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|---|----------------|----------------|-------------------|-------------------------|------------------|-----------|--|
| <br>University of Sadat City | Final Exam:    | Frist Semester | Course Code:      | B2-24                   | Percentage       | 80%       | <br>GEBRI |
|   | Academic Year: | 2018/2019      | Academic Program: | Master                  | N. of Exam Paper | 1         |  |
|   | Level:         | Master         | Department:       | Microbial Biotechnology | Date             | 24/1/2018 |  |
|   | Course Name:   | Seminars       | Total score:      | 80                      | Time allowed:    | 3h        |  |

### Instructions of Exam:

1. Answer the obligatory questions.
2. Use the blue pen and pencil in answer sheet
3. Allow one sheet answer for every student
4. Is not allowed to borrow the tools (pen, pencils, drawing tools, calculator ...etc)
5. Is not allowed to use the cell phone or any of its application during the time of exam

Name: Mousa Eltlawy

**1<sup>st</sup> question:** (20 marks)

Identify the following

- a- Antibiotics
- b- Multiple drug resistance (MDR)
- C- Pan drug resistance (PDR)
- D- CARBAPENEMS
- E- Beta- lactamases

**2<sup>nd</sup> question:** (20 marks)

Classify Anti biotics by their mode of action?

**3<sup>rd</sup> question:** (20 marks)

Discuss in detailed the deferent mechanism of antibiotic resistance in bacteria With Drawing?

**4<sup>th</sup> question:** (20 marks)

Chose two methods for Laboratory Evaluation of Carbapenem Resistance and compare between them?

With best wishes

|                     |  |  |                    |                       |
|---------------------|--|--|--------------------|-----------------------|
| Professor of Course | Dr. Rateb Nabil                                      |  | Course coordinator | Dr. Rateb Nabil       |
| Staff Course        | Dr. Rateb Nabil<br>Dr. Abeer Mohamed                 |  | Department Head    | Prof.Dr. Atef Ibrahem |
| Exam group          | Dr. Hanafy Hamza, Dr. Rateb Nabil, Dr. Ragaa Hamouda |  |                    |                       |

نموذج رقم: SQ0000000F101002  
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