17P236 (Pages: 2) Name:…..………..……..…

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, MAY 2018
(Regular/Supplementary/Improvement)
(CUCSS - PG)
CC15P BO2 C05 - CELL BIOLOGY, MOLECULAR BIOLOGY, BIOPHYSICS
(Botany)
(2015 Admission onwards)

Time: Three Hours   Maximum: 36 Weightage

I. Answer *all* questions very briefly.

   1. RIA.

   2. Define attenuation.

   3. Give Henderson- Hasselbatch equation.

   4. What is primosomes?

   5. Role of chaperons.

   6. What are mitotic inducers?

   7. Define Beer Lambert's Law.

   8. Mention different physical mutagens?

   9. Define c-valueparadox.

   10. What is the significance of Go?

   11. Define Chargaff's rule.

   12. What is a linker DNA?

   13. Give the function of buffer in biological systems.

   14. Differentiate euchromatin and heterochromatin.

(14 x 1 = 14 Weightage)

II. Answer any *seven* questions in not more than 100 words.

   15. Give an account on cellular interactions and its application.

   16. Explain the application of molecular phylogenetics.

   17. Give an account on chromosome banding and its significance.

   18. Mention the application of autoradiography in biological systems.

   19. Write an account on different antibodies and explain the structure of immunoglobulin.

   20. Describe synaptonemal complex.

21. Write a note on cellular differentiation.

22. Give a comparative account on colorimetry and spectrophotometry.

23. Explain the gene regulation in prokaryotes.

24. Write application of lyophilisation.

(7 x 2 = 14 Weightage)

III. Answer any *two* questions in 300 words.

25. Explain the process of apoptosis and add a note on ageing.

26. Give a detailed account on the mechanisms of protein synthesis.

27. Describe the principle of centrifugation. Mention the types and application of centrifugation.

28. Write an account on cancer and the interaction of cancer cells with normal cells.

(4 x 2 = 8 Weightage)

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