



Postgraduate PhD degree of Medical Biochemistry and Molecular Biology

Blueprint of (Biochemical aspects of inflammation) course (PhD)

Course Code: (BIC604BAI)

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)
Introduction to inflammation: - Types of inflammation (Acute & chronic)	2	9.1%	7	5		2	
Molecular and cellular events for inflammatory genes activation: a) Inflammatory inducers: PAMPs & DAMPs. b) Inflammatory sensors – pattern recognition receptors: types & signaling pathways. c) Inflammatory signaling pathways: IKK-NF-κB, JNK-MAP – JAK-STAT.	10	45.5%	36	25		11	
Biochemical mediators of acute inflammation & resolution: a) Vasoactive amines.	8	36.4%	29	20		9	



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b) Peptides. c) Proteins: cytokines, chemokines, molecules of leucocyte & endothelial adhesion, serum cascade system, acute phase reactants, enzymes and hormones. d) Eicosanoids.							
Metabolic regulators of inflammation	1	4.5%	4	3		1	
Biochemistry of chronic inflammatory disorders: a) Metabolic inflammation (Metaflammation) b) Neuroinflammation c) Autoinflammation d) Sepsis	1	4.5%	4	3		1	
Total	22	100%	80	56		24	

Head of Biochemistry & Molecular Biology Department
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