## PARUL UNIVERSITY FACULTY OF APPLIED SCIENCE M.Sc./IMSc, winter 2019-20 Examination

Subject Code: 11202101Time: 10:30am to 1:00pmSubject Name: GeneticsTotal Marks: 60Instructions:Instructions are compulsory.1. All questions are compulsory.Instruction the right indicate full marks.3. Make suitable assumptions wherever necessary.Instructions wherever necessary.	M.Sc./IMSc, winter 2019-20 Examination	
Subject Name: Genetics         Total Marks: 60           Instructions:         1. All questions are compulsory.           2. Figures to the right indicate full marks.         3. Make suitable assumptions wherever necessary.           4. Start new question on new page.         (08)           (a) <i>lac</i> operon a negative control system.         (08)           (b) Structure and function of <i>trp</i> operon.         (04)           (c) Short note Regulation of galactose metabolism in yeast         (04)           (b) Short note Regulation of galactose metabolism in yeast         (04)           (c) Short note Regulation of galactose metabolism in yeast         (04)           (a) Brief note (Each of 02 marks)         (04)           (c) Short note on Regulation of galactose metabolism in yeast         (04)           (d) Brief note (Each of 02 marks)         (04)           (c) Short note on area operon         (04)           (d) Short note on area operon         (04)           (e) Short note on area operon         (04)           (f) Short note on chromatin remodeling.         (03)           (g) Short note on chordatin remodeling.         (03)           (g) Short note on cholden Rice.         (03)           (g) Short note on sproperies of plasmids.         (04)           (h) Short note on stropes of Restriction endonucleases enzymes.	Semester: 1/7 Subject Code: 11202101 Subject Name: Genetics	Time: 10:30am to 1:00pm
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<ul> <li>2. Zinc finger motif <ul> <li>(c) Short note on <i>ara</i> operon</li> <li>(04)</li> </ul> </li> <li>Q.2. B) Answer the following questions (Any two) <ul> <li>(a) Short note on chromatin remodeling.</li> <li>(b) Short note on Regulation of lytic phase Bacteriophage λ.</li> <li>(c) Short note on Golden Rice.</li> </ul> </li> <li>Q.3. A) Brief note (Each of 04 marks) <ul> <li>(b) YAC</li> </ul> </li> <li>Q.3. B) Answer the following questions (Any two) <ul> <li>(a) Ti plasmid</li> <li>(b) YAC</li> </ul> </li> <li>Q.3. B) Answer the following questions (Any two) <ul> <li>(a) Short note on BAC.</li> <li>(b) Short note on types of Restriction endonucleases enzymes.</li> <li>(c) Short note on properties of plasmids.</li> </ul> </li> <li>Q.4. A) Answer the following questions.</li> <li>(a) Brief note (Each of 02 marks)</li> <li>(b) Write a brief note on cDNA cloning in bacteria.</li> <li>(b) Write a brief note on cDNA cloning in bacteria.</li> <li>(c) Short note on steps involved in PCR.</li> <li>(d) Short note on knockout mice.</li> </ul>		(04)
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(c) Short note on Southern blotting. (03)		
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