



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD, KOLKATA-700019



TERM: Pre-Test

TEACHER'S NAME: SHAISTA AHMED

Syllabus planning for the academic year 2020

Subject: BIOLOGICAL SCIENCES

CLASS: 12

SECTION: A1and A2

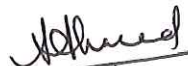
No. of working days:- 03

No. of periods available: 03

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	CLASS WORK	HOME WORK
JANUARY					
FEBRUARY					
MARCH					
APRIL	03	<u>CHAPTER 1</u> REPRODUCTION IN ORGANISMS	ASEXUAL REPRODUCTION , SEXUAL REPRODUCTION, PRE- AND POST- FERTILIZATION EVENTS.	OBJECTIVE QUESTIONS (MCQ,VSAQ, SAQ) TO BE GIVEN ON THE TOPIC- ASEYUAL REPRODUCTION, PRE AND POST FERTILIZATION EVENTS.	NOTES TO BE GIVEN ON MODES OF ASEYUAL REPRODUCTION, TYPES OF SYNGAMY AND TYPES OF POLLINATION

Teachers are requested to prepare a LESSON PLAN for each Topic to be taught. The Lesson plans are to be submitted along with the monthly planner.

Submitted on : 27.1.2020

Signature of Teacher : 
28/1/20

Academic Co-ordinator :  28/1/2020

PRINCIPAL

VICE PRINCIPAL  28/2/2020



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION
27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019



