

BIO302 MCQs Mids

Q:
The hydrophilic backbones of alternating deoxyribose and phosphate groups are inside the double helix, facing the surrounding water?

- a) True
- b) False**
- c) False in certain cases
- d) a and c

Q:
Chromosomes are made up of.....

- a) Protein and DNA**
- b) DNA and RNA
- c) RNA and protein
- d) a & c

Q:
Chromosome theory of inheritance by Thomas Hunt Morgan was presented in

- a) 1913
- b) 1912
- c) 1911
- d) 1910**

Q:
Nucleotide consists of major molecules

- a) 2
- b) 3
- c) 4
- d) 5**

Q:
How many amino acids are there in one complete tern of DNA...

- a) 6.3
- b) 3.6**
- c) 36
- d) 4.6

Q:
Nucleosome fold to form the _____ fiber

- a) 20 nm
- b) 30 nm**
- c) 40 nm
- d) 50 nm

Q:
On which media, cells are preferred to be grown?

- a) N14**
- b) Pb
- c) Cs
- d) Ra

Q:
DNA polymerase has _____ domains

- a) 3**
- b) 4
- c) 5
- d) 6

Q:

An E.Coli chromosome is estimated to have about.....super-coiled loops

- a) 500
- b) 400**
- c) 300
- d) 200

Q:

Separation of DNA is accomplished by _____.

- a) Type I topoisomerase
- b) Type II topoisomerase**
- c) Type III topoisomerase
- d) DNA polymease

Q:

Which one of the following is not an ionizing radiation?

- a) X-rays
- b) Ultraviolet light**
- c) Gamma rays
- d) β rays

Q:

Hydrolytic deamination of cytosine is estimated to take place about

- a) 1000 to 5000 times a day in a mammalian cell
- b) 100 to 500 times a day in a mammalian cell**
- c) 10 to 50 times a day in a mammalian cell
- d) 1to 5times a day in a mammalian cell

Q:

What will happen to the DNA exposed to N-methylguanine

- a) it will be oxidized
- b) it will make dimers of the bases
- c) it will lead to production of mono-adduct
- d) it will form a basic site**

Q:

Aflatoxins are produced by

- e) Bacteria
- f) Virus
- g) Fungi**
- h) Parasites

Q:

.....are similar enough to the proper bases to get taken up by cells converted into nucleoside triphosphate and incorporated into DNA during replication.

- a) Interclating agents
- b) Base analogs**
- c) Amino acid analogs
- d) None of these

Q:

Cells infected with phageprovide the ideal system to find the true template for protein synthesis

- a) T4**
- b) P4
- c) S4
- d) L4

Q:

RNA polymerase performs essentially the same reaction in the cells from bacteria to human that is the synthesis of

- a) cDNA

b) DNA

c) RNA

d) DNA, RNA and Cdna

e) Q:

There are three human MutS homologs

a) MSH1, MSH2, MSH3

b) MSH2, MSH3, MSH4

c) MSH2, MSH3, MSH6

d) MSH2, MSH3, MSH5

Q:

In long patch repair, how many nucleotides are repaired...

a) 1

b) 4-6

c) 2-8

d) 10-14

Q:

Pyrimidine dimers are formed by...

UV radiation

Infra red

Ultrasound

nuclear radiation