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COLLEGE OF ENGINEERING AND TECHNOLOGY

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT01- Computer Graphics

MARK SHEET

Sl. No	Register Number	Student Name	Marks
1	17TH3101	S. JAYAVARTHINI	88
2	17TH3102	KEERTHANA R	96
3	17TH3103	PARAMESWARI V	84
4	17TH3104	SUCITHA E	92
5	17TH3105	YASMEEN S	96

HOD

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT01 - Computer Graphics

NAME :

CLASS :

DATE :

1. What is the range of the pixels in a Grayscale image?

   A. 0 - 1

   B. 0 - 255

   C. 0 - 1024

   D. None of the above

   Answer: B. 0 – 255

2. The RGB image is known as the true color image. What does RGB stand for?

   A. Real Grey Black Image

   B. Red Greyed Background Image

   C. Red Green Blue Image

   D. None of the above

   Answer: C. Red Green Blue Image

3. What is the pixel range for an RGB image?

   A. 0 - 8

   B. 0 - 16,777,216

   C. 0 - 1

   D. None of the above

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Answer: D. None of the above (The correct range is 0-255 for each color channel)

4. Which of the following options is not correct according to the definition of Computer Graphics?

A. Computer Graphics is used for animation purposes.

B. Computer graphics can be used to provide a better user interface.

C. Computer graphics can improve the sound quality of a video.

D. None of the above

Answer: C. Computer graphics can improve the sound quality of a video.

5. GUI stands for:

A. Graphical Usable Interface

B. Graphical User Interface

C. Graph Users Interface

D. Graphic User Interface

Answer: B. Graphical User Interface

6. PPI stands for:

A. Pixel per inch

B. Photos per instruction

C. Pixels per image

D. None of the above

Answer: A. Pixel per inch

7. Who among the following developed the CRT (Cathode Ray Tube)?

A. Charles Darwin

B. Ferdinand Braun

C. Thomas Alva Edison

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D. None of the above

Answer: B. Ferdinand Braun

8. The inside of the Cathode Ray Tube is coated with what material?

A. Fluorescent powder

B. No coating

C. Phosphorus

D. None of the above

Answer: C. Phosphorus

9. Which among the following is not a merit (advantage) of the Cathode Ray Tube?

A. It runs at the highest pixel ratio

B. It is less expensive than any other display technology

C. It is very large, heavy, and bulgy

D. None of the above

Answer: C. It is very large, heavy, and bulgy

10. In the context of 3D computer graphics, which of the following statements correctly describes the Z-buffer algorithm?

A. It is used for resolving visibility issues in rendering scenes.

B. It operates based on the painter's algorithm.

C. It requires additional memory proportional to the square root of the number of pixels in the frame buffer.

D. It stores the depth of the closest pixel encountered so far for each pixel in the frame buffer.

Answer: A and D only

11. The process of repositioning an object along a circular path is called:

A. Translation

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B. Rotation

C. Scaling

D. None of the above

Answer: B. Rotation

12. Which of the following must be specified to generate a rotation?

A. Rotational distance

B. Rotation angle

C. Coordinates

D. None of the above

Answer: B. Rotation angle

13. A positive value of the rotation angle:

A. Rotates an object in the clockwise direction

B. Rotates an object in the counter-clockwise direction

C. Both of the above

D. None of the above

Answer: B. Rotates an object in the counter-clockwise direction

14. Which of the following transformation is used for altering the object's size?

A. Translation

B. Scaling

C. Rotation

D. None of the above

Answer: B. Scaling

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15. What happens if the values of scaling factors sxs_xsx and sys_ysy are less than 1 (i.e., sx<1s_x < 1sx<1 and sy<1s_y < 1sy<1)?

A. No change in the object's size

B. Reduce the object's size

C. Increase the object's size

D. None of the above

Answer: B. Reduce the object's size

16. In which of the following cases will uniform scaling be produced?

A. Values of scaling factors sxs_xsx and sys_ysy are unequal.

B. Values of scaling factors sxs_xsx and sys_ysy are equal.

C. Both of the above

D. None of the above

Answer: B. Values of scaling factors sxs_xsx and sys_ysy are equal.

