

--Question Starting--

Match the following assembly language instructions with their primary purpose in machine operation:

1. Instruction Function

I. MOV A. Perform arithmetic operations

II. JMP B. Transfer data between registers and memory

III. CMP C. Control program flow based on conditions

IV. ADD D. