



COURSE SPECIFICATION

Elective courseIII

Faculty of Medicine- Mansoura University

(A) Administrative information

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| (1) Programme offering the course. | MD of Medical Biochemistry |
| (2) Department offering the programme. | Medical biochemistry department |
| (3) Department responsible for teaching the course. | Medical biochemistry department |
| (4) Part of the programme. | 2 nd part |
| (5) Date of approval by the Department`s council | 1/11/2015 |
| (6) Date of last approval of programme specification by Faculty council | 9/8/2016 |
| (7) Course title. | Organ system function assessment |
| (8) Course code. | BIC 604 OF |
| (9) Total teaching hours. | 2 hours |

(B) Professional information

(1) Course Aims:

Provide the candidate with a deep insight on different laboratory investigations that has been proposed in the assessment of different organs' diseases.

(2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

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| AII-27.A | Identify and discuss of principal tests used to assess liver, kidney, adrenal and thyroid function. |
| AII-27.B | Describe the biomedical importance of organ function tests in clinical medicine. |
| AII-27.C | Identify reference value of different organ function tests. |
| AII-27.D | Interpret abnormal results of different organ function tests. |
| AII-27.E | Discuss of sensitivity, specificity and predictive values of different organ function tests. |

B- Intellectual skills

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| B9 | Evaluate the organ functions tests. |
| B10 | Identify the main problems resulted from diseases. |
| B11 | Analyze the symptoms as a results of organ dysfunctions. |
| B12 | Comment accurately up on the obtained results on his given results. |

(3) Course content:

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| Subjects | No. of teaching hours |
| | Lectures |

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| <p>Liver function tests:</p> <p><i>1- Function of the liver</i></p> <p><i>2- Tests based on abnormality on</i></p> <ul style="list-style-type: none"> • Bile pigment metabolism • Liver part of carbohydrate metabolism • Change of plasma protein • Liver part of lipid metabolism • Amino acid metabolism and values of serum enzymes in liver disease • Prothrombin activity | 8 |
| <p>Renal function tests</p> <p><i>1- Function of the kidney</i></p> <p><i>2- Test based on measuring</i></p> <ul style="list-style-type: none"> • Glomerular filtration function • Tubular function • renal plasma flow | 8 |
| <p>Adreno-cortical function tests</p> <p><i>1- Function of the adrenal glands</i></p> <p><i>2- Tests based on</i></p> <ul style="list-style-type: none"> • Cortisol production • Aldosterone and androgen production • Pituitary adrenal function • Provocative tests | 6.5 |
| <p>Thyroid function tests</p> <p><i>1-Function of the thyroid</i></p> <p><i>2-Test based on measuring</i></p> <ul style="list-style-type: none"> • Primary function of thyroid • blood level of thyroid hormones • metabolic effect of thyroid • Immunological test to detect autoimmune thyroid disease. | 7.5 |

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| <i>Total teaching hours</i> | 30 |
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(4) Teaching methods:

- 4.1. Lecture
- 4.2. Tutorial
- 4.3. Seminars

(5) Assessment methods:

5.1 .Written Examination for assessment of ILOs number **knowledge and intellectual ILOs**

MCQ for assessment of ILOs number **knowledge and intellectual ILOs**

5.2 seminars: the candidate should prepare and present at least one seminar in atopic related to the course and determined by the supervisors in front of the department staff (without marks).

Assessment schedule.

Assessment 1: after 6 semesters from MD registration (written exam with marks)

Assessment 2 : MCQ exams at the end of each semester (4 semesters)

Assessment 3: the candidate should prepare and present at least one seminar in atopic related to the course and determined by the supervisors in front of the department staff (without marks).

Percentage of each Assessment to the total mark.

Written exam. 80%

MCQ exam. 20%

Other assessment without marks., seminars and log book assessment are requirement of the 2nd part exam.

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| Written exam | MCQ | total |
| 48 | 12 | 60 |

(6) References of the course:

5.1 Text books

- *Clinical chemistry*, 2nd edition , by MN Chatterjea. TAYPEE brother medical puplication, Ldt, India, 2010.

- *Clinical chemistry, principle , procedure, correlation*, 5th edition, by Michael L. Bishop, Edward P. Fody and Larry schoeff.Lippincott ,Williams & Wilkins, 2007.
- ***Textbook of Biochemistry***: With Clinical Correlation. 3rd ed. (4th printing). By Devlin, T. M : Wiley-Liss: A John Wiley & Sons, Inc., Publication, New York. 1993.

5.2 Websites

- <http://www.labtestsonline.org>
- <http://www.indstate.edu/thcme/mwking/enzyme-kinetics.html>
- <http://www-biol.paisley.ac.uk/kinetics/contents.html>

(7) Facilities and resources mandatory for course completion.

- Lecture rooms: available in the department

Course coordinator: Staff members of credit committee of the department.

Head of the department: Prof. Dr/FAGR **bazid**