**UNIT:4**

**PART A -MULTIPLE CHOICE QUESTIONS**

1. Which mechanism provides control to the program (CLO4-L2)

a)Unifier b)Automatic backtracking c)substitution d)declarative semantic

Ans:b(T1)

1. \_\_\_\_\_\_\_ provides the values to the variables (CLO4-L1)

a)General unifier b)Automatic backtracking c)substitution d)declarative semantic

Ans:a(T1)

1. \_\_\_\_\_\_\_ is the semantics of imperative language(CLO4-L1)

a)substitution b)predicate c)declarative semantics d) clauses

Ans:c(T1)

1. Logic programming language is a\_\_\_\_\_\_\_\_\_ (CLO4-L1)

a)non-procedural b) predicate c)declarative semantics d) clauses

Ans:a(T1)

1. Which supplies the basic form of communication to the computer(CLO4-L2)

a)predicateb)predicate calculusc)clauses d)semantics

Ans:b(T1)

1. \_\_\_\_\_\_\_\_ is the set of predicate symbols together with their arties(CLO4-L1)

a)clauses b)predicate c)resolution d)predicate signature

Ans:d(T1)

1. In logic programming, the classes of formulae are called \_\_\_\_\_\_\_\_ (CLO4-L1)

a)logical connectives b)resolution c)clauses d) automic formulae

Ans:c(T1)

1. Special inference rule is called as \_\_\_\_\_\_\_\_ (CLO4-L1)

a)logical connectives b)resolution c)clauses d) automic formulae

Ans:b(T1)

1. A restricted version of the concept of the clause \_\_\_\_\_\_\_\_(CLO4-L1)

a)definite clause b)resolution c)clauses d) automic formulae

Ans:a(T1)

1. Sequence of clauses are called as \_\_\_\_\_\_\_\_ (CLO4-L1)

a) definite clause b) resolution c)prolog program d) logical connectives

Ans:c(T1)

1. --------- is a sequence of atoms (CLO4-L1)

a) definite clause b) resolution c)prolog program d)query

Ans:d(T1)

1. Which one implements resolution via a strictly linear depth-first strategy and unification algorithm(CLO4-L2)

a)definite clause b)substitution c)prolog d) logical connectives

Ans:c(T1)

1. \_\_\_\_\_\_\_ has a number of standard predicates(CLO4-L1)

a)prolog b)logical connectives c) disjunction d)unification

Ans:a(T1)

1. \_\_\_\_\_\_\_\_ is a function from variable to terms.(CLO4-L1)

a)disjunction b) conjunction c)connectives d)substitution

Ans:d(T1)

1. The relation is a preorder and the equivalence induced by it is called \_\_\_\_\_\_\_(CLO4-L1)

a)First order logic b)variance c)unification d) definite clauses

Ans:b(T1)

1. Identify the process by which variables are initiated or allocated to the memory and assigned values so that patterns match during resolution(CLO4-L3)

a)unification b)First order logic c)variance d)disjunction

Ans:a(T1)

1. \_\_\_\_\_\_\_ allow millions of different machines, using all sorts of different network hardware, to pass packets to each other over the fabric of an IP network.(CLO4-L1)

a)Sockets b)Client machine c)server machines d)IP address(CLO4-L1)

Ans:d(T2)

1. Identify the process in which single channel needed to be shared unambiguously by several different conversations.(CLO4-L3)

a)Demultiplexing b)Multiplexing c)Unification d)backtracking

Ans:b(T2)

1. Which are all necessary to direct a packet to its destination.(CLO4-L2)

a)IP Address b)IP address and port c)port d)InternetAssignedNumbers

Ans:b(T2)

1. The full form of IANA is \_\_\_\_\_\_\_\_\_\_(CLO4-L1)
2. Internet Assigned Numbers Authority b)Internet Automatic Number Authority

C) Internet Assigned Numbers Aanlytic d) Integrated Assigned Numbers Authority

Ans:a(T2)

1. \_\_\_\_\_\_\_\_ (0–1023) are for the most important and widely-used protocols(CLO4-L1)
2. Well Known ports b)Registered ports c)Known ports d)Unregistered ports

Ans:a(T2)

1. \_\_\_\_\_\_\_\_\_\_\_ (1024–49151) are not usually treated as special by operating systems(CLO4-L1)

a)Registered ports b)well known ports c)Known ports d)Unregistered ports

Ans:a(T2)

1. Python’s standard socket module supports \_\_\_\_\_\_\_(CLO4-L1)

a)getByName() b)getName() c)getservbyname() d)getServName()

Ans:c(T2)

