



جامعة الموصل - كلية الطب البيطري



مفردات الامتحان التنافسي للتقديم الى الدراسات العليا دكتوراه احياء مجهرية بيطرية لسنة ٢٠٢٦-٢٠٢٧

كيمياء حياتية وفسلجة جراثيم	
1	Cell organelles and their role in bacterial
2	physiology: lysozymes, nucleus, mitochondria, endoplasmic reticulum, Golgi apparatus, vacuoles, Nissel's bodies, inclusion bodies
3	Bacterial respiration
4	Aerobic respiration
5	Anaerobic respiration

علم الاحياء المجهرية العام	
1	Introduction and history of microbiology
2	Microscopy and Bacterial Classification
3	General properties of bacteria, cell wall, cytoplasmic membrane, capsule and flagella Normal Flora
4	Bacterial nutrition and dynamic of growth Bacterial metabolism
5	Determination of microbial pathogenicity
6	Enzymes and bacterial toxins
7	Bacterial genetics

الاحياء الجزيئي	
1	Prokaryotic and Eukaryotic cell membrane
2	Nucleus and cytoplasmic organelles
3	DNA properties and DNA structure
4	gene-arrangement
5	gene sequence
6	gene regulation
7	DNA replication
8	Restrictions and recombinant DNA
9	Molecular basis of mutation
10	Plasmid and genetic engineering
11	Protein synthesis



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علم الاحياء المجهرية الخاص	
1	Micrococcaceae and Streptococaceae
2	Brucellaceae
3	Mycobacteriaceae
4	Corynebacteriaceae
5	Bacillaceae and Lactobacillaceae
6	Clostridiaceae Enterobacteriaceae
7	Pseudomonadaceae
8	Bacteroidaceae
9	Spirochaetaceae
10	Pasteurellaceae Actinomycetaceae
11	Campylobacteraceae

علم المناعة	
1	Principle of immunity and immune response (specific and nonspecific)
2	Immunoglobulin: Structure, variation, Function and synthesis
3	Immunology of T and B cells
4	Complement: Nature, Function and pathways
5	Cell mediated immunity, antigen recognition by T cells
6	Immunological tolerance
7	Types of Hypersensitivity
8	Mechanisms Auto-immunity
9	Transplantation
10	Principle of immune genetics
11	Immunoanaphylaxis reaction
12	Immunity of infection



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علم الفايروسات	
1	Viruses: structures chemistry, morphology and classification Viral multiplication and types of propagation
3	Viral genetic interaction between viruses
4	Interferon and its formation and use
5	Oncogenic viruses and theory oncogenicity of viruses
6	DNA and RNA viruses

علم الفطريات والمايكوبلازما	
1	Mycological techniques, isolation and identification
2	Cryptococcosis and Histoplasmosis
3	Dermatophytes
4	Aspergillosis
5	Mycotic Abortion, mastitis
6	Mycotoxin
7	Immunity and antifungal drugs
8	Introduction to Mycoplasma history, taxonomy, morphology, ultrastructure
9	Cultivation, identification, physiology of Mycoplasma Host-parasite relationship, pathogenicity, immunology and main animal Mycoplasma
10	Rickettsiales
11	Chlamydiaceae