DEPARTMENT OF MICROBIOLOGY & SEROLOGY

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GENERAL INSTRUCTION ON SAMPLE COLLECTION

MICROBIOLOGY: The patients coming for Microbiological test should not take any antibiotic therapy prior to investigation. Ref: Test master list SNSC/CM/12A, 12B, 12C, 12D, 12E and 12F / Departmental manual for more details.

TEST MASTER LIST

DEPARTMENT OF MICROBIOLOGY

Collection procedure for tests under scope of NABL for SNSC Clinical Microbiology and Serology laboratory

S. No	Test code	Name of Test	Name of clinical specimen	Volume Criteria	Criteria for Acceptance of clinical specimen	Criteria for Rejection of Clinical specimen	Turn around time*	Temperature of Storage	Tariff
1	401	Grams Stain	Conjunctival Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	250
			Sputum	3-5mL	Freshly collected sputum	Contaminated with saliva	6-8 hours	2-8°C	
			Throat Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	6-8 hours	2-8°C	
2	402	KOH / Calcofluor Stain	Conjunctival Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	350
			Sputum	3-5mL	Freshly collected sputum	Contaminated with saliva	6-8 hours	2-8°C	
			Throat Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	6-8 hours	2-8°C	

3	**403**	Giemsa Stain	Conjunctival Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	**250**
			Throat Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	6-8 hours	2-8°C	
4	**404**	AFB Stain	Sputum	3-5mL	Freshly collected sputum	Contaminated with saliva	6-8 hours	2-8°C	**250**
			Throat Swab	One Swab Stick meant for direct smear	** (NA)	** (NA)	6-8 hours	2-8°C	
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	6-8 hours	2-8°C	
5	**411**	Aerobic Bacterial culture	Conjunctival Swab	One Swab Stick meant for culture	To be collected and transported in HBSS	If collected in a unsterile container	48 - 56 hours	2-8°C	**1700**
			Sputum	3-5mL	Freshly collected sputum in a sterile container	Contaminated with saliva	48 - 56 hours	2-8°C	
			Throat Swab	One Swab Stick meant for culture	To be collected in a sterile container	If collected in a unsterile container	48 - 56 hours	2-8°C	
6	**436**	Aerobic culture	Urine	5-10mL	Mid stream urine to be collected in a sterile container	If collected in a unsterile container, if the patient is on antibiotic therapy	2 days	2-8°C	**800**

7	**437**	Anaerobic Culture	Urine	5-10mL	Mid stream urine to be collected in a sterile container	If collected in a unsterile container, if the patient is on antibiotic therapy	48 - 56 hours	2-8°C	**900**
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	48 - 56 hours	2-8°C	
8	**412**	Fungal culture	Conjunctival Swab	One Swab Stick meant for culture	To be collected in a sterile container	If collected in a unsterile container	12 days	2-8°C	**900**
			Sputum	3-5mL for inoculation to all plates	Freshly collected sputum in a sterile container	Contaminated with saliva	12 days	2-8°C	
			Throat Swab	One Swab Stick meant for culture	To be collected in a sterile container	If collected in a unsterile container	12 days	2-8°C	
			Ocular specimens, non ocular specimens and biopsy	** (NA)	** (NA)	** (NA)	12 days	2-8°C	
9	**414**	Acantham oeba culture	Corneal scraping, Corneal biopsy, Contact lens solution, Contact lens	** (NA)	** (NA)	** (NA)	10 days	2-8°C	**340**

* Time taken from the receipt of specimen(s) in the Microbiology and Serology department to the time, soft copy of the reports will be available in the HMS format of the department

** The intraocular specimens are directly received in the Microbiology laboratory from the OPD or from OT

Ocular specimens: Conjunctival swab, Conjunctival scraping, Corneal scraping, Corneal button, Aqueous aspirate, Vitreous aspirate, Lens aspirate, Infected Suture, Infected buckle, Donor corneal rim (DCR), Iris tissue, Intra ocular lens (IOL), Contact lens, Capsular bag, Eviscerated material, Canalicular pus and orbital pus and any other ocular biopsy tissue, Sub retinal mass, and Scleral nodule, Lasik flap and Orbital biopsy.

Non-ocular and other clinical specimens: Throat swab, Sputum, Pus, Urine, Cerebro spinal fluid (CSF), Biopsy*, Nail clippings, Hair, Scrapings from genital lesions, Amniotic fluid, Bronchial wash, Ascitic fluid, Pleural fluid, Bronchoalveolar Lavage, Tracheal aspirate, Nasopharyngeal aspirate, Vesicle fluid, Synovial fluid, CAPD, Skin scraping, Gastric washing.