17. The Cohen-Sutherland algorithm divides the two-dimensional space into how many regions?

A. 4

B. 8

C. 9

D. 23

Answer: C. 9

18. The 4-bit code of the bottom region among the nine regions divided using the Cohen-Sutherland algorithm is:

A. 0000

B. 0010

C. 0110

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D. 0101

Answer: C. 0110

19. According to the Cohen-Sutherland algorithm, where does the line lie if the 4-bit code of both ends is 0000, and the logical OR also gives 0000?

A. Half outside half inside

B. Completely inside

C. Completely outside

D. None of the above

Answer: B. Completely inside

20. Which one of the following is the most commonly used and basic input device?

A. Mouse

B. Printer

C. Scanner

D. Keyboard

Answer: D. Keyboard

21. Which device is used for the 3D positioning of an object?

A. Trackball

B. Mouse

C. Spaceball

D. All of the above

Answer: C. Spaceball

22. Which is not an input device?

A. Impact printers

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Answer: A. Impact printers

23._____ is NOT a common bitmap-based file type extension.

A. ODT

B. TIFF

C. PNG

D. PCX

Answer: A. ODT

24. What is the minimum and maximum possible value for each of the pixels of an RGB image?

A. 0 - 2^3

B. 0 - 2^24

C. 0 - 1

D. 0 - 255

Answer: D. 0 – 255

25. Which of the following options is correct in accordance with the cathode ray tube?

A. CRTs are brighter than LCDs.

B. CRTs can operate at any resolution and at any aspect ratio.

C. CRTs are the most expensive display technology.

D. None of the above

Answer: B. CRTs can operate at any resolution and at any aspect ratio.

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Department of Information Technology

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NAME : R. KEERTHANA

CLASS : IV/IT

DATE : 20-8-2020

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24/25

96%

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C. PNG

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Certificate of Completion

2020-2021

This is to certify that Mr/Ms ..... YASMEEN S .....

Year ..... IV ..... Department ..... IT ..... has successfully Completed the Value added course.

COURSE TITLE: ..... COMPUTER GRAPHICS .....

SCORE: ..... 96 .....

COURSE DURATION: ..... (9-8-20 to 13-8-20) .....

HOD

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT02- Nature Inspired Computing

MARK SHEET

Sl. No	Register Number	Student Name	Marks
1	18TH1002	S.BALASUBRAMANIAN	88
2	18TH1003	R.DEEPIKA	84
3	18TH1004	R.DIVYA	96
4	18TH1005	J. KALAIVANI	88
5	18TH1006	K. KANIMOZHI	82
6	18TH1008	A. MANIKANDAN	88
7	18TH1009	S.MANJU	96
8	18TH1010	S.MOHAMED SHAFEE	88
9	18TH1012	K.MUGUNDHAN	96
10	18TH1014	R.RANJITH	92
11	18TH1015	S. SANTHIYA	92
12	18TH1017	P. THAMIZHARASAN	96
13	18TH1019	A. VISHNUPRIYA	96

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT02 - Nature Inspired Computing

NAME :

CLASS :

DATE :

1. Which algorithm is inspired by the process of natural selection and genetics?

   a) Ant Colony Optimization

   b) Genetic Algorithm

   c) Particle Swarm Optimization

   d) Simulated Annealing

   Answer: b) Genetic Algorithm

2. Which technique mimics the collective behavior of decentralized, self-organized systems like ant colonies?

   a) Genetic Programming

   b) Evolutionary Strategies

   c) Ant Colony Optimization

   d) Artificial Neural Networks

   Answer: c) Ant Colony Optimization

3. What is the main inspiration behind Particle Swarm Optimization?

   a) Swarm Intelligence

   b) Genetic Evolution

   c) Cellular Automata

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d) Artificial Neural Networks

Answer: a) Swarm Intelligence

4. Which algorithm is used for optimization problems and is inspired by the behavior of birds flocking or fish schooling?

   a) Ant Colony Optimization

   b) Genetic Algorithm

   c) Particle Swarm

   d) Evolutionary Programming

   Answer: c) Particle Swarm Optimization

5. What is the main concept behind Genetic Algorithms?

   a) Mimicking the behavior of ants

   b) Mimicking the process of natural selection and genetics

   c) Mimicking the behavior of particles

   d) Mimicking the behavior of neurons

   Answer: b) Mimicking the process of natural selection and genetics

6. Cellular Automata are inspired by the behavior of:

   a) Ant colonies

   b) Flocking birds

   c) Decentralized systems

   d) Simple units interacting based on rules

   Answer: d) Simple units interacting based on rules

7. Which algorithm is inspired by the way biological neurons process information?

   a) Genetic Algorithm

   b) Particle Swarm Optimization

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c) Artificial Neural Networks

d) Ant Colony Optimization

Answer: c) Artificial Neural Networks

8. What does ACO stand for?

a) Artificial Computing Organization

b) Ant Colony Organization

c) Ant Colony Optimization

d) Adaptive Computing Optimization

Answer: c) Ant Colony Optimization

9. Which technique involves simulating the behavior of particles in a multi-dimensional search space?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Simulated Annealing

Answer: b) Particle Swarm Optimization

10. Which algorithm is used for continuous optimization problems and is inspired by the process of natural selection?

a) Genetic Algorithm

b) Ant Colony Optimization

c) Particle Swarm Optimization

d) Evolutionary Programming

Answer: a) Genetic Algorithm

11. Evolutionary Strategies are inspired by which natural process?

a) Natural selection

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b) Genetic mutation

c) Flocking behavior

d) Cellular automata

Answer: a) Natural selection

12. Genetic Programming involves evolving:

a) Solutions represented as chromosomes

b) Programs represented as trees

c) Solutions represented as particles

d) Neural network architectures

Answer: b) Programs represented as trees

13. Which technique involves iteratively improving candidate solutions through random mutations and natural selection?

a) Genetic Algorithm

b) Simulated Annealing

c) Evolutionary Programming

d) Ant Colony Optimization

Answer: a) Genetic Algorithm

14. Which algorithm is used for discrete optimization problems and is inspired by the foraging behavior of ants?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Evolutionary Programming

Answer: c) Ant Colony Optimization

15. Which nature-inspired technique is often used for function optimization?

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a) Simulated Annealing

b) Ant Colony Optimization

c) Genetic Programming

d) Artificial Neural Networks

Answer: a) Simulated Annealing

16. Which of the following is NOT a nature-inspired computing technique?

a) Genetic Algorithm

b) Quicksort

c) Ant Colony Optimization

d) Neural Networks

Answer: b) Quicksort

17. Which technique involves simulating the cooling process of metals to find an optimal solution?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Simulated Annealing

Answer: d) Simulated Annealing

18. What is the main idea behind evolutionary programming?

a) Mimicking the process of natural selection

b) Mimicking the behavior of particles

c) Mimicking the behavior of ants

d) Mimicking the behavior of neurons

Answer: a) Mimicking the process of natural selection

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19. What is the primary goal of nature-inspired computing techniques?

    a) To mimic natural processes for entertainment purposes

    b) To solve complex computational problems efficiently

    c) To replace traditional computing methods entirely

    d) To create artificial life forms

    Answer: b) To solve complex computational problems efficiently

20. Which technique is used for training artificial neural networks by adjusting the connection weights based on the error between the actual and desired outputs?

    a) Genetic Algorithm

    b) Backpropagation

    c) Particle Swarm Optimization

    d) Evolutionary Strategies

    Answer: b) Backpropagation

21. Which algorithm is used for continuous optimization problems and is inspired by the behavior of particles in a multi-dimensional search space?

    a) Genetic Algorithm

    b) Particle Swarm Optimization

    c) Ant Colony Optimization

    d) Simulated Annealing

    Answer: b) Particle Swarm Optimization

22. What is the primary advantage of nature-inspired computing techniques?

    a) They always find the optimal solution to a problem

    b) They are efficient for solving only specific types of problems

    c) They are robust and adaptive

    d) They are easy to implement but often slow

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Answer: c) They are robust and adaptive

23. Which technique involves iteratively improving candidate solutions through random mutations and natural selection?

a) Genetic Algorithm

b) Simulated Annealing

c) Evolutionary Programming

d) Ant Colony Optimization

Answer: a) Genetic Algorithm

24. Which nature-inspired technique is based on the behavior of swarms of birds or fish?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Evolutionary Programming

Answer: b) Particle Swarm Optimization

25. What does the term "nature-inspired computing" refer to?

a) A type of computing based on natural language processing

b) A field of computing that mimics principles observed in natural systems

c) A computing technique using quantum principles

d) A computing approach that ignores natural phenomena

Answer: b) A field of computing that mimics principles observed in natural systems

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Department of Information Technology

20IT02 - Nature Inspired Computing

NAME : S. MANJU

CLASS : III/IT

DATE : 20-8-2020.

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24/25 96%

2. Which technique mimics the collective behavior of decentralized, self-organized systems like ant colonies?

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9. Which technique involves simulating the behavior of particles in a multi-dimensional search space?

   a) Genetic Algorithm

   b) Particle Swarm Optimization

   c) Ant Colony Optimization

   d) Simulated Annealing

10. Which algorithm is used for continuous optimization problems and is inspired by the process of natural selection?

    a) Genetic Algorithm

    b) Ant Colony Optimization

    c) Particle Swarm Optimization

    d) Evolutionary Programming

11. Evolutionary Strategies are inspired by which natural process?

    a) Natural selection

    b) Genetic mutation

    c) Flocking behavior

    d) Cellular automata

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12. Genetic Programming involves evolving:

a) Solutions represented as chromosomes

b) Programs represented as trees

c) Solutions represented as particles

d) Neural network architectures

13. Which technique involves iteratively improving candidate solutions through random mutations and natural selection?

a) Genetic Algorithm

b) Simulated Annealing

c) Evolutionary Programming

d) Ant Colony Optimization

14. Which algorithm is used for discrete optimization problems and is inspired by the foraging behavior of ants?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Evolutionary Programming

15. Which nature-inspired technique is often used for function optimization?

a) Simulated Annealing

b) Ant Colony Optimization

c) Genetic Programming

d) Artificial Neural Networks

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16. Which of the following is NOT a nature-inspired computing technique?

a) Genetic Algorithm

b) Quicksort

c) Ant Colony Optimization

d) Neural Networks

17. Which technique involves simulating the cooling process of metals to find an optimal solution?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Simulated Annealing

18. What is the main idea behind evolutionary programming?

a) Mimicking the process of natural selection

b) Mimicking the behavior of particles

c) Mimicking the behavior of ants

d) Mimicking the behavior of neurons

19. What is the primary goal of nature-inspired computing techniques?

a) To mimic natural processes for entertainment purposes

b) To solve complex computational problems efficiently

c) To replace traditional computing methods entirely

d) To create artificial life forms

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20. Which technique is used for training artificial neural networks by adjusting the connection weights based on the error between the actual and desired outputs?

a) Genetic Algorithm

b) Backpropagation

c) Particle Swarm Optimization

d) Evolutionary Strategies

21. Which algorithm is used for continuous optimization problems and is inspired by the behavior of particles in a multi-dimensional search space?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Simulated Annealing

22. What is the primary advantage of nature-inspired computing techniques?

a) They always find the optimal solution to a problem

b) They are efficient for solving only specific types of problems

c) They are robust and adaptive

d) They are easy to implement but often slow

23. Which technique involves iteratively improving candidate solutions through random mutations and natural selection?

a) Genetic Algorithm

b) Simulated Annealing

c) Evolutionary Programming

d) Ant Colony Optimization

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24. Which nature-inspired technique is based on the behavior of swarms of birds or fish?

a) Genetic Algorithm

b) Particle Swarm Optimization

c) Ant Colony Optimization

d) Evolutionary Programming

25. What does the term "nature-inspired computing" refer to?

a) A type of computing based on natural language processing

b) A field of computing that mimics principles observed in natural systems

c) A computing technique using quantum principles

d) A computing approach that ignores natural phenomena

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Certificate of Completion

2020-2021

This is to certify that Mr/Ms MANJU S

Year III Department IT has successfully Completed the Value added course.

