

CLASS: XII	INDIAN SCHOOL MUSCAT SECOND PERIODIC TEST	SUBJECT: BIOLOGY
	SET - B	
QP.NO.	VALUE POINTS	SPLIT UP MARKS
1.	Acts as an adaptor molecule that picks up a particular amino acid from cellular pool and takes the same over to A site of m RNA for incorporation into polypeptide chain.	1
2.	Different species starting from a common point in a geographical area radiate to other geographical areas. OR Total allelic frequency of population remains constant and equals one.	1
3.	The strand having the polarity 3' – 5' is transcribed because RNA polymerase polymerises nucleotides only in 5' -3' direction.	1+1
4.	Cloning vectors are used for transferring fragments of foreign DNA into a suitable host.	1
5.	Cellulase, proteases, lipases, RNase, chilled ethanol.	½ x 4
6.	Treat with divalent cation, ice , heatshock, ice	½ x 4
7.	a) Act as substrates for polymerization. b) Provide energy	1+1
8.	Excessive use of herbicides, pesticides, antibiotics etc has only resulted in selection of resistant varieties in a much lesser time scale. For example: use of DDT to kill mosquitos.	1+1
9.	Once the RNA polymerase reaches the termination region of DNA, the RNA polymerase is separated from DNA – RNA hybrid and nascent RNA separates with the help of termination factor called rho factor.	1+1
10.	Presence of hydrogen bonds, the plane of one bp stacks over the other, thymine in place of uracil. (any two). Uracil instead of thymine in RNA. OR Spicing, capping and tailing.	1+1+1
11.	If a recombinant DNA bearing gene for resistance to an antibiotic is transferred into Ecoli cells, the host cells transform into ampicillin resistant cells. In ampicillin containing medium only transformants will grow. Thus they can be selected . OR Explanation of tetracycline resistance or β galactosidase site.	1+1+1