| Region 'X'	Factor 'Y'	Enzyme 'Z'
(a) Terminator	Sigma (σ)	RNA polymerase
(b) Promoter	Rho (ρ)	RNA polymerase
(c) Promoter	Sigma (σ)	RNA polymerase
(d) Promoter	Sigma (σ)	DNA polymerase

Sol. 2 (C) Promoter   Sigma (σ)   RNA Polymerase

3. The status of the human population reflected in the human age pyramid given below is:
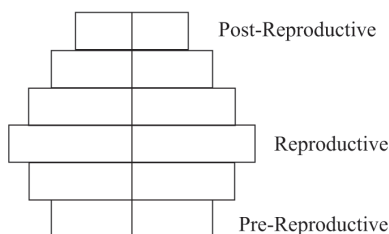
(a) Declining population   (b) Stable population   (c) Expanding population   (d) Extinct population

Sol. 3 (a) Declining Population.

4. The graph plotted below is based on the data collected by biology students with respect to the levels of oxygen at the specific points in the river flowing outside their city. Which point in the graph indicates the entry of untreated sewage in the river?
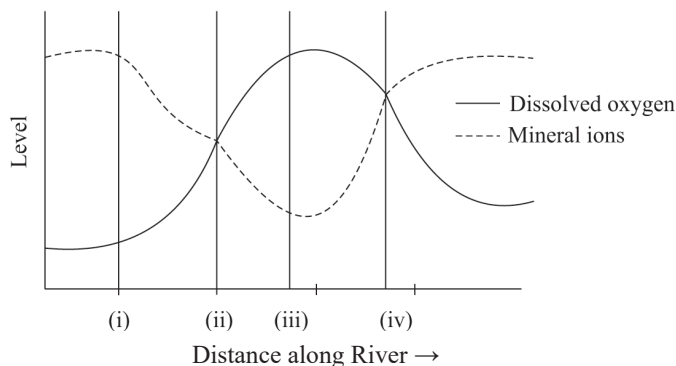
(a) Point (i)   (b) Point (ii)   (c) Point (iii)   (d) Point (iv)

Sol. 4 (d) Point (iv) The dissolved oxygen is decreasing and mineral ions are increasing.

5. Given below are two columns. In Column I is the list of four enzymes and in Column II is the list of functions of the given enzymes. Which one of the following options shows the enzymes matched with their respective functions correctly?

Column I (Enzyme)	Column II (Function)
P. DNA Ligase	i. Removes nucleotides from ends of DNA
Q. Restriction exonuclease	ii. Extends primer on a DNA template