COURSE TITLE: NATURE INSPIRED COMPUTING SCORE: 96

COURSE DURATION: (9-8-20 to 13-8-20)

HOD

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT03- Bayesian Data Analysis

MARK SHEET

Sl. No	Register Number	Student Name	Marks
1	19TH0502	AGATHIAN M	88
2	19TH0503	AJEETH A	84
3	19TH0504	ARAVINDKRISHNA S	96
4	19TH0505	ARUN T	88
5	19TH0508	CHANDRAKUMAR. E	82
6	19TH0509	DEVIBALA E	88
7	19TH0510	DHIYA B	96
8	19TH0511	DIIIYA S	88
9	19TH0512	DIIIYASRI R	96
10	19TH0513	ELAMATHI M	92
11	19TH0514	FATHIMA AASMIN C	92
12	19TH0515	HARIHARAN A	96
13	19TH0516	HARIHARAN R	96
14	19TH0517	JOHNSON VASANTHARAJ. S	88
15	19TH0518	KALIMUTHU K	84

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16	19TH0519	KANNADASAN K	96
17	19TH0521	KIRUBA. B	88
18	19TH0522	MAHESH H	82
19	19TH0523	MUGILAN M	88
20	19TH0524	MURALIDHARAN V	96
21	19TH0525	NAVANEETHA KRISHNAN S	88
22	19TH0526	NITHYA R	96
23	19TH0527	NOORUDEEN M	92
24	19TH0528	PASUPATHI N	92
25	19TH0529	PUGAZHENDHI S	96
26	19TH0530	REVATHI B	96
27	19TH0531	SAMPATHKUMAR V	88
28	19TH0532	SANDHIYA P	84
29	19TH0533	SARANYA T	96
30	19TH0534	SARIGA T	88
31	19TH0535	SASIREKA M	82
32	19TH0536	SATHIYAVANI S	88
33	19TH0537	SELVA SUNDARAM K	84
34	19TH0538	SHEKANAS. K	96

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35	19TH0539	SIIIABALAN J	88
36	19TH0540	SUJITH. K	82
37	19TH0541	SURIYA PRAKASH J	88
38	19TH0542	SWETHA K	96
39	19TH0543	THANNARASI. V	88
40	19TH0544	THENADAYALAN V	96
41	19TH0545	U. GEORRGE	92
42	19TH0546	UMAR SHARIFS M	92
43	19TH0547	VIJAYWILLSONDASS A	96

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT03 - Bayesian Data Analysis

NAME :

CLASS :

DATE :

1. By whom and when were the Bayesian methods applied first?
a) Smith-Waterman, 1981
b) Agarwal and States, 1996
c) Smith-Waterman, 1996
d) Agarwal and States, 1981

Answer: b

2. With the application of Bayesian methods, the most probable repeat length and evolutionary time since the repeat was formed may be derived.
a) True
b) False

Answer: a

3. If the purpose is to calculate the probability of one event AND a second event, the odds scores for the events are _____
a) added
b) multiplied
c) multiplied and added
d) subtracted

Answer: b

4. In a type of probability, analysis is to calculate the odds score for one event OR a second event, or of a series of events. In this case, the odds scores are _____
a) multiplied
b) subtracted
c) added and multiplied
d) added

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Answer: d

5. In Bayesian methods, difficulty with making estimations is that the estimate depends on the following Assumption. (Assumption – The mutation rate in sequences has been constant with time and that the rate of mutation of all nucleotides is the same.)
a) True
b) False

Answer: a

6. Another difficulty in Bayesian methods is deciding on the length of sequence that was duplicated.
a) True
b) False

Answer: a

7. A length and distance that gives the highest overall probability may then be determined. Such alignments are initially found using _____
a) a particular scoring matrix only
b) an alignment algorithm only
c) an alignment algorithm and a particular scoring matrix
d) dot method

Answer: c

8. Which of the following feature of Bayesian methods is the disadvantage of it?
a) A length and distance that gives the highest overall probability may be determined
b) They are used to calculate evolutionary distance
c) Computationally Bayesian methods are better
d) A specific mutational model is required

Answer: d

9. Zhu (1998) have devised a computer program called the Bayes block aligner which in effect slides ____ sequences along each other to find the _____ ungapped regions or blocks.
a) two, least scoring
b) two, highest scoring
c) multiple, highest scoring
d) multiple, least scoring

