



FCD(SA) Part I

## THE COLLEGES OF MEDICINE OF SOUTH AFRICA

Incorporated Association not for gain  
Reg No 1955/000003/08

### Part I Examination for the Fellowship of the College of Dentistry of South Africa

1 September 2015

Paper 2

(3 hours)

*All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)*

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- 2 a) Describe the Starling forces that determine the net movement of fluid across the capillary wall. Describe the variations in capillary permeability and structures seen in different parts of the body. (13)
- b) Describe oedema and name the different causes thereof. (12)
- [25]
- 3 Describe the blood-clotting and anti-clotting systems and the clinical importance of each system. [25]
- 4 a) What is meant by the term upper motor neuron and lower motor neuron? Contrast the effects of lower motor neuron lesions and those lesions affecting each of the types of upper motor neurons. (13)
- b) What are the functions and composition of saliva? (12)
- [25]



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2 September 2015

Paper 3

(3 hours)

*All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)*

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- 1 a) Discuss metaplasia, using examples that can occur in epithelial as well as connective tissue. (10)  
b) Discuss and describe the morphology of the different types of necrosis. (5)  
[15]
- 2 Describe and discuss the mechanisms of bacterial injury/infection. [25]
- 3 Immediate hypersensitivity can potentially lead to a fatal outcome in a patient. Discuss the pathogenesis and pathology of type 1 hypersensitivity and give examples of the clinical manifestation of the reaction. [25]
- 4 Some DNA viruses have been indicated as oncogenic viruses. Discuss the role of the Human Papilloma virus and Epstein Barr virus in the development of tumours. [25]
- 5 a) Discuss the mechanism that contributes to the development of thrombosis. (13)  
b) Describe the changes that a thrombus can undergo in a patient surviving the initial formation of the thrombus. (5)  
c) Compare the complications and outcome of venous thrombosis and arterial thrombosis. (7)  
[25]
- 6 a) The prevalence and severity of atherosclerosis and ischaemic heart disease among individuals and groups are related to a number of risk factors. Discuss the risk factors associated with the development of atherosclerosis. (15)  
b) Hypertension causes vascular pathology. Discuss the pathogenesis and the mechanisms involved in the development of essential and secondary hypertension. (10)  
[25]