***Biopsy** – Bone marrow, Bone, Lymph node, Fine needle aspiration biopsy (FNAB), Sub retinal mass ,Abscess fluid, Gastric biopsy, Lung biopsy, Liver biopsy, Brain biopsy, Ileo caecal biopsy, Granuloma, Endometrial biopsy, Skin nodule or any other biopsy specimens.

TEST MASTER LIST

DEPARTMENT OF SEROLOGY

Collection procedure for Serological tests under scope of NABL for SNSC Clinical Microbiology and Serology laboratory

S. No	Test code	Name of Test	Sample to be collected (Vacutainer)	Volume Criteria[a]	Criteria for Acceptance of serum/plasma	Criteria for Rejection of serum/ plasma	Turn around time*	Temperature of Storage	Tariff
1.	202	Non Treponemal (RPR) and treponemal (TPHA) antibodies	Plain blood/ EDTA, Heparinized/ citrated Blood	2-4 mL	Free from RBCs, and of required volume	Grossly Haemolysed / contaminated/lipemic	2-3 days #	2-8°C	1000
2.	203	Rheumatoid arthritis (RA) Factor (Nephelometry)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed / contaminated/lipemic	2-3 days #	2-8°C	400
3.	218	C - Reactive protein (CRP) (Nephelometry)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed / contaminated/lipemic	2-3 days#	2-8°C	400
4.	317	HBs Ag, Antibodies to HCV, Non Treponemal (RPR) and Treponemal (TPHA) antibodies	Plain blood/ EDTA, Heparinized/ Citrated Blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed / contaminated/lipemic	24-36hours$	2-8°C	3200

5	**220**	Antibodies to HIV 1 and HIV 2 and HIV-1 p24 antigen (Screening and ELISA)	Plain blood/ EDTA, Heparinized/ citrated Blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	24-36 hours[$]	2-8°C	**1000**
6	**222**	Hepatitis B surface antigen (HBsAg) (Screening and ELISA)	Plain blood/ EDTA, Heparinized/ citrated Blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	24-36 hours[$]	2-8°C	**1000**
7	**260**	Antibodies to HBsAg	Plain blood/ EDTA, Heparinized/ Citrated Blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	3 days or two samples whichever is earlier	2-8°C	**880**
8	**223**	Antibodies to Hepatitis C virus (HCV) (Screening and ELISA)	Plain blood/ EDTA, Heparinized/ citrated Blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	24-36 hours[$]	2-8°C	**1200**
9	**206**	Anti nuclear antibody (Fluorescent and ELISA)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	2-3 days [#]	2-8°C	**2240**
10	**234**	IgG antibodies to cANCA (Proteinase3)	Plain blood/ EDTA, Heparinized/ Citrated plasma	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	2-3 days[#]	2-8°C	**1900**
11	**235**	IgG antibodies to pANCA (Myeloperoxidase)	Plain blood/ EDTA/ Heparin/ Citrated plasma	2-4mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	2-3 days[#]	2-8°C	**1830**
12	**233 A**	Antibodies to Aquaporin 4 (NMO – IgG) Antibodies to Myelin oligodentrocyte glycoprotein (MOG)	Plain blood/ EDTA, Heparinized/ Citrated Blood	2-4 mL	Free from RBCs and of required volume Transportation at 2–4^{0}C	Grossly Haemolysed/ Contaminated /lipemic	3 – 4 days or five samples whichever is earlier	-20°C	**8500**
			CSF	Not applicable	Transportation at 2 – 4^{0}C	Not applicable		2-8°C	

TEST MASTER LIST

DEPARTMENT OF MICROBIOLOGY AND SEROLOGY

Collection procedure for tests NOT UNDER SCOPE of NABL for SNSC Clinical Microbiology and Serology laboratory

S.No	Test code	Name of Test	Sample to be collected (Vacutainer)	Volume Criteria[a]	Criteria for Acceptance of serum/ plasma	Criteria for Rejection of serum/plasma	Turn around time*	Temperature of Storage	Tariff
1	**205**	Widal Test	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	24-30 hours	2-8°C	**350**
2	**217**	Anti streptolysin O (ASO) (Latex)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**500**
3	**219**	Serum Lysozyme assay	Plain blood	2-4mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**460**
4	**276**	Antibodies to dsDNA (Fluorescent)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/lipemic	2-3 days #	2-8°C	**1500**
5	**277**	Antibodies to SSA and SSB (LIA)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days #	2-8°C	**3000**
6	**458**	Bacterial culture-Blood culture by BACTEC (Fungi, Aerobic and Anaerobic bacteria)	Blood	10 mL for adults 5 mL for children below 5 yrs	Collected and inoculated immediatel y aseptically	Collected in a vacutainer with or without anticoagulant	14 days	Not applicable	**1600**
7.	**455**	AFB culture (LJ medium)	Ocular specimens (Refer to page 5)	Not applicabl e	Collected in a sterile container	Not collected in a sterile container, leaky container	42 days	2-8°C	**530**