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Answer: b

10. Unlike the commonly used methods for aligning a pair of sequences, the Bayesian method _____ using a particular scoring matrix or designated gap penalties.
a) does not depend on
b) depends on
c) is based on
d) involves

Answer: a

11. Which of the following is incorrect regarding pair wise sequence alignment?
a) The most fundamental process in this type of comparison is sequence alignment
b) It is an important first step toward structural and functional analysis of newly determined sequences
c) This is the process by which sequences are compared by searching for common character patterns and establishing residue-residue correspondence among related sequences
d) It is the process of aligning multiple sequences

Answer: d

12. Which of the following is incorrect about evolution?
a) The macromolecules can be considered molecular fossils that encode the history of millions of years of evolution
b) The building blocks of these biological macromolecules, nucleotide bases, and amino acids form linear sequences that determine the primary structure of the molecules
c) DNA and proteins are products of evolution
d) The molecular sequences barely undergo changes

Answer: d

13. The presence of evolutionary traces is because some of the residues that perform key functional and structural roles tend to be preserved by natural selection; other residues that may be less crucial for structure and function tend to mutate more frequently.
a) True
b) False

Answer: a

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14. The degree of sequence variation in the alignment reveals evolutionary relatedness of different sequences, whereas the conservation between sequences reflects the changes that have occurred during evolution in the form of substitutions, insertions, and deletions.
a) True
b) False
Answer: b

15. If the two sequences share significant similarity, it is extremely _____ that the extensive similarity between the two sequences has been acquired randomly, meaning that the two sequences must have derived from a common evolutionary origin.
a) unlikely
b) possible
c) likely
d) relevant

Answer: a

16. Sometimes, it is also possible that two sequences have derived from a common ancestor, but may have diverged to such an extent that the common ancestral relationships are not recognizable at the sequence level.
a) True
b) False

Answer: a

17. Which of the following is incorrect regarding sequence homology?
a) Two sequences can homologous relationship even if have do not have common origin
b) It is an important concept in sequence analysis
c) When two sequences are descended from a common evolutionary origin, they are said to have a homologous relationship
d) When two sequences are descended from a common evolutionary origin, they are said to share homology

Answer: a

18. Sequence similarity can be quantified using _____ homology is a _____ statement.
a) percentages, quantitative
b) percentages, qualitative
c) ratios, qualitative

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d) ratios, quantitative

Answer: b

19. Shorter sequences require higher cutoffs for inferring homologous relationships than longer sequences.
a) True
b) False
Answer: a

20. Sequence similarity and sequence identity are synonymous for nucleotide sequences and protein sequences as well.
a) True
b) False
Answer: b

21. The overall goal of pair wise sequence alignment is to find the best pairing of two sequences, such that there is maximum correspondence among residues.
a) True
b) False
Answer: a

22. In local alignment, the two sequences to be aligned cannot be of unequal lengths.
a) True
b) False
Answer: b

23. Alignment algorithms, both global and local, are fundamentally similar and only differ in the optimization strategy used in aligning similar residues.
a) True
b) False
Answer: a

24. In a dot matrix, two sequences to be compared are written in the _____ of the matrix.
a) horizontal and vertical axes
b) 2 parallel horizontal axes
c) 2 parallel vertical axes
d) horizontal axis (one preceding another)
Answer: a

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VALUE ADDED COURSES

2020-2021

Department of Information Technology

20IT03 - Bayesian Data Analysis

NAME : HARIHARAN.A

CLASS : IV/IT

DATE : 20-8-2020.

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24/25 96%.

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b) 2 parallel horizontal axes
c) 2 parallel vertical axes
d) horizontal axis (one preceding another)

25. When the two sequences have substantial regions of similarity, many dots line up to form contiguous _____ lines.
a) crossings on
b) horizontal
c) diagonal
d) vertical

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Certificate of Completion

2020-2021

This is to certify that Mr/Ms DHIYA B

Year II Department IT has successfully Completed the Value added course.

COURSE TITLE: BAYESIAN DATA ANALYSIS SCORE: 96

COURSE DURATION: (9-8-20 to 13-08-20)

HOD

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