



SEMESTER B.TECH. **END SEMESTER EXAMINATIONS** NOVEMBER 2019

**SUBJECT: HEALTH DIAGNOSTICS [BIO 4019]**

Date of Exam: **23/11/2019** Time of Exam: **2.00 PM TO 5.00 PM** Max. Marks: **50**

**Instructions to Candidates:**

- ❖ Answer ALL the questions & missing data may be suitable assumed

1A.	Give the importance of Health diagnostics study and its application in global public health.	3
1B.	Write short notes on: i) Immune disorders ii) Karyotype analysis	2
1C	Explain in detail about PCR-SSCP diagnostic method application in detecting any medical condition.	5
2A.	Give the steps involved in PAGE diagnostic method in analyzing variations in enzymes.	4
2B.	Perform <i>In situ</i> hybridization test to critically diagnose chromosome 9-22 translocations in a subject.	3
2C.	<p>Carefully analyze the karyotype given below and administer a suitable diagnostic method.</p>	3
3A.	Discuss about symptoms, behaviors and genes involved in causing neurodevelopmental disorders in detail.	5
3B.	Give detailed description on:	5

	a) Mucopolysaccharidoses b) Glycogen storage disorders	
<b>4A.</b>	Briefly discuss about various CD markers available with examples and their applications.	<b>5</b>
<b>4B.</b>	Discuss about the need for HLA typing during an transplantation procedure.	<b>5</b>
<b>5A.</b>	Elaborate on: i) Antigen-Antibody Reactions ii) Signal Amplification Systems	<b>5</b>
<b>5B.</b>	Discuss the case studies on: a) Diagnosis of HIV b) Diagnosis of enteric diseases	<b>5</b>