THARAKA



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FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF PROCUREMENT AND LOGISTICS MANAGEMENT

BOTA 872: PLANT MOLECULAR GENETICS

STREAMS: MSC (BOTA) TIME: 3 HOURS

DAY/DATE: FRIDAY 17/04/2020 11.30 A.M. – 2.30 P.M.

INSTRUCTIONS: ANSWER ANY 3 QUESTIONS

- 1. Discuss in details the 4 steps of translation of mRNA to manufacture proteins [20 marks]
- 2. (a) Describe the procedure involved in the use of restriction enzymes to map

plasmids [5 marks]

- (b) Differentiate between DNA and RNA [5 marks]
- (c) Give 10 significance of genetic mapping [10 marks]
- 3. (a) Discuss the steps involved in molecular cloning technique [10 marks]
 - (b) DiscussRibozymes [5 marks]
 - (c) Discuss any two techniques for repairing and adjusting the genome after cutting

by restriction enzymes [5 marks]

- 4. (a) Discuss the process of transcription [12 marks]
 - (b) Discuss RNA modification [8 marks]