CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

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MAJOR SUBJECT: Molecular Breeding and Bioinformatics

Course No.: MGPB 0506 (External exam)

Registration No.................................. TOTAL MARKS: -------

A. Multiple Choice Questions : (0.5X5 =2.5)

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| 1. | RFLP markers were first used in construction of genetic maps by |
| a) | Bostein |
| b) | Vos |
| c) | Litt and luty |
| d) | Edwards et al. |
| 2. | The codominant markers located on either side of the target gene can be used to select for rare recombinants |
| a) | Background selection |
| b) | Forground selection |
| c) | Recombinant selection |
| d) | None of the above |
| 3. | The ability of a marker to differentiate homozygous from heterozygote known as |
| a) | Dominant marker |
| b) | Codominant marker |
| c) | Hybridization based marker |
| d) | PCR based marker |
| 4. | Marker present within gene of interest known as |
| a) | Functional marker |
| b) | Indirect marker |
| c) | Direct marker |
| d) | Both a and c |
| 5. | Which of the following is the best marker |
| a) | Morphological marker |
| b) | Biochemical marker |
| c) | Molecular marker |
| d) | Cytological marker |

B. Write the full form of the following: (0.5 X10 =5)

1. SSR

2. RFLP

3. MAS

4. SNP

5. PCR

6. RILs

7. NILs

8. DH

9. EDVs

10. TILLING

C. Define: (1X5=5)

1. Allele mining

2. GMOs

3. EDVs

4. Bioinformatics

5. Molecular farming

D. Write True/ False: (0.5X5 =2.5)

1. Linkage disequilibrium means linkage is absent.
2. Varieties which are not clearly distinguishable come under EDVs.
3. Tilling and PCR based are the two approaches of allele mining.
4. Plants which are traditionally cultivated are Farmer’s variety.
5. RILs are the best population for linkage mapping.