

Code No: 07A32304

R07

Set No. 2

II B.Tech I Semester Examinations, MAY 2011

GENETICS

Bio-Technology

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. What is the method used in karyotyping? Explain the importance of karyotyping. [16]
2. Write in detail about petite phenotype in yeast. [16]
3. Discuss the organization of genetic material in Drosophila? [16]
4. Describe the mechanism of transduction process. [16]
5. With respect to gene mapping explain the following terms:
 - (a) Interference & Coefficient of coincidence
 - (b) Gene order & gene distance. [8+8]
6. Write short notes on
 - (a) linkage and crossing over
 - (b) transduction. [8+8]
7. What evidence led to the idea that DNA was the genetic material? Explain. [16]
8. Relate the potential effect of the Lyon hypothesis on the Retina of a human female heterozygous for the X-linked red-green color blindness. [16]

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R07

Set No. 4

II B.Tech I Semester Examinations, MAY 2011

GENETICS

Bio-Technology

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. What evidence led to the idea that DNA was the genetic material? Explain. [16]
2. Discuss the organization of genetic material in Drosophila? [16]
3. Describe the mechanism of transduction process. [16]
4. What is the method used in karyotyping? Explain the importance of karyotyping. [16]
5. Relate the potential effect of the Lyon hypothesis on the Retina of a human female heterozygous for the X-linked red-green color blindness. [16]
6. Write short notes on
 - (a) linkage and crossing over
 - (b) transduction. [8+8]
7. With respect to gene mapping explain the following terms:
 - (a) Interference & Coefficient of coincidence
 - (b) Gene order & gene distance. [8+8]
8. Write in detail about petite phenotype in yeast. [16]

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R07

Set No. 1

II B.Tech I Semester Examinations, MAY 2011

GENETICS

Bio-Technology

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Describe the mechanism of transduction process. [16]
2. What is the method used in karyotyping? Explain the importance of karyotyping. [16]
3. What evidence led to the idea that DNA was the genetic material? Explain. [16]
4. Write in detail about petite phenotype in yeast. [16]
5. Write short notes on
 - (a) linkage and crossing over
 - (b) transduction. [8+8]
6. Discuss the organization of genetic material in Drosophila? [16]
7. Relate the potential effect of the Lyon hypothesis on the Retina of a human female heterozygous for the X-linked red-green color blindness. [16]
8. With respect to gene mapping explain the following terms:
 - (a) Interference & Coefficient of coincidence
 - (b) Gene order & gene distance. [8+8]

Code No: 07A32304

R07

Set No. 3

II B.Tech I Semester Examinations, MAY 2011

GENETICS

Bio-Technology

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. Describe the mechanism of transduction process. [16]
2. With respect to gene mapping explain the following terms:
 - (a) Interference & Coefficient of coincidence
 - (b) Gene order & gene distance. [8+8]
3. Relate the potential effect of the Lyon hypothesis on the Retina of a human female heterozygous for the X-linked red-green color blindness. [16]
4. Write in detail about petite phenotype in yeast. [16]
5. What evidence led to the idea that DNA was the genetic material? Explain. [16]
6. Write short notes on
 - (a) linkage and crossing over
 - (b) transduction. [8+8]
7. What is the method used in karyotyping? Explain the importance of karyotyping. [16]
8. Discuss the organization of genetic material in Drosophila? [16]
