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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

B.TECH

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)

(Objective Type)

Subject Code: ABT0201 **Max. Mks. : 70**

Subject: Introduction to Biotechnology **Time : 70 Minutes**

General Instructions:

All questions are compulsory.

Question No- 1 to 15 are objective type question carrying 2 marks each.

Question No- 16 to 35 are also objective type/Glossary based question carrying 2 marks each.

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Type	Difficulty	Correct	Option1	Option2	Option3	Option4
1	Cell organelles are located within the ____ of the cell.		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Cytoplasm	Nucleus	Cytoplasm	Lysosomes	Cell membrane
2	This organelle is responsible for destroying worn-out cell parts--		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Lysosomes	Lysosomes	Mitochondrion	Golgi apparatus	Ribosome
3	Which of the following organisms can be found in extreme saline conditions?		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Archaebacteria	Eubacteria	Archaebacteria	Cyanobacteria	Mycobacterium
4	Blue-green algae belong to which group----		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Prokaryotes	Protista	Prokaryotes	Fungi	Bryophytes
5	Which of the following is an indicator of air pollution?		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Lichens	Mycorrhiza	Agaricus	Lichens	Common mushrooms
6	Which of the following is not found within DNA----		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Amino acids	Thymine	Phosphodiester bonds	Complementary base pairing	Amino acids
7	During denaturation of DNA, which of the following happens?		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Phosphodiester bonds break within the sugar-phosphate backbone	Hydrogen bonds between complementary bases break	Phosphodiester bonds break within the sugar-phosphate backbone	Hydrogen bonds within the sugar-phosphate backbone break----	Phosphodiester bonds between complementary bases break
8	Which of the following may use RNA as its genome----		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	Virus	Bacterium	An archaeon	Virus	Eukaryote
9	Which of the following systems protects our body against disease-causing microbes?		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	Immune system	Immune system	Digestive system	Excretory system	Respiratory system
10	Which of the following immunity is present from our birth?		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	Innate Immunity	Innate Immunity	Active immunity	Passive immunity	Acquired immunity
11	B-cells and T-cells are two types of cells involved in		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	Acquired immunity	Innate Immunity	Active immunity	Passive immunity	Acquired immunity
12	C-peptide of human insulin is		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	Removed during maturation of pro-insulin to insulin.	A part of mature insulin molecule	Responsible for formation of disulphide bridges.	Removed during maturation of pro-insulin to insulin.	Responsible for its biological activity.
13	Choose the correct option regarding Retrovirus--		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	An RNA virus that can synthesize DNA during infection.	An RNA virus that can synthesize DNA during infection.	A DNA virus that can synthesize RNA during infection	A ss DNA virus.	A ds RNA virus
14	The trigger for activation of toxin of Bacillus thuringiensis is:		Single Choice Questions	Single Choice Questions	2	Single Choice	Brilliant	Alkaline pH of gut	Acidic pH of stomach.	High temperature	Alkaline pH of gut	Mechanical action in the insect gut
15	A single molecule of glucose generates _____ molecules of acetyl CoA, which enters the Krebs cycle		Single Choice Questions	Single Choice Questions	2	Single Choice	Smart	2	4	3	2	1
16	Animal cell lack ------- and --------		Glossary I	Glossary I	2	Single Choice	Brilliant	Cell wall and Plastids	Nucleoid	Nucleotide	Peptide	Cell wall and Plastids

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Type	Difficulty	Correct	Option1	Option2	Option3	Option4
17	The naked genetic material in prokaryotic cell is ------		Glossary I	Glossary I	2	Single Choice	Brilliant	Nucleoid	Nucleoid	Nucleotide	Peptide	Cell wall and Plastids
18	ATP is a higher ----------		Glossary I	Glossary I	2	Single Choice	Brilliant	Nucleotide	Nucleoid	Nucleotide	Peptide	Cell wall and Plastids
19	In a protein different amino acids are united to one another by ------- bonds		Glossary I	Glossary I	2	Single Choice	Brilliant	Peptide	Nucleoid	Nucleotide	Peptide	Cell wall and Plastids
20	The process of recombination in prokaryotes takes place by ----------		Glossary II	Glossary II	2	Single Choice	Brilliant	Transformation, Transduction and conjugation	Bacteria and Archaea	Metaphase	Pili	Transformation, Transduction and conjugation
21	In prokaryotes, the hair-like outgrowths which attach to the surface of other bacterial cells are-----		Glossary II	Glossary II	2	Single Choice	Brilliant	Pili	Bacteria and Archaea	Metaphase	Pili	Transformation, Transduction and conjugation
22	The two domains to which prokaryotes are classified into are---------		Glossary II	Glossary II	2	Single Choice	Brilliant	Bacteria and Archaea	Bacteria and Archaea	Metaphase	Pili	Transformation, Transduction and conjugation
23	The best stage at which the total number of chromosomes can be counted in any species is--------		Glossary II	Glossary II	2	Single Choice	Brilliant	Metaphase	Bacteria and Archaea	Metaphase	Pili	Transformation, Transduction and conjugation
24	DNA element with ability to change position is------		Glossary III	Glossary III	2	Single Choice	Brilliant	Transposon	Chemical synthesis of gene	5	t-RNA	Transposon
25	Khorana was awarded Noble prize for-----		Glossary III	Glossary III	2	Single Choice	Brilliant	Chemical synthesis of gene	Chemical synthesis of gene	5	t-RNA	Transposon
26	Number of structural genes in tryptophan operon is------		Glossary III	Glossary III	2	Single Choice	Brilliant	5	Chemical synthesis of gene	5	t-RNA	Transposon
27	Anticodon occurs over---------		Glossary III	Glossary III	2	Single Choice	Brilliant	t-RNA	Chemical synthesis of gene	5	t-RNA	Transposon
28	Jenner is called father of-------		Glossary IV	Glossary IV	2	Single Choice	Brilliant	Immunology	Active immunity	Weakened germs in injection	Virus	Immunology
29	Immunity acquired after an infection is -------		Glossary IV	Glossary IV	2	Single Choice	Brilliant	Active immunity	Active immunity	Weakened germs in injection	Virus	Immunology
30	Active immunity is got from-----		Glossary IV	Glossary IV	2	Single Choice	Brilliant	Weakened germs in injection	Active immunity	Weakened germs in injection	Virus	Immunology
31	AIDS is caused by -------		Glossary IV	Glossary IV	2	Single Choice	Brilliant	Virus	Active immunity	Weakened germs in injection	Virus	Immunology
32	The first transgenic crop was-------		Glossary V	Glossary V	2	Single Choice	Brilliant	Tobacco	Vitamin A	Human insulin	Genetic Engineering	Tobacco
33	Addition of foreign gene into a crop is -------		Glossary V	Glossary V	2	Single Choice	Brilliant	Genetic Engineering	Vitamin A	Human insulin	Genetic Engineering	Tobacco
34	Transgenic bacteria are being used for producing------		Glossary V	Glossary V	2	Single Choice	Brilliant	Human insulin	Vitamin A	Human insulin	Genetic Engineering	Tobacco
35	Transgenic Golden rice is enriched with high-------		Glossary V	Glossary V	2	Single Choice	Brilliant	Vitamin A	Vitamin A	Human insulin	Genetic Engineering	Tobacco