1. Example for Connection oriented protocol(CLO4-L1)

a)UDP b)SMTP c)FTP d)TCP

Ans:d(T2)

1. Example for Connection less protocol(CLO4-L1)

a)SMTP b) FTP c)UDP d)TCP

Ans:c(T2)

1. \_\_\_\_\_\_ are file descriptors, which happen to be connected to network sources of data rather than to data stored on a filesystem.

a)IP Address b)IPV4 c)IPV2 d)Sockets

Ans:d(T2)

1. \_\_\_\_\_\_\_\_\_ is an application-level block of transmitted data.(CLO4-L1)

a)data b)datagram c)segmentation d)Fragmentation

Ans:b(T2)

1. Simple server uses \_\_\_\_\_\_ command to request a UDP network address.(CLO4-L1)

a)bind() b)scocket() c)getName() d)getsockName()

Ans:a(T2)

1. Which method is used by python program to retrieve the current IP and port to which the socket is bound.(CLO4-L2)

a)bind() b)getsockname() c)getName() d)getSocket()

Ans:b(T2)

1. Sending packets with another computer’s return address is called \_\_\_\_\_\_\_\_(CLO4-L1)

a)Binding b) Unification c)Spoofing d) IP address

Ans:c(T2)

1. The concept by which larger UDP packets are spitted into several small physical packets(CLO4-L1)

a)fragmentation b)Binding c) Unification d) partition

Ans:a(T2)

1. The MTU is \_\_\_\_\_ that all of the network devices between two hosts will support. (CLO4-L1)

a)smallest packet size b)medium packet size c)average packet size d)largest packet size

Ans:d(T2)

1. \_\_\_\_\_\_ is efficient only if your host ever only sends one message at a time, then waits for a response.(CLO4-L1)

a)UDP b)TCP c)FTP d)SMTP

Ans:a(T2)

1. Which protocol provides reliable connection?(CLO4-L2)

a)UDP b) FTP c)TCP d)SMTP

Ans:c(T2)

1. TCP uses a \_\_\_\_\_\_ that counts the number of bytes transmitted.(CLO4-L1)

a)protocol b)counter c)rules d)Ports

Ans:b(T2)

1. The amount of data that a sender is willing to have on the wire at any given moment is called \_\_\_\_(CLO4-L1)

a)The size of the TCP window. b) counter c) port d) protocol

Ans:a(T2)

1. TCP uses \_\_\_\_\_\_\_ to distinguish different applications running at the same IP address, and follows exactly the same conventions regarding well-known and ephemeral port numbers.(CLO4-L1)

a)IP address b)port c)port numbers d) socket ID

Ans:c

1. \_\_\_\_\_\_\_refers to the address family ipv4.(CLO4-L1)(<https://www.geeksforgeeks.org/socket-programming-python/>)(CLO4-L1)

a)Af\_INET b) AS\_INET c) AG\_INET d) AN\_INET

Ans:a

1. A server has a \_\_\_\_\_\_method which puts the server into listen mode.(CLO4-L1)

a)list() b)listento() c)listen() d)listenfrom()

Ans:c

1. \_\_\_\_\_\_ are the end-point of a two-way communication .(CLO4 L1) (<https://www.techbeamers.com/python-tutorial-essentials-of-python-socket-programming/>)

a)IP Address b)sockets c)sockets ID d) Object ID

Ans:b

1. Identify the method used to connect the client to host and port and initiate the connection towards the server.(CLO4-L3)

a)sock\_object.recv() b)sock\_object.send()

c)sock\_object.append() d)sock\_object.connect():

Ans:d

1. Identify the method to receive messages at endpoints when the value of the protocol parameter is TCP.(CLO4-L3)

a)sock\_object.recv() b)sock\_object.send()

c)sock\_object.append() d)sock\_object.connect():

Ans:a

1. Which method is used to receive messages at endpoints if the protocol used is UDP.(CLO4-L2)

a)sock\_object.recv() **b**)sock\_object.recvfrom()

c)sock\_object.append() d)sock\_object.connect():

Ans:b

1. Identify the method that returns host name.(CLO4-L1)

a)sock\_object.recv() **b**)sock\_object.recvfrom()

**c)**sock\_object.gethostname d)sock\_object.connect():

Ans:c

1. Identify the method to send messages from endpoints if the protocol parameter is UDP.(CLO4-L3)

a)sock\_object.sendto():**b**)sock\_object.recvfrom()

**c)**sock\_object.gethostname d)sock\_object.connect():

Ans:a

1. Identify the server module that is supported by python(CLO4-L3)

a)sock\_object.sendto(): **b**)sock\_object.recvfrom()

