student should be able to,

1. Identify the following routine tests performed in the biochemistry lab
   - Plasma glucose (RBS, FBS, PPBS, OGTT)
   - Liver function tests
   - Renal function tests
   - Bone profile (calcium, phosphate magnesium, alkaline phospatase)
   - Serum electrolytes
   - Lipid profile
   - Urine full report
   - CSF full report
2. List the indications for requesting the tests mentioned in 1.
3. Describe the collection methods and errors of the tests mentioned in 1.
4. Describe how you would prevent the collection errors mentioned in 3.
5. To interpret results of the tests mentioned in 1.
6. List the equipments used in basic tests mentioned in 1.
7. Know the normal reference ranges of the tests mentioned in 1.
8. Recognize flags indicated in analyzer reports.
9. Identify investigations performed to assess renal functions and interpret abnormal test results in renal failure and urinary tract infections.
10. Identify investigations performed to assess liver functions and interpret abnormal test results in acute and chronic hepatitis, liver failure, prehepatic, hepatic and post hepatic jaundice.
11. State the tests performed in a CSF sample and interpret the results of abnormal reports to arrive at an aetiological diagnosis.
12. State the tests performed in a seminal fluid sample and know how to interpret the results of abnormal reports.
13. List bedside tests used for patient care (urine heat tests, Benedict tests, urine strip tests/dipstick, urine hcg)
14. Describe the procedure for such bedside testing and their interpretation.
15. List the biochemical investigations that are sent to reference laboratories and state the indications for the tests.

Tasks to be completed during the histopathology rotation

1. List 5 different types of specimens received in the histopathology laboratory and state the following
   A. Patient details and date received in the laboratory
   B. Indication for performing the test
   C. Transport medium used
   D. Comment on the request forms received with the specimens
   E. Comment on the specimen collection
   F. State the time taken to issue a report

Tasks to be completed during the chemical pathology rotation

1. List 5 tests performed in the biochemistry laboratory
2. Briefly describe how samples are collected for each of these tests
3. Identify an abnormal biochemistry report for each of the tests mentioned in 1.
4. For each of the reports
   4a. state the patient details and date of performing the test
   4b. interpret the results
   4c. discuss the possible causes for the abnormalities detected.

Tasks to be completed during the haematology rotation

1. Identify an abnormal report for each of the following tests
   a. Full blood count
   b. Erythrocyte sedimentation rate (ESR)
   c. Blood picture
   d. Prothrombin time (PT)
   e. Activated partial thromboplastin time (APTT)
2. In each of the tests mentioned in 1.
   a. Write down the patient details and date of performing the test
   b. State how the specimens were collected
   c. List the indications
   d. Comment on the request form
   e. Interpret the results
   f. Give possible causes for the results

Tasks to be completed during the Blood Bank rotation

1. Perform blood grouping and cross matching