8.	**490**	INVITRO ANTIFUNGAL SENSITIVITY TEST	Fungal isolate from Ocular specimens, non ocular specimens and biopsy (Refer to page 5)	** (NA)	Pure fungal isolate of a single organism	Contaminated fungal isolate	12 days	25°C	**1160**
9	**207**	Antibodies to *Toxoplasma gondii* (IgG and IgM)	Plain blood/ EDTA/ Heparin/ Citrated plasma	2-4mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**1760**
10	**210**	Antibodies to Rubella virus (IgG and IgM)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**1760**
11	**211**	Antibodies to CMV (IgG and IgM)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**1760**
12	**212**	Antibodies to HSV (IgG and IgM)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days#	2-8°C	**1760**
13	**274**	QuantiFERON – TB test Platinum IGRA test	Blood – Use only BD vacutainer heparin tubes provided with the kit.	2-4 mL	Collected in only BD vacutainer heparin tubes provided with the kit	Collected in ordinary anticoagulated vacutainer	2-3 days#	22-26°C	**3500**
14	**316**	TORCHES SCREENING	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2-3 days @	2-8°C	**8040**
15	**282**	Autologous serum preparation (for topical use)	Plain blood	2-4 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	2 hours	2-8°C	**750**
16	**283**	PRP preparation (for topical use)	ACD tube	7-8 mL	Free from RBCs and of required volume	Grossly Haemolysed/ contaminated/ lipemic	4-6 hours	2-8°C	**1000**

***:** Time taken from the receipt of specimen(s) in the Microbiology and Serology department to the time, soft copy of the reports will be available in the HMS format of the department

 # : Serology days: Tuesday/Thursday/Saturday: Samples received in the Microbiology department till 10.00am on the day of testing will be included and the report will be generated by 5.30 pm on the day of testing.

$: Serum Samples received in the Microbiology department till 10.00am will be included in that day for testing by ELISA for Antibodies to HIV 1 and HIV2, HBsAg and antibodies to HCV and the report generated by 5.30 pm on the day of testing. Samples received after 10.00 am will be included in the next working day.

a: volume of blood for patients ≤ 1 yr is 1.0-1.5ml

ACCEPTANCE / REJECTION CRITERIA FOR RECEIVING SPECIMEN AT SNSC LAB – MICROBIOLOGY AND SEROLOGY

	Acceptance Criteria	Rejection Criteria
1.	**Microbiology Collections:** Proper Collection and Transportation	1.Swabs submitted for culture not identified its **source** 2. Improper transport: a. Urine specimens for culture left at room temperature for more than two hours or refrigerated for more than 24 hours. b. Anaerobic cultures not transported in an anaerobic environment.
2.	All clinical specimen collected in sterile container for microbiology tests	Culture specimen received in unsterile containers/non-laboratory containers as evidenced by contamination of containers, leaking containers and containers with foreign material.
3.	Clinical specimen transported in appropriate transport medium for tests requested.	Samples which are not sufficient / Single swab submitted for multiple requests (for eg.direct smear study and culture for aerobic and anaerobic bacteria fungus and *Mycobacterium tuberculosis*./isolation of viruses etc)
4.	Samples collected before initiation of antibiotic therapy.	Samples collected after initiation of antibiotic therapy.
5.	Mid stream urine samples for pyogenic bacterial culture collected with aseptic precautions and transported within half an hour to laboratory	Urine samples (for pyogenic bacterial culture) collected immediately after performing fundus fluorescence angiogram. Twenty four-hour specimen collections for pyogenic urine culture
6.	Sputum sample should be examined by Grams stain and score of leucocytes and squamous epithelial cells to be determined as in procedure N of manual. The sample grouped under 4,5,6 grade is accepted for testing.	Sputum sample should be examined by Grams stain and score of leucocytes and squamous epithelial cells to be determined as in procedure N of manual. The sample grouped under 1,2,3 grade is not accepted for testing.

Note: If the specimens are sent for both Microbiological as well as Histopathological investigation, the specimen would be received in unfixed condition and half of the specimen should be sent to Histopathology lab from Microbiology laboratory.

	Acceptance Criteria	Rejection Criteria
	Serum samples that are clear without lysis or lipemic	Serum samples that are lysed, serum that look lipemic and turbid with bacterial growth.
	Serum sample sufficient for test requested	Serum sample insufficient for test requested
	Primary /Secondary sample as given in table 1 for respective tests.	Primary /Secondary sample not as given in table 1 for respective tests.