

3: Serology:

3.1: Please carry out following serological tests on the given samples.

(Marks: 4x2=8) (8)

|                 |              |              |
|-----------------|--------------|--------------|
|                 | (3.1.1) RA   | (3.1.2) CRP  |
| Expected Result | Negative     | Positive     |
| Reported        | Negative (4) | Positive (4) |

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: 6x2=12) (12)

| Sample |                 | HIV Antibody     | HBsAg        | HCV Antibody |
|--------|-----------------|------------------|--------------|--------------|
| 3.2.1  | Expected Result | Negative         | Positive     | Negative     |
|        | Reported        | Non-reactive (2) | Positive (2) | Negative (2) |
| 3.2.2  | Expected Result | Negative         | Negative     | Positive     |
|        | Reported        | Non-reactive (2) | Negative (2) | Positive (2) |

MARKS:

$\frac{61}{80}$

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# 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



2018 Cycle (Round 1, March)

17<sup>th</sup> QC Result

Code No: DLH357

Q 1. Perform Gram staining on the given fixed smears. Give description with your interpretation report.

(Marks: 5x3=15) **15**

### 1.1: BAL sample.

Cells-Many pus cells, scanty ciliated columnar epithelial cells.

**2** Correct / Not Correct / Not Reported

Bacteria-Many gram negative pleomorphic bacilli seen

**2** Correct / Partly Correct / Not Correct

Interpretation: Suggestive of bacterial pneumonia due to GNB (? *H. influenzae*).

**1** Reported / Wrongly Reported / Not Reported

### 1.2: Sputum sample

Many squamous epithelial cells, few PMNs

**2** Correct / Not Correct / Not Reported

Mixed upper respiratory tract flora seen

**2** Correct / Partly Correct / Not Correct

Interpretation: Poor quality specimen, advised repeat deeply coughed out sputum sample for better evaluation.

**1** Reported / Wrongly Reported / Not Reported

### 1.3: Urine sample.

Many PMNs cells seen

**2** Correct / Not Correct / Not Reported

Many gram negative bacilli (>1/oil immersion field) seen, significant bacteriuria.

**2** Correct / Partly Correct / Not Correct

Interpretation: Suggestive of UTI due to gram negative bacteria.

**1** Reported / Wrongly Reported / Not Reported

Identify the given lyophilized culture & performs the antibiotic sensitivity testing.

(Marks: 15x3=45) **26**

|                                  |                 |               |  |
|----------------------------------|-----------------|---------------|--|
| Identification of given organism | Genus           | Species       | Correct /<br>Partly Correct/<br>Not Reported<br>Wrongly Reported |
|                                  | <i>Shigella</i> | <i>sonnei</i> |  |

| Antibiotics  | 1. Ampicillin | 2. Ceftriaxone | 3. Nalidixic acid | 4. Ciprofloxacin | 5. Co-trimoxazole |
|--|---------------|----------------|-------------------|------------------|-------------------|
| Interpretation (Expected) (S/MS/R)                                   | S             | S              | S                 | S                | S                 |
| Reported   | -             | -              | -                 | -                | -                 |
| Correct-2<br>Minor Error-1<br>Major Error-0<br>Very Major Error-(-1) | 0             | 0              | 0                 | 0                | 0                 |

|                                  |                       |                      |  |
|----------------------------------|-----------------------|----------------------|--|
| Identification of given organism | Genus                 | Species              | Correct /<br>Partly Correct/<br>Wrongly Reported |
|                                  | <i>Staphylococcus</i> | <i>saprophyticus</i> |  |

| Antibiotics  | 1. Nitrofurantoin | 2. Co-trimoxazole | 3. Penicillin | 4. Cefoxitin | 5. Levofloxacin |
|--|-------------------|-------------------|---------------|--------------|-----------------|
| Interpretation (Expected) (S/MS/R)                                   | S                 | S                 | R             | S            | S               |
| Reported   | S                 | S                 | R             | S            | S               |
| Correct-2<br>Minor Error-1<br>Major Error-0<br>Very Major Error-(-1) | 2                 | 2                 | 2             | 2            | 2               |

|                                  |                    |             |  |
|----------------------------------|--------------------|-------------|--|
| Identification of given organism | Genus              | Species     | Correct /<br>Partly Correct/<br>Wrongly Reported |
|                                  | <i>Escherichia</i> | <i>coli</i> |  |

| Antibiotics  | 1. Ceftriaxone | 2. Amikacin | 3. Ciprofloxacin | 4. Piperacillin/Tazobactam | 5. Ertapenem |
|--|----------------|-------------|------------------|----------------------------|--------------|
| Interpretation (Expected) (S/MS/R)                                   | S              | S           | S                | S                          | S            |
| Reported   | S              | R           | S                | S                          | S            |
| Correct-2<br>Minor Error-1<br>Major Error-0<br>Very Major Error-(-1) | 2              | 0           | 2                | 2                          | 2            |