

PM SHRI KENDRIYA VIDALAYA SITAPUR SHIFT 1
MONTHLY TEST CLASS 12 BIOLOGY

MM 30

TIME 1 HR

GENERAL INSTRUCTIONS

- 1) All Questions are Compulsory.
- 2) Section A contains Multiple choice questions
- 3) Section B contains Short Question
- 4) Section C contains Long answer type

SECTION A		Ma
In malignant tumors, the cells proliferate, grow rapidly and move to other parts of the body to form new tumours. This stage of disease is called A. Metagenesis B. Metastasis C. Mitosis D. Tetratogenesis		1
Interferons are: A. Anti-bacterial proteins B. Anti-viral proteins C. Complex proteins D. Anti-clotting proteins		1
What particular antibody causes a main immune response? a) IgG, b) IgM, c) IgA, d) IgE.		1
Which of the following is the cause of autoimmune diseases? a) Immune System begins to attack its cells and tissues b) Immune System starts producing cells and tissues c) Immune System fails completely d) Immune System produces WBCs in a huge number		1
Antibiotics are most effective against which type A. Filaria B. Ringworm C. Tuberculosis D) Rheumatoid arthritis		1
Dr. Kirti has a patient who is diagnosed with an HIV infection. She has to test for HIV infection in the partner of the patient who has no symptoms of the infection. Which of these methods can be used to diagnose the infection in the partner?		1

P) Urine analysis Q) Electroporation R) Polymerase Chain Reaction (PCR) S) Enzyme Linked Immuno-Sorbent Assay (ELISA)	
Which one is a true statement regarding DNA polymerase used in PCR? (a) It is used to ligate introduction DNA in recipient cells (b) It serves as a selectable marker (c) It is isolated from a virus (d) It remains active at high temperature	1
ASSERTION-REASON TYPE (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion. (b) Both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion. (c) The Assertion is correct but Reason is incorrect. (d) Both the Assertion and Reason are incorrect	1
Assertion(A) : Antibiotics are obtained from bacteria and fungi. Reason (R) : The first antibiotic penicillin was obtained from fungus <i>Penicillium notatum</i>.	1
Assertion : Plasmids are single-stranded extra chromosomal DNA. Reason : Plasmids are usually present in eukaryotic cells	1
Assertion (A): Bone marrow and thymus are primary lymphoid organs. Reason (R): It is the organs, to which matured lymphocytes migrate, interact with antigens and then proliferate to become effector cells	1
SECTION B	
Differentiate between opioids and cannabinoids on the basis of their (a) specific receptor site in human body. (b) mode of action in human body	2
Explain contact inhibition and metastasis with reference to cancer	2
Match the following list of bioactive substances and their roles: Bioactive Substance Role A. Statin i. Removal of oil stains	2

B. Cyclosporin A C. Streptokinase D. Lipase	ii. Removal of clots from blood vessels iii. Lowering of blood cholesterol iv. Immuno-suppressive agent	
Who among the Dryopithecus and Ramapithecus was more man-like? By what Latin name the first hominid was known?		2
How has the bacterium Bacillus thuringiensis helped us in controlling caterpillars of insect pests?		2
LONG ANSWER TYPE		
Draw the figure of the plasmid pBR322. (i) Identify the selectable marker in the given figure. (ii) How is the coding sequence of the b–galactosidase considered a better marker than the ones identified by you in the figure. (iii) Why is it necessary to have a selectable marker in the cloning vector		5
Represent schematically the life cycle of a malarial parasite. OR 1) Draw the figure, structure of an antibody molecule , Name all the parts 2) Differentiate between active immunity and passive immunity.		5