



# MICROBIOLOGY EXTERNAL QUALITY ASSURANCE SCHEME

Under the aegis of Indian Association of Medical Microbiology

## IAMM EQAS New Delhi

Department of Clinical Microbiology and Immunology  
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### Result ( Code No: DLH450 / ESIC Medical College & Hospital, Faridabad )

Batch Name	26th QC, March	Batch Marks	80
Start By Date	10-Apr-2021	Submit By Date	24-May-2021

#### Q.1. Smear :

**1.1 : Pus Sample: A 30 year old lactating lady presented with abscess in the left breast. Smear prepared from pus aspirate is provided. Perform Gram stain & report as below. (Marks: 5 )**

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

Participant's Answer (Cells):--Many polymorphonuclear cells seen (Marks :2)

**Expected Result (Organism):--Many GPCs (1) in pairs & small groups (1) seen. (Marks :2)**

Participant's Answer (Organism):--Abundant Gram positive cocci in clusters seen (Marks :2)

**Expected Result (Interpretation):--Staphylococcal abscess. (Marks :1)**

Participant's Answer (Interpretation):--Suggestive of mastitis due to Staphylococcus species (Marks :1)

**Marks Obtained :-- 5**

**1.2 : Sputum Sample: A 25 year old man presented with fever, cough & night sweats for 3 weeks. Smear prepared from sputum sample is provided. Perform ZN stain & report giving RNTCP grading. (Marks: 5 )**

**Expected Result (Findings):--Slender, beaded acid fast bacilli seen. (Marks :1)**

Participant's Answer (Findings):--Long, slender, beaded acid fast bacilli seen >10/oil immersion field (Marks :1)

**Expected Result (Grading):--AFB seen 2+. (Marks :4)**

Participant's Answer (Grading):--3+ AFB seen (Marks :4)

**Marks Obtained :-- 5**

**1.3 : ET Sample: A 65 year old covid-19 patient on ventilatory support. Smear prepared from ET aspirate is provided. Perform Gram stain & report as below. (Marks: 5 )**

**Expected Result (Cells):--Many (1) PMN (1) cells seen. (Marks :2)**

Participant's Answer (Cells):--Many polymorphonuclear cells seen. Few epithelial cells seen. (Marks :2)

**Expected Result (Organism):--Many (1) GNCBs (1) seen. (Marks :2)**

Participant's Answer (Organism):--Many Gram negative coccobacilli seen. (Marks :2)

**Expected Result (Interpretation):--Suggestive of VAP due to Acinetobacter species. (Marks :1)**

Participant's Answer (Interpretation):--Ventilator associated pneumonia due to Acinetobacter baumannii. (Marks :1)

**Marks Obtained :-- 5**

#### Q.2. 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; tick whichever applicable. Attempt only one: Either "A" or "M". Kindly do not report both, even if done. Organism Isolated From Pus: (Marks: 15 )**

	Genus	Species
Expected Result (Identification of given organism)	<i>Enterococcus</i> (Marks: 3)	<i>faecium</i> (Marks: 2)
Participant's Answer	<i>Enterococcus</i> (Marks: 3)	<i>faecium</i> (Marks: 2)

Antibiotics	Benzylpenicillin/	Gentamicin High Level	Linezolid	Vancomycin	Tigecycline
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	Ampicillin				
Expected Result	R(Marks: 2)	R(Marks: 2)	S(Marks: 2)	R(Marks: 2)	S(Marks: 2)
Participant's Answer	R (Marks: 2)	R (Marks: 2)	S (Marks: 2)	R (Marks: 2)	S (Marks: 2)
Participant's Test Method	Vitek -2	Vitek -2	Vitek -2	Vitek -2	Vitek -2
Participant's Zone Size (mm) or MIC (ug/ml)	>=64	-	1	>=32	<=0.12
Correct:-- 2 Minor Error:-- 1 Major Error:-- 0 Very Major Error:-- (-1)					
Participant's Comments: VAN-A like resistance detected; Gentamicin not synergistic with cell wall active agents (e.g, ampicillin, penicillin , vancomycin)					
Marks Obtained: 15					

## 2.2 Organism Isolated From ET Secretions: (Marks: 15 )

	Genus		Species		
Expected Result (Identification of given organism)	<i>Acinetobacter</i> (Marks: 3)		<i>baumannii complex</i> (Marks: 2)		
Participant's Answer	<i>Acinetobacter</i> (Marks: 3)		<i>baumannii complex</i> (Marks: 2)		
Antibiotics	Piperacillin/ Tazobactam	Meropenem	Amikacin	Levofloxacin	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	Vitek -2	Vitek -2	Vitek -2	Vitek -2
Participant's Zone Size (mm) or MIC (ug/ml)	>=128	>=16	>=64	>=16	>=320
Correct:-- 2 Minor Error:-- 1 Major Error:-- 0 Very Major Error:-- (-1)					
Participant's Comments: Carbapenemase producer					
Marks Obtained: 15					

## 2.3 Organism Isolated from Blood culture: (Marks: 15 )

	Genus		Species		
Expected Result (Identification of given organism)	<i>Salmonella</i> (Marks: 3)		<i>serotype Typhi</i> (Marks: 2)		
Participant's Answer	<i>Salmonella</i> (Marks: 3)		<i>serotype Typhi</i> (Marks: 2)		
Antibiotics	Ampicillin	Ceftriaxone	Ciprofloxacin	Co-trimoxazole	Azithromycin
Expected Result	S(Marks: 2)	S(Marks: 2)	R(Marks: 2)	S(Marks: 2)	S(Marks: 2)
Participant's Answer	S (Marks: 2)	S (Marks: 2)	R (Marks: 2)	S (Marks: 2)	S (Marks: 2)
Participant's Test Method	Vitek -2	Vitek -2	Vitek -2	Vitek -2	E- Test
Participant's Zone Size (mm) or MIC (ug/ml)	<=2	<=1	>=4	<=20	4
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	CRP	Dengue NS1
Expected Result	Positive (Marks: 4)	Negative (Marks: 4)
Participant's Answer	Positive (Marks: 4)	Negative (Marks: 4)
Center Comments	RECOMBIGEN/CRP; SD BIOSENSOR/DENGUE	

Marks Obtained :-- 8

**3.2 : Perform the Blood Borne Viral (BBV) serology: HBsAg, HCV and HIV antibody on both the samples (Sample nos. 3.2.1 & 3.2.2) (Marks: 12 )**

Sample		HIV Antibody	HBsAg	HCV Antibody
3.2.1	Expected Result	Non-Reactive (Marks: 2)	Non-Reactive (Marks: 2)	Non-Reactive (Marks: 2)
	Participant's Answer	Non-Reactive ( Marks: 2)	Non-Reactive ( Marks: 2)	Non-Reactive ( Marks: 2)
3.2.2	Expected Result	Non-Reactive (Marks: 2)	Non-Reactive (Marks: 2)	Reactive (Marks: 2)
	Participant's Answer	Non-Reactive ( Marks: 2)	Non-Reactive ( Marks: 2)	Reactive ( Marks: 2)
Center Comments		QUADRO HIV 1,2 AB		

Marks Obtained :-- 12

**Grand Total Marks : 80**

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

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