Code No: 07A32304 **R07** **Set No. 2**

II B.Tech I Semester Examinations,November 2010
GENETICS
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Discuss the organization of genetic material in Drosophila? [16]
2. Define and explain Lyon hypothesis. [16]
3. Explain how Mendel proposed the principle of dominance & Principle of Segregation from his experiments in monohybrid crosses? [16]
4. What possible conclusions can be drawn from the observation that no synaptonemal Complexes are observed in male Drosophila? Explain. [16]
5. Write short notes on
   (a) deletions or deficiency
   (b) Duplications. [8+8]
6. Describe about the extrachromosomal inheritance. [16]
7. Differentiate between the conjugation of
   (a) F^+ and F^-
   (b) Hfr and F^-. [8+8]
8. Suggest experiments on some organism to determine genetically
   (a) Whether two genes are genetically located on the same chromosome
   (b) Whether they are in the coupling or repulsive phase. [8+8]

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Code No: 07A32304 **R07** **Set No. 4**

II B.Tech I Semester Examinations,November 2010
GENETICS
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. What possible conclusions can be drawn from the observation that no synaptonemal Complexes are observed in male Drosophila? Explain. [16]
2. Explain how Mendel proposed the principle of dominance & Principle of Segregation from his experiments in monohybrid crosses? [16]
3. Define and explain Lyon hypothesis. [16]
4. Discuss the organization of genetic material in Drosophila? [16]
5. Write short notes on
   (a) deletions or deficiency
   (b) Duplications. [8+8]
6. Differentiate between the conjugation of
   (a) F^+ and F^-
   (b) Hfr and F^-. [8+8]
7. Suggest experiments on some organism to determine genetically
   (a) Whether two genes are genetically located on the same chromosome
   (b) Whether they are in the coupling or repulsive phase. [8+8]
8. Describe about the extrachromosomal inheritance. [16]

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Code No: 07A32304 **R07** **Set No. 1**

II B.Tech I Semester Examinations,November 2010
GENETICS
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. What possible conclusions can be drawn from the observation that no synaptonemal Complexes are observed in male Drosophila? Explain. [16]
2. Suggest experiments on some organism to determine genetically
   (a) Whether two genes are genetically located on the same chromosome
   (b) Whether they are in the coupling or repulsive phase. [8+8]
3. Differentiate between the conjugation of
   (a) F^+ and F^-
   (b) Hfr and F^-. [8+8]
4. Describe about the extrachromosomal inheritance. [16]
5. Discuss the organization of genetic material in Drosophila? [16]
6. Explain how Mendel proposed the principle of dominance & Principle of Segregation from his experiments in monohybrid crosses? [16]
7. Write short notes on
   (a) deletions or deficiency
   (b) Duplications. [8+8]
8. Define and explain Lyon hypothesis. [16]

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Code No: 07A32304 **R07** **Set No. 3**

II B.Tech I Semester Examinations,November 2010
GENETICS
Bio-Technology

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. Describe about the extrachromosomal inheritance. [16]
2. What possible conclusions can be drawn from the observation that no synaptonemal Complexes are observed in male Drosophila? Explain. [16]
3. Suggest experiments on some organism to determine genetically
   (a) Whether two genes are genetically located on the same chromosome
   (b) Whether they are in the coupling or repulsive phase. [8+8]
4. Differentiate between the conjugation of
   (a) F^+ and F^-
   (b) Hfr and F^-. [8+8]
5. Explain how Mendel proposed the principle of dominance & Principle of Segregation from his experiments in monohybrid crosses? [16]
6. Discuss the organization of genetic material in Drosophila? [16]
7. Write short notes on
   (a) deletions or deficiency
   (b) Duplications. [8+8]
8. Define and explain Lyon hypothesis. [16]

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