TERM: PRE TEST
Subject: BIOLOGICAL SCIENCES

TEACHER'S NAME: SHAISTA AHMED

CLASS: 12

SECTION: A1, A2

Syllabus planning for the academic year 2020

No. of working days:- 70

No. of periods available: 35

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASSWORK
MAY	7	<u>CHAPTER 2:</u> HUMAN REPRODUCTION <u>CHAPTER 4:</u> REPRODUCTIVE HEALTH	GAMETOGENESIS, OOGENESIS, IMPLANTATION AND FERTILIZATION. BIRTH CONTROL, SEXUALLY TRANSMITTED DISEASES AND INFERTILITY.	OBJECTIVE QUESTIONS (MCQ, VSAQ, SAQ) TO BE GIVEN ON THE TOPICS - MALE REPRODUCTIVE AND FEMALE REPRODUCTIVE SYSTEM, GAMETOGENESIS, OOGENESIS, IMPLANTATION. SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS - BIRTH CONTROL, SEXUALLY TRANSMITTED DISEASES, INFERTILITY.	EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON THE TOPICS- MALE AND FEMALE REPRODUCTIVE SYSTEM, GAMETOGENESIS, OOGENESIS, IMPLANTATION. EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPICS- BIRTH CONTROL, SEXUALLY TRANSMITTED DISEASE AND INFERTILITY.
JUNE	11	<u>CHAPTER 5:</u> PRINCIPLES OF INHERITANCE <u>CHAPTER 6:</u> HUMAN HEALTH AND DISEASE <u>CHAPTER 7:</u> MOLECULAR BASIS OF INHERITANCE	MENDEL'S LAW OF INHERITANCE, MONOHYBRID AND DIHYBRID CROSS, INCOMPLETE INHERITANCE, CO-DOMINANCE, LINKAGE, SEX DETERMINATION, MUTATION, PEDIGREE ANALYSIS, MENDELIAN DISORDERS. COMMON DISEASE IN HUMAN, IMMUNITY, AIDS, CANCER, DRUG AND ALCOHOL ABUSE. NUCLEOSOME MODEL, REPLICATION, TRANSCRIPTION.	OBJECTIVE QUESTIONS ON (MCQ, VSAQ, SAQ) TO BE GIVEN ON TOPICS- MENDEL'S LAW OF INHERITANCE, MONOHYBRID AND DIHYBRID CROSS, INCOMPLETE INHERITANCE, CO DOMINANCE, LINKAGE, SEX DETERMINATION, MUTATION, PEDIGREE ANALYSIS, MENDELIAN DISORDERS, CHROMOSOMAL DISORDERS. OBJECTIVE QUESTIONS (MCQ, VSAQ, SAQ) TO BE GIVEN ON COMMON DISEASES IN HUMANS, IMMUNITY, AIDS, CANCER, DRUG AND ALCOHOL ABUSE. LONG ANSWER QUESTIONS TO BE GIVEN ON TOPICS - NUCLEOSOME MODEL, REPLICATION, TRANSCRIPTION.	EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPICS - BACK CROSS, TEST CROSS, MULTIPLE ALLELE, LINKAGE, PEDIGREE ANALYSIS. DISCUSSION AND NOTES TO BE GIVEN ON- IMMUNITY, ELISA, AIDS, CANCER, DRUG AND ALCOHOL ABUSE. EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPICS - NUCLEOSOME MODEL, REPLICATION, TRANSCRIPTION. <u>LAST DATE OF PROJECT SUBMISSION - 16.06.2020</u>
JULY	17	<u>CHAPTER 6:</u> MOLECULAR BASIS OF INHERITANCE <u>CHAPTER 7:</u> EVOLUTION <u>CHAPTER 9:</u> STRATEGIES FOR ENHANCEMENT <u>PRE TEST BEGINS ON 03-08-2020</u>	GENETIC CODE, TRANSLATION, OPERON CONCEPT, DNA FINGER PRINTING. EVIDENCE OF EVOLUTION, ADAPTIVE RADIATION, MECHANISM OF EVOLUTION, HARDY -WEINBERG PRINCIPLE, ORIGIN AND EVOLUTION OF MAN. PLANT AND ANIMAL BREEDING, SINGLE CELL PROTEIN, TISSUE CULTURE. <u>SYLLABUS FOR PRE TEST EXAMINATION:</u> <u>CHAPTERS- 1,2,3,4,5,6,7,8,9.</u>	LONG ANSWER QUESTION TO BE GIVEN ON TOPICS - PROPERTIES OF GENETIC CODE, TRANSLATION, LAC OPERON, DNA FINGERPRINTING. OBJECTIVE QUESTIONS ON (MCQ, VSAQ, SAQ) TO BE GIVEN ON - EVIDENCES OF EVOLUTION OF MAN. SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPIC - PLANT AND ANIMAL BREEDING, SINGLE CELL PROTEIN, TISSUE CULTURE.	EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPICS- ORIGIN OF LIFE, CONVERGENT AND DIVERGENT EVOLUTION, INDUSTRIAL MELANISM, FLOW CHART OF HUMAN EVOLUTION. EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPICS_ PLANT BREEDING, TISSUE CULTURE, MICROPROPAGATION.
AUGUST	8	<u>CHAPTER 10:</u> MICROBES IN HUMAN WELFARE <u>CHAPTER 11:</u> BIOTECHNOLOGY: PRINCIPLES AND PROCESSES.	ROLE OF MICROBES IN DIFFERENT ASPECTS LIKE HOUSEHOLD PRODUCTS, INDUSTRIES, SEWAGE TREATMENT, BIOGAS PRODUCTION, AS BIOCONTROL AGENTS, BIOFERTILIZERS. TOOLS OF RECOMBINANT DNA TECHNOLOGY, CLONING VECTORS, PROCESS OF RECOMBINANT TECHNOLOGY.	SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS- ROLE OF MICROBES IN DIFFERENT ASPECTS LIKE HOUSEHOLD PRODUCTS, INDUSTRIES, SEWAGE TREATMENT, BIOGAS PRODUCTION, AS BIOCONTROL AGENTS, BIOFERTILIZERS. OBJECTIVE QUESTIONS ON RESTRICTION ENZYMES AND CLONING VECTORS.	EXPLANATION OF THE ROLE OF MICROBES AND PRINCIPLES OF BIOTECHNOLOGY WAS DONE. SHORT ANSWER TYPE QUESTIONS WERE GIVEN ON THE TOPICS- BIOFERTILIZERS, SEWAGE TREATMENT.

