

EMBU UNIVERSITY COLLEGE

(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

FIRST SEMESTER EXAMINATIONS 2013/2014

FIRST YEAR EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN GENETICS

SBT 542: BIOCHEMICAL GENETICS

DATE: DECEMBER 2, 2013

TIME: 11.00 - 2.00PM

INSTRUCTIONS:

ANSWER ANY FOUR (4) QUESTIONS (25 MARKS EACH)

- 1. Describe in details using appropriate illustrations the process of transformation.
- 2. Discuss translation and the detailed role of different types of RNA during this process
- 3. Discuss DNA replication and the key steps that can be manipulated for beneficial exploitations?
- 4. Major advances have been made in recent times with regard to gene structure and function. Discuss those that have made outstanding contributions in agriculture and food production.
- 5. Explain what the central dogma is and describe with appropriate illustrations, transcription in prokaryotes?

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