



Master degree in (Medical Biochemistry and Molecular Biology)

Blueprint of (Nutritional biochemistry) course (Master): Course Code : (BIC504NB)

The total marks of this course are 100, divided as:

- Workplace-based assessment (20 marks)
- Written exam (80 marks), distributed as follows:

Course content	Teaching hours	Relative weight to the total marks	Total Marks	MCQ Marks	No of exam Q (MCQ)	Short essay questions marks	No of exam Q (short essay questions)
Definition of: nutritional science and nutrients	2	6.7%	5	3		2	
Classification of nutrients <ul style="list-style-type: none"> • Macronutrients: • carbohydrates (dietary sources, daily requirements, functions, dietary fibers, types & sources, biomedical importance) • lipids: (dietary source, daily requirements, functions, essential fatty acids) • proteins:(dietary source, requirements, functions, biological value of protein, nitrogen balance) micronutrients: vitamins and minerals 	12	40%	32	22		10	
Energy aspects of food	4	13.33%	11	8		3	



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-caloric value of food -respiratory quotient (RQ) - specific dynamic action (SDA) -basal metabolic rate (BMR)							
Balanced diet <ul style="list-style-type: none"> recommended daily requirements food groups (cereals, milk, pulses/ legumes, vegetables, fruits, fats, oil & sweets) Nutritional requirement for certain groups: Values in calories in common foods 	4	13.33%	11	8		3	
Disorders of nutrition (applied nutrition I) <ul style="list-style-type: none"> Under nutrition, Protein calorie malnutrition (marasmus, kwashiorkor & marasmic kwashiorkor), Starvation, Eating disorders, and Over nutrition: Obesity 	4	13.33%	11	8		3	
Diet therapy (applied nutrition II) <ul style="list-style-type: none"> - types of diet & dietary guidelines in certain disorders 	4	13.33%	10	7		3	



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- nutritional support: Nutritional needs & Types including: enteral and parenteral							
Total	30	100%	80	56		24	

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