

Unit IV

1. Artificial intelligence is

- A.**It uses machine-learning techniques. Here program can learn From past experience and adapt themselves to new situations
- B.**Computational procedure that takes some value as input and produces some value as output.
- C.**Science of making machines performs tasks that would require intelligence when performed by humans
- D.**None of these

2. Expert systems

- A.**Combining different types of method or information
- B.**Approach to the design of learning algorithms that is structured along the lines of the theory of evolution
- C.**an information base filled with the knowledge of an expert formulated in terms of if-then rules
- D.**None of these

3. Falsification is

- A.**Modular design of a software application that facilitates the integration of new modules
- B.**Showing a universal law or rule to be invalid by providing a counter example
- C.**A set of attributes in a database table that refers to data in another table
- D.**None of these

4. **Evolutionary computation is**

- A. Combining different types of method or information
- B. Approach to the design of learning algorithms that is structured along the lines of the theory of evolution.**
- C. Decision support systems that contain an information base filled with the knowledge of an expert formulated in terms of if-then rules.
- D. None of these

5. **Genetic Algorithm are a part of**

- A. Evolutionary Computing
- B. inspired by Darwin's theory about evolution - "survival of the fittest"
- C. are adaptive heuristic search algorithm based on the evolutionary ideas of natural selection and genetics
- D All of the above**

6. **What are the 2 types of learning**

- A. Improvised and unimprovised
- B. supervised and unsupervised**
- C. Layered and unlayered
- D. None of the above

7. **Supervised Learning is**

- A. learning with the help of examples
- B. learning without teacher
- C. learning with the help of teacher**
- D. learning with computers as supervisor

8. Unsupervised learning is

- A.** learning without computers
- B.** problem based learning
- C.**
- D.** learning from teachers

9. Conventional Artificial Intelligence is different from soft computing in the sense

- A.** Conventional Artificial Intelligence deal with predicate logic where as soft computing deal with fuzzy logic
- B.** Conventional Artificial Intelligence methods are limited by symbols where as soft computing is based on empirical data
- C.** Both (a) and (b)
- D.** None of the above

10. In supervised learning

- A.** classes are not predefined
- B.** classes are predefined
- C.** classes are not required
- D.** classification is not done

11. **Shallow knowledge**

- A.** The large set of candidate solutions possible for a problem
- B.** The information stored in a database that can be, retrieved with a single query
- C.** Worth of the output of a machine learning program that makes it understandable for humans
- D.** None of these

12. **Quantitative attributes are**

- A.** A reference to the speed of an algorithm, which is quadratically dependent on the size of the data
- B.** Attributes of a database table that can take only numerical values
- C.** Tools designed to query a database
- D.** None of these

13: **Subject orientation**

- A.** The science of collecting, organizing, and applying numerical facts
- B.** Measure of the probability that a certain hypothesis is incorrect given certain observations.
- C.** One of the defining aspects of a data warehouse, which is specially built around all the existing applications of the operational data
- D.** None of these

14:

Vector

- A.**It do not need the control of the human operator during their execution
- B.**An arrow in a multi-dimensional space. It is a quantity usually characterized by an ordered set of scalars
- C.**The validation of a theory on the basis of a finite number of examples
- D.**None of these

15. Transparency

- A.**The large set of candidate solutions possible for a problem
- B.**The information stored in a database that can be retrieved with a single query
- C.**Worth of the output of a machine learning program that makes it understandable for humans
- D.**None of these

16. Core of soft Computing is

- A.**Fuzzy Computing, Neural Computing, Genetic Algorithms
- B.**Fuzzy Networks and Artificial Intelligence
- C.**Artificial Intelligence and Neural Science
- D.**Neural Science and Genetic Science

17. Who initiated the idea of Soft Computing

- A. Charles Darwin
- B. Lofti A Zadeh
- C. Rechenberg
- D. Mc_Culloch

18. Fuzzy Computing

- A. mimics human behaviour
- B. doesn't deal with 2 valued logic
- C. deals with information which is vague, imprecise, uncertain, ambiguous, inexact, or probabilistic
- D. All of the above

19. Neural Computing

- A. mimics human brain
- B. information processing paradigm
- C. Both (a) and (b)
- D. None of the above

20. Genetic Algorithm are a part of

- A. Evolutionary Computing
- B. inspired by Darwin's theory about evolution - "survival of the fittest"
- C. are adaptive heuristic search algorithm based on the evolutionary ideas of natural selection and genetics
- D. All of the above

21. What are the 2 types of learning

- A. Improvised and unimprovised
- B. supervised and unsupervised**
- C. Layered and unlayered
- D. None of the above

22. Supervised Learning is

- A. learning with the help of examples
- B. learning without teacher
- C. learning with the help of teacher**
- D. learning with computers as supervisor

23. Unsupervised learning is

- | | |
|-----------|----------------------------------|
| A. | learning without computers |
| B. | problem based learning |
| C. | learning from environment |
| D. | learning from teachers |

24. Conventional Artificial Intelligence is different from soft computing in the sense

- A. Conventional Artificial Intelligence deal with predicate logic where as soft computing deal with fuzzy logic
- B. Conventional Artificial Intelligence methods are limited by symbols where as soft computing is based on empirical data
- C. Both (a) and (b)
- D. None of the above

25. In supervised learning

- | | |
|-----------|-------------------------------|
| <u>A.</u> | classes are not predefined |
| <u>B.</u> | classes are predefined |
| <u>C.</u> | classes are not required |
| <u>D.</u> | classification is not done |

26. Massively parallel machine is

- A. A programming language based on logic
- B. A computer where each processor has its own operating system, its own memory, and its own hard disk
- C. Describes the structure of the contents of a database.
- D. None of these

27. **Search space**

- A.** The large set of candidate solutions possible for a problem
- B.** The information stored in a database that can be, retrieved with a single query.
- C.** Worth of the output of a machine learning program that makes it understandable for humans
- D.** None of these

28. **$n(\log n)$ is referred to**

- A.** A measure of the desired maximal complexity of data mining algorithms
- B.** A database containing volatile data used for the daily operation of an organization
- C.** Relational database management system
- D.** None of these

29. **Perceptron is**

- A.** General class of approaches to a problem.
- B.** Performing several computations simultaneously
- C.** Structures in a database those are statistically relevant
- D.** Simple forerunner of modern neural networks, without hidden layers

30. Prolog is

A. A programming language based on logic

B. A computer where each processor has its own operating system, its own memory, and its own hard disk

C. Describes the structure of the contents of a database

D. None of these

31.