**c)**sock\_object.gethostname d)Python-Server.Py

Ans:d

1. Identify the client module that is supported by python.(CLO4-L3)

a)sock\_object.sendto(): **b**)sock\_object.recvfrom()

**c)**sock\_object.gethostname d)Python-Client.Py

Ans:d

1. \_\_\_\_\_\_\_ is used for all sorts of situations in computer science where two programs, sharing limited resources, can wind up waiting on each other forever(CLO4-L1)

a)fragmentation b)Segmentation c)deadlock d) samophore

Ans:c(T2)

1. \_\_\_\_\_\_\_\_can be used to end direction of communication in a two-way socket(CLO4-L1)
2. The shutdown() call b)Shut() c)close() d)end()

Ans:a(T2)

1. Identify the message used to close the TCP connection.(CLO4-L3)

a)SYN b)FYN c) FIN d) end()

Ans:c(T2)

**PART B- 4 Mark Questions**

1. Write the characteristics of logic programming. (CLO4-L1)

2. Write a program to perform arithmetic operations using logic programming. (CLO4-L3)

3. Write a program to derive n-parasitic number using logic programming.(CLO4-L3)

4. Explain logic symbols in detail. (CLO4-L1)

5. Write about non- logical symbols. (CLO4-L1)

6. Explain about predicate logic with example(CLO4-L1)

7. What is unification? Give example (CLO4-L1)

8. Differentiate clauses and resolution(CLO4-L2)

9. What is “term”? Give Example(CLO4-L1)

10. Compare clause and definite clause(CLO4-L2)

11. Give example for substitution(CLO4-L2)

12. Write a program to check prime numbers using python logic programming(CLO4-L3)

13. Differentiate kanron and sympy(CLO4-L2)

14. What are dependent functions(CLO4-L1)

15. Differentiate TCP and UDP(CLO4-L2)

16. Compare connection oriented and connectionless service(CLO4-L2)

17. Differentiate automatic and manual configuration(CLO4-L2)

18. How will you generate random port numbers?(CLO4-L2)

19.What is file descriptors? Give example(CLO4-L1)

20. Differentiate bind() and getSockName() .(CLO4-L2)

21. What is UDP fragmentation? Give example .(CLO4-L1)

22. What will happen when you send large packets? Give example.(CLO4-L2)

23. Differentiate multicast and broadcast.(CLO4-L2)

24. Write the code to connect server and client in TCP.(CLO4-L3)

25. How does TCP provides reliable connection.(CLO4-L2)

26.Compare passive and active socket.(CLO4-L2)

27. Write the code to connect server and client in UDP.(CLO4-L3)

28.Define declarative semantics? Give example.(CLO4-L1)

29.Write the three components of First Order Logic and Explain.(CLO4-L1)

**PART C-12 Mark Questions**

1. Write a logic programming to solve the following Zebra puzzle using python.(CLO4-L3)

There are five houses.

The English man lives in the red house.

The Swede has a dog.

The Dane drinks tea.

The green house is immediately to the left of the white house.

They drink coffee in the green house.

The man who smokes Pall Mall has birds.

In the yellow house they smoke Dunhill.

In the middle house they drink milk.

The Norwegian lives in the first house.

The man who smokes Blend lives in the house next to the house with cats.

In a house next to the house where they have a horse, they smoke Dunhill.

The man who smokes Blue Master drinks beer.

The German smokes Prince.

The Norwegian lives next to the blue house.

They drink water in a house next to the house where they smoke Blend.

1. Write a program to implement First OrderLgic.(CLO4-L3)
2. Design a expense tracker that is used to keep track of the user’s expenses. It has to give correct information to the users on their expenses and help them spend better using PySimpleGUI and PyData libraries.
3. Write a program to compare the following expressions and find the unknown value
4. 16X3 + 8X2 + 15X +17
5. 25X3 + 18X2 + 30X +165
6. Compare resolution and clauses. Explain in detail the same with examples.(CLO4-L2)
7. What is unification? Explain with example.(CLO4-L1)
8. Illustrate the prolog features with examples.(CLO4-L3)
9. Design a simple calculator using python programming.(CLO4-L3)
10. Explain in detail about dependent type programming .(CLO4-L1)
11. Write a program to implement unreliability, bakeoff blocking and timeouts. .(CLO4-L3)
12. Write a program to implement client server communication using TCP. (CLO4-L3)
13. Write a program to implement client server communication using UDP. (CLO4-L3)
14. Write a program to demonstrate the concept of UDP fragmentation and explain .(CLO4-L3)
15. Explain in detail about communication using UDP with example. .(CLO4-L1)