MEDICAL SCIENCES BOARD

(a) Preliminary Examination in Biomedical Sciences

With effect from 1 October 2011 (for first examination in 2012)

1 In Examination Regulations, 2010, p. 58, after l. 8 insert:

‘Biomedical Sciences Medical Sciences Division’

2 Ibid, p. 62, after l. 5 insert:

‘Biomedical Sciences 3rd’

3 Ibid., p. 105, after l. 19 insert:

‘Special Regulations for the Preliminary Examination in Biomedical Sciences

A

1. The subjects of the Preliminary Examination in Biomedical Sciences shall be:

(1) Systems
(2) Cells, Molecules and Genes
(3) Mathematics and Statistics

2. The syllabus, number of papers, and their format shall be as prescribed by regulation by the Medical Sciences Board.

3. A candidate shall be deemed to have passed the examination if he or she has satisfied the Moderators in all three subjects.

4. Candidates must offer all three subjects at one examination, provided that a candidate who has failed in one, two or all three subjects may offer that number of subjects again on one further occasion.

5. The Moderators may award a Distinction to candidates of special merit who have satisfied them in all three subjects at a single examination.

B

One written paper will be set in each subject. The duration of the written papers will be three hours for subjects 1 and 2, and two hours for subject 3.

All candidates shall be assessed as to their practical ability in coursework under the following provisions:

(a) The Course Director, or a deputy, shall make available to the Moderators, at the end of the fifth week of the term in which the examinations are held, evidence
showing the extent and the standard to which each candidate has completed the prescribed coursework.

(b) Coursework cannot normally be retaken. Candidates whose attendance or performance is deemed unsatisfactory may be required by the Moderators to submit to further examination. Failure to satisfy the Moderators in the coursework associated with an examination paper will normally constitute failure of that examination paper.

Schedule

1. Systems
   a. Body: cardiovascular; respiratory; renal and gastrointestinal systems
   b. Brain: introduction to neuroscience; neuroanatomy overview; sensory; motor; neural development; learning and memory; sleep, dreams, and consciousness
   c. Behaviour: memory; language; awareness and attention; decision-making and rationality; disorders; social; genetics of diseases

2. Cells, Molecules and Genes
   a. Cells: cell division and cell cycle; inter- and intra-cellular signalling; excitable tissues; membrane transport; general principles of pharmacology
   b. Molecules: DNA/RNA structure; protein structure; lipids and membrane structure; energy metabolism
   c. Genes: fundamentals of genes; molecular biology techniques

3. Mathematics and Statistics’