

## **Practical examination – OSPE (Objective structured practical examination)**

Total marks = 80 marks

No marks for record in university practical exam

Practical exam marks to be divided as follows

Four Procedural stations = 40 marks

20 Response stations = 40 marks

### **Procedural stations:**

Four stations of 15 minutes each (Questions can be asked during the procedure)

1. Peripheral smear preparation and staining
2. Blood grouping
3. Urine examination (including sediments shown as charts)
4. Peripheral smear reporting (one out of the following)
  - a. Microcytic hypochromic anemia
  - b. Neutrophilia
  - c. Eosinophilia
  - d. Acute leukemia
  - e. Chronic myeloid leukemia

### **Response stations:**

20 stations of 3 minutes each

1. Gross specimens – 4 nos.
2. Histopathology slides – 4 nos.
3. Hematology slides – 2 nos.
4. Cytology slide – 1 no.

**(30% of the above should be in Clinico pathological correlation format i.e. 3 nos. in CPC)**

5. Instruments – 1 nos.
6. Charts – 5 nos.

7. CBC histogram – 1 no.
8. Clinical Pathology test interpretation – 1 no.
9. Correlative exercise with history (Specimens / slides combination) – 1 no.

### List of Gross specimens

Sl. No.	Gross specimens	Sl. No.	For demonstration only
1	Fatty liver	1	Amyloidosis
2	Calcinosis cutis	2	CVC spleen
3	Gangrene	3	Suppurative meningitis
4	Acute appendicitis	4	Lobar pneumonia
5	CVC liver	5	Lung abscess
6	Infarct spleen	6	Bronchiectasis
7	TB lymph node	7	Emphysema
8	TB lung	8	Pulmonary artery embolism
9	Atherosclerosis	9	Myocardial infarction
10	Pleomorphic adenoma	10	TB intestine
11	Peptic ulcer	11	Madura foot
12	Gastric carcinoma	12	Intussusception
13	Cirrhosis liver	13	Intestinal ulcer – TB, typhoid, amoebic
14	Chronic calculous cholecystitis	14	Adenocarcinoma colon
15	Carcinoma lung	15	Familial adenomatous polyposis
16	Renal stones with hydronephrosis	16	Hepatocellular carcinoma
17	Renal cell carcinoma	17	Chronic pyelonephritis
18	Seminoma testis	18	Ca bladder
19	Leiomyoma uterus	19	Carcinoma Penis
20	Carcinoma endometrium	20	Carcinoma cervix
21	Mature cystic teratoma	21	Dysgerminoma
22	Serous/ Mucinous cystadenoma ovary	22	Hashimoto's thyroiditis

23	Fibroadenoma	23	Adenoma thyroid
24	Carcinoma breast	24	Sequestrum
25	Multinodular goitre	25	Osteochondroma
26	Papillary carcinoma thyroid	26	Lipoma
27	Osteoclastoma	27	Lymphoma
28	Squamous cell carcinoma	28	Wilm's tumour
29	Basal cell carcinoma	29	Osteosarcoma
30	Malignant melanoma		

### List of Histopathology slides

Sl. no.	Histopathology slides	Sl. no.	For demonstration only
1	Fatty liver	1	Caseous necrosis
2	Calcinosis cutis	2	Amyloidosis
3	Coagulative necrosis (Infarction testis / spleen)	3	Granulation tissue
4	Acute appendicitis	4	Lobar pneumonia
5	TB lymph node	5	Tuberculoid leprosy
6	Lepromatous leprosy	6	Actinomycosis
7	Rhinosporidiosis	7	Aspergillosis
8	CVC lung	8	Myocardial Infarction
9	Atherosclerosis	9	Chronic pyelonephritis
10	Lipoma	10	Cirrhosis liver
11	Pleomorphic adenoma	11	Wilm's tumour
12	Hodgkin's lymphoma	12	Seminoma
13	Adenocarcinoma-colon	13	Secretory endometrium
14	Renal cell carcinoma	14	Leiomyoma
15	Fibroadenoma	15	Hydatidiform mole
16	Carcinoma breast	16	Serous cystadenoma/ Mucinous cystadenoma

17	Papillary carcinoma thyroid	17	Multinodular goitre
18	Teratoma ovary	18	Hashimoto's thyroiditis
19	Osteoclastoma	19	Follicular adenoma
20	Squamous cell carcinoma	20	Osteochondroma
21	Basal cell carcinoma	21	Osteosarcoma
		22	Meningioma
		23	Schwannoma
		24	Hemangioma
		25	Malignant melanoma

### List of Hematology slides

No.	For examination as spotters	No.	For demonstration only
1	Microcytic hypochromic anemia	1	Target cell
2	Macrocytic anemia	2	Sickle cell
3	Spherocytic anemia	3	Reticulocyte
4	Neutrophilia	4	Atypical lymphocyte
5	Eosinophilia	5	Toxic granules
6	Acute leukemia	6	MPO stain
7	Chronic myeloid leukemia	7	Megaloblast
8	Normoblast	8	Chronic lymphocytic leukemia
9	Megakaryocyte	9	Filaria
10	Plasma cell myeloma		
11	Aplastic anemia		
12	Malarial parasite – PV/PF		

### List of cytology slides

Sl .no	Cytology slides
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1.	Granuloma lymph node
2.	Fibroadenoma
3.	Carcinoma breast
4.	Papillary carcinoma thyroid
5.	Squamous cell carcinoma sputum / cervical smear
6.	Adenocarcinoma in body fluids

### List of instruments

Sl .no	Instruments
1	Lumbar Puncture Needle
2	Liver Biopsy Needle
3	Bone marrow Aspiration Needle
4	Wintrobe's Tube
5	Westergren's ESR Tube
6	Urinometer
7	Vacutainers
8	Blood collection bag
9	Ayre's spatula
10	Tissue capsule
11	Paraffin block
12	L-block

### List of charts

Sl. no	Charts with clinical history
1.	CSF analysis: Pyogenic meningitis
2.	CSF analysis: Tuberculous meningitis

3.	CSF analysis: Viral meningitis
4.	Liver function test: Hepatocellular jaundice
5.	Liver function test: Obstructive jaundice
6.	Liver function test: Hemolytic jaundice
7.	Liver function test: Acute viral hepatitis
8.	Thyroid function test: Hypothyroidism
9.	Thyroid function test: Hyperthyroidism
10.	Renal Function test- Acute glomerulonephritis
11.	Renal Function test- Chronic glomerulonephritis
12.	Renal function test: Nephrotic syndrome
13.	Cardiac function tests in acute coronary syndromes
14.	Semen analysis
15.	Autoimmune Hemolytic anaemia
16.	Sickle cell anaemia
17.	Thalassemia
18.	Hereditary Spherocytosis
19.	Multiple myeloma
20.	Lymphoma
21.	Bleeding disorder: Coagulation disorders
22.	Bleeding disorder: Platelet disorders
23.	CBC histogram: Iron deficiency anemia
24.	CBC histogram: Macrocytic anemia
25.	CBC histogram: Neutrophilia
26.	CBC histogram: Acute leukemia
27.	CBC histogram: Chronic myeloid leukemia
28.	CBC histogram: Chronic lymphatic leukemia

## **Viva voce**

Total marks: 20 marks

Total stations for viva: 4

Station 1: Clinical pathology and hematology

Station 2: General pathology

Station 3: Systemic pathology I

Station 4: Systemic pathology II