

MICROBIOLOGY EXTERNAL QUALITY ASSURANCE SCHEME

Under the aegis of Indian Association of Medical Microbiology

IAMM EQAS New Delhi

Department of Clinical Microbiology and Immunology Sir Ganga Ram Hospital, Rajinder Nagar, New Delhi-110060



Dr. Jaswinder K. Oberoi PT Coordinator - EQAS Dr. Neeraj Goel PT Coordinator - EQAS Dr. Sanghamitra Datta PT Quality Manager - EQAS Dr. Reena Raveendran PT Technical Manager - EQAS

Result (<u>Code No:</u> DLH911 / All India Institute of Medical Sciences, Rajkot)

Batch Name	33rd QC , July	Batch Marks	86
Start By Date	24-Jul-2023	Submit By Date	24-Aug-2023

Q1. Smear:

1.1: A 70 year old man presented with fever & cough of 3 days duration. Smear prepared from sputum sample is provided. Do Gram stain & give your report. (Marks: 5)

Expected Result (Cells):--Few PMN cells (1) & many squamous epithelial cells (1) seen. (Marks :2)

Participant's Answer (Cells):--Epithelial cells(10-15/LPF), Pus cells(1-5/LPF) & Presence of budding yeast cells with pseudohyphae seen (Marks :2)

Expected Result (Organism):--Upper respiratory flora consisting of many GPC, GNC, GPB, GNB & Budding Yeast Cells with pseudohyphae seen. (Marks :2)

Participant's Answer (Organism):--Moderate gram positive cocci in pairs & few gram positive cocci in chains seen (Marks :1)

Expected Result (Interpretation):--Poor quality specimen. Advised to submit deeply coughed out sample for better evaluation. (Marks :1)

Participant's Answer (Interpretation):--Bartletts grading (-1), suggestive of salivary contamination of sputum sample (Marks :1)

Participant's Comments	Received sputum sample is unsatisfactory so it should be rejected.
a trepant's comments	Received sputum sample is unsatisfactory so it should be rejected.

Marks Obtained :-- 4

1.2 : A 76 year old male, known case of chronic myeloid leukemia presented with right sided weakness and slurring of speech. Smear prepared from pus aspirated from cerebellar abscess is provided. Do modified Kinyoun stain & give your report. (Marks: 5)

Expected Result (Findings):--Few acid fast (1), slender, branching, filamentous (1) bacteria seen. (Marks :2)

Participant's Answer (Findings):--Thin, long, branching, filamentous acid fast bacilli seen against blue background (Marks :2)

Expected Result (Interpretation):--Brain abscess due to Nocardia. (Marks :3)

Participant's Answer (Interpretation):--Suggestive of pyogenic cerebellar abscess in known case of chronic myeloid leukemia probably caused by Nocardia species (Marks :3)

Marks Obtained :-- 5

1.3 : Smear prepared from pus aspirated of a peri-renal abscess is provided. Do Grams stain & give your report. (Marks: 5)

Expected Result (Cells):--Many PMN cells seen. (Marks :2)

Participant's Answer (Cells):--Plenty of pus cells(>20/OIF) & few RBCs seen. (Marks :2)

Expected Result (Organism):--Many GNB seen. (Marks :2)

Participant's Answer (Organism):--Many pleomorphic gram negative bacilli and few gram positive cocci in pairs seen. (Marks :1)

Expected Result (Interpretation):--Infection caused by Gram Negative bacilli. (Marks :1)

Participant's Answer (Interpretation):--Suggestive of pyogenic peri- renal abscess probably caused by mixed bacterial infection (Marks :0)

Marks Obtained :-- 3

Q2. Culture/Sensitivity:

2.1 Three freeze dried (lyophilized) cultures of bacteria are provided. Identify and perform the antibiotic sensitivity testing. Use current CLSI guidelines wherever applicable for interpretation of antimicrobial sensitivity. EUCAST guideline can be used wherever CLSI guidelines are not available. A= Automated/M= Manual; select whichever applicable. Attempt only one: Either "A" or "M". Kindly do not report both, even if done. Organism Isolated From Urine: (Marks: 15)

	Genus	Species	Serotype (if applicable)
Expected Result (Identification of given organism)	Escherichia (Marks: 3)	coli (Marks: 2)	
Participant's Answer	Escherichia (Marks: 3)	coli (Marks: 2)	

Antibiotics	Amoxicillin/Clavulanic Acid	Ceftriaxone	Ertapenem	Co-trimoxazole	Nitrofurantoin
Expected Result	S(Marks: 2)	R(Marks: 2)	S(Marks: 2)	R(Marks: 2)	S(Marks: 2)
Participant's Answer	S (Marks: 2)	R (Marks: 2)	I (Marks: 1)	R (Marks: 2)	S (Marks: 2)
Participant's Test Method	Vitek -2	Vitek -2	Vitek -2	Vitek -2	Disc diffusion
Participant's Zone Size (mm) or MIC (ug/ml)					19 mm

Correct:-- 2 Minor Error:-- 1 Major Error:-- 0 Very Major Error:-- (-1)

Marks Obtained: 14

2.2 Organism Isolated From Throat Swab: (Marks: 13)

	Genus	Species	Serotype (if applicable)
Expected Result (Identification of given organism)	Streptococcus (Marks: 3)	pyogenes (Marks: 2)	
Participant's Answer	Streptococcus (Marks: 3)	pyogenes (Marks: 2)	

Antibiotics	Penicillin	Levofloxacin	Erythromycin	Clindamycin
Expected Result	S(Marks: 2)	S(Marks: 2)	S(Marks: 2)	S(Marks: 2)
Participant's Answer	S (Marks: 2)	S (Marks: 2)	S (Marks: 2)	S (Marks: 2)
Participant's Test Method	Disc diffusion	Disc diffusion	Disc diffusion	Disc diffusion
Participant's Zone Size (mm) or MIC (ug/ml)	27mm	17mm	25mm	19mm

Correct:-- 2 Minor Error:-- 1 Major Error:-- 0 Very Major Error:-- (-1)

Marks Obtained: 13

2.3 Organism Isolated From Endotracheal Secretion: (Marks: 15)

	Genus	Species	Serotype (if applicable)
Expected Result (Identification of given organism)	Acinetobacter (Marks: 3)	baumannii complex (Marks: 2)	
Participant's Answer	Acinetobacter (Marks: 3)	baumannii complex (Marks: 2)	

Antibiotics	Piperacillin/ Tazobactam	Ceftazidime	Meropenem	Ciprofloxacin	Co- trimoxazole
Expected Result	R(Marks: 2)	R(Marks: 2)	R(Marks: 2)	R(Marks: 2)	R(Marks: 2)
Participant's Answer	R (Marks: 2)	R (Marks: 2)	R (Marks: 2)	R (Marks: 2)	R (Marks: 2)
Participant's Test Method	Vitek -2	Disc diffusion	Vitek -2	Vitek -2	Vitek -2
Participant's Zone Size (mm) or MIC (ug/ml)		6mm			
Correct: 2 Minor Error: 1 Major Error: 0 Very Major Error: (-1)					
Marks Obtained: 15					

Q 3. : Serology:

3.1 : Please carry out following serological tests on the given samples. (Marks: 8)

Q.No.	3.1.1	3.1.2
Test	CMV- IgG	ASO
Expected Result	Positive (Marks: 4)	Negative (Marks: 4)
Participant's Answer	NotAttempted (Not evaluated.)	Negative (Marks: 4)
Method	Not Attempted	Latex Agglutination
Name of Kit	Not Attempted	Arkary

Marks Obtained :-- 4

3.2: Perform the Blood Borne Viral (BBV) serology: HBsAg, HCV and HIV antibody on the given samples (Sample nos. 3.2.1, 3.2.2, 3.2.3 & 3.2.4) (Marks: 24)

Sample		HIV Antibody	HBsAg	HCV Antibody
3.2.1	Expected Result	Non-Reactive (Marks: 2)	Positive (Marks: 2)	Non-Reactive (Marks: 2)
	Participant's Answer	Non-Reactive (Marks: 2)	Positive (Marks: 2)	Non-Reactive (Marks: 2)
	Method	Immunochromatography	Immunochromatography	Immunochromatography
	Name of kit	HIV- TRI-DOT	OTHER	OTHER

	Expected Result	Non-Reactive (Marks: 2)	Non-Reactive (Marks: 2)	Positive (Marks: 2)
	Participant's Answer	Non-Reactive (Marks: 2)	Negative (Marks: 2)	Reactive (Marks: 2)
3.2.2	Method	Immunochromatography	Immunochromatography	Immunochromatography
	Name of kit	HIV- TRI-DOT	OTHER	OTHER
	Expected Result	Non-Reactive (Marks: 2)	Non-Reactive (Marks: 2)	Positive (Marks: 2)
	Participant's Answer	Non-Reactive (Marks: 2)	Negative (Marks: 2)	Reactive (Marks: 2)
3.2.3	Method	Immunochromatography	Immunochromatography	Immunochromatography
	Name of kit	HIV- TRI-DOT	OTHER	OTHER
3.2.4	Expected Result	Non-Reactive (Marks: 2)	Positive (Marks: 2)	Non-Reactive (Marks: 2)
	Participant's Answer	Non-Reactive (Marks: 2)	Positive (Marks: 2)	Non-Reactive (Marks: 2)
	Method	Immunochromatography	Immunochromatography	Immunochromatography
	Name of kit	HIV- TRI-DOT	OTHER	OTHER

Marks Obtained :-- 24

Grand Total Marks: 86

Marks Obtained: 82

Note: This is computer generated report, does not require signature of the EQAS provider.
