Q.P. Code :11119

[Time: 2:30 Hours] **[Marks:60]**

Please check whether you have got the right question paper.

N.B:
1. All questions carry equal marks.
2. All questions are compulsory.
3. Draw a necessary diagram whenever necessary.

Q. 1 Give a brief description of functions of cAMP? Justify its role as second messengers in hormonal action. **12**

OR

Explain in details the role of G-protein with reference to suitable example **12**

Q. 2 Draw a well labelled diagram of secondary structure of DNA. Discuss the salient features on Watson and crick model of double stranded structure of DNA **12**

OR

Write detailed account on molecular basis of gene mutation **12**

Q. 3 What are the different components required for the process of translation, enlist and explain the function of each of them **12**

OR

Differentiate between Rho dependent and Rho independent processes in termination of Transcription **12**

Q. 4 Explain in detail of negative and positive gene regulation in prokaryotes with respect to tryptophan operon? **12**

OR

Briefly describe concept of lac operon model of control of protein synthesis **12**

Q. 5 Short notes on **any three** **12**

a) Arabinose operon
b) Characteristics of genetic code
c) DNA replications
d) Okazaki fragments
e) G-proteins
f) CAMP and protein Kinase
