



**ROYAL AUSTRALASIAN COLLEGE
OF
DENTAL SURGEONS**
INCORPORATED
ABN 97 343 369 579

PRIMARY EXAMINATION

HISTOLOGY 2005

28 November 2005

Time allowed: Two hours

INSTRUCTIONS TO CANDIDATES

The complete examination in Histology is in two parts:

This paper which is worth 75% of the final mark;

The viva which is worth 25% of the final mark.

SECTION A AND SECTION B MUST BE ANSWERED IN SEPARATE BOOKLETS

SECTION A

Each of the **TWO** essays you are required to attempt is worth 25% of the final mark in Histology.

1. The pulp plays a vital role in the support of tooth structure. Discuss this statement in terms of the pulps role during development, maturity and protection against disease.
2. Bone structure and healing influence clinical dentistry. Describe the structure, function and healing of bone.
3. Describe the detailed microanatomy of the cementum – periodontal ligament complex. In your description include development, structure and changes associated with aging.
4. Give a detailed account of enamel structure and the relationship of its structure to function and disease processes.



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SECTION B

This section is worth 25% of the final mark for histology.

5. Answer any SIX of the following 8 questions (each is of equal value).
- (a) Write short notes on the structure role and functional relations of messenger RNA.
 - (b) Describe the histology of the structures you would pass a needle through while giving a mandibular block injection.
 - (c) Relate the histological and functional characteristics of a cementoblast to its function.
 - (d) Describe the change from a cap to bell stage of tooth development.
 - (e) Write brief notes on the histology of the salivary glands.
 - (f) Describe histological changes you would expect with the placement of a medium size (dentine and enamel involved) restoration of a tooth.
 - (g) Describe the histological similarities and differences between the fibroblasts and odontoblasts.
 - (h) Write brief notes comparing the histology of the dorsal and ventral surface of the tongue.