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Submitted on: 27.1.2020

Signature of Teacher:

PRINCIPAL

Shaista Ahmed
28/1/20

Academic Co-ordinator:

VICE PRINCIPAL

J. Shekhar 28/1/2020

Shaista Ahmed
28/1/2020



ST. LAWRENCE HIGH SCHOOL
A JESUIT CHRISTIAN MINORITY INSTITUTION
27, BALLYGUNGE CIRCULAR ROAD, KOLKATA- 700019
TERM: SELECTION TEST



TEACHER'S NAME: SHAISTA AHMED

Syllabus planning for the academic year 2020

No. of working days:- 58

Subject: BIOLOGICAL SCIENCE

CLASS: 12

SECTION: A1, A2

No. of periods available:34

MONTH	NO. OF PERIODS	LESSONS	TOPICS COVERED	HOMEWORK	CLASSWORK
SEPTEMBER	20	CHAPTER 12: BIOTECHNOLOGY AND ITS APPLICATIONS CHAPTER 13: ORGANISMS AND POPULATION CHAPTER 14: ECOSYSTEM CHAPTER 15: BIODIVERSITY AND CONSERVATION	BIOTECHNOLOGICAL APPLICATIONS IN AGRICULTURE, MEDICINE, TRANSGENIC ANIMALS. ORGANISMS AND ITS ENVIRONMENT, ADAPTATION, POPULATION ATTRIBUTES, POPULATION GROWTH, POPULATION INTERACTIONS. ECOSYSTEM-STRUCTURE AND FUNCTION.BIODIVERSITY	SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS GENETICALLY ENGINEERED INSULIN, GENE THERAPY, AND TRANSGENIC ANIMALS. SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON THE TOPICS - ADAPTATION, POPULATION ATTRIBUTES, POPULATION GROWTH, POPULATION INTERACTIONS LONG ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS: ECOSYSTEM-STRUCTURE AND FUNCTION, PRODUCTIVITY, ENERGY FLOW, ECOLOGICAL SUCCESSION,, NUTRIENT CYCLING. SAQ ON BIODIVERSITY.	EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON THE TOPIC – GENETICALLY ENGINEERED INSULIN, GENE THERAPY, AND TRANSGENIC ANIMALS. EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON TOPIC – ADAPTATION, POPULATION ATTRIBUTES, POPULATION GROWTH, POPULATION INTERACTIONS. EXPLANATION OF– COMPONENTS OF ECOSYSTEM, ENERGY FLOW,SUCCESSION EXPLANATION AND NOTES ON BIODIVERSITY.
OCTOBER	11	CHAPTER 15: BIODIVERSITY AND CONSERVATION. CHAPTER 16: ENVIRONMENTAL ISSUES. ENTIRE SYLLABUS COMPLETED	LOSS AND CAUSES OF BIODIVERSITY, BIODIVERSITY CONSERVATION. CAUSES AND CONTROL OF AIR POLLUTION, SOLID WASTE, GREEN HOUSE EFFECT, OZONE DEPLETION, DEFORESTATION.	SHORT ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS – LOSS AND CAUSES OF BIODIVERSITY, BIODIVERSITY CONSERVATION. OBJECTIVE TYPE QUESTIONS AND LONG ANSWER TYPE QUESTIONS TO BE GIVEN ON TOPICS- CAUSES AND CONTROL OF AIR POLLUTION, WATER POLLUTION,SOLID WASTE,GREEN HOUSE EFFECT,OZONE DEPLETION,DEFORESTATION.	EXPLANATION, DISCUSSION AND NOTES TO BE GIVEN ON EXSITU AND INSITU CONSERVATION. EXPLANATION AND NOTES TO BE GIVEN ON TOPICS- CAUSES AND CONTROL OF AIR AND WATER POLLUTION,SOLID WASTE,GREENHOUSE EFFECT,OZONE DEPLETION.
NOVEMBER	3	REVISION OF ENTIRE SYLLABUS SELECTION TEST EXAMINATION EXAMINATION BEGINS ON 18-11-20	SYLLABUS FOR SELECTION TEST EXAM: <u>1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16</u>		
DECEMBER	—	—	—	—	—

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Submitted on : 27.1.2020

Signature of Teacher : *Shaista Ahmed*
28/1/20

PRINCIPAL

Academic Co-ordinator : *J. Shepe* 28/1/2020

VICE PRINCIPAL

Shaista Ahmed
28/1/2020