

BIO543: Big Data Mining Healthcare

(8th February 2024, Quiz1)

Maximum Marks: 20

Duration: 20 Minutes

Name: _____

Admission No: _____

Instructions: Attempt all questions, each question carry one mark. Please tick only best possible option.

1. FASTA format is not used to store following molecules?
a) DNA
b) RNA
c) **Lipid**
d) Protein
2. Proteins are made of ___ types of natural amino acids.
a) 4
b) **20**
c) 16
d) 64
3. Which database is used for creating datasets for developing STAT3In?
a) UniProt
b) **PUBCHEM**
c) SalivaDB
d) TCIA
4. Which is commonly used database for designing epitope based vaccine?
a) **IEDB**
b) SwissProt
c) PDB
d) CPPSite2
5. Which database base contain experimentally determined protein structures?
a) Propred
b) BLAST
c) **PDB**
d) MHCBN
6. Which of the following is not a function of an operating system?
a) User interface
b) **Database management system**
c) I/O Management
d) Memory mangement
7. Which command is used to list all running containers in docker?
a) **ps -a**
b) cat -d
c) list -a
d) rm -a
8. Which of the following Python command can read all content of a file?
a) **input.read()**
b) readline()
c) input.readline()
d) readall()
9. Which of the following data type in python is mutable?
a) Tuple
b) **List**
c) Strings
d) None
10. Which python library can be used to read excel file?
a) Numpy
b) Matplot
c) **pandas**
d) Column
11. Which of these is not Object Oriented Programming?
a) Python
b) C++
c) Java
d) **Fortran**

12. Which is the commonly used format to present protein sequence?
a) BION c) BLAST
b) JSON d) **FASTA**
13. How many amino acids are made by five codons?
a) **0** c) 2
b) 4 d) 6
14. How many DNA duplexes will be obtained from one DNA duplex after 5 cycles of PCR?
a) 16 c) 32
b) 64 d) 128
15. Which of the following tool/database is used for peptide-based therapeutics?
a) PADEL c) **B3Pdb**
b) CancerDR d) TCIA
16. Which tool can be used for predicting disease biomarker?
a) **CancerCSP** c) AlgPred
b) ToxinPred d) Gromacs
17. PUBMED contain around _____ citations/abstracts of biomedical literature.
a) 16 thousands c) 26 billions
b) **36 millions** d) 46 trillions
18. Living organism can be divided in ____ kingdoms?
a) One c) Three
b) **Five** d) Seven
19. Which macromolecules contain anticodons?
a) mRNA c) Protein
b) DNA d) **tRNA**
20. Which of the following is not an example of unicellular organism?
a) Amoeba c) Paramecium
b) Bacteria d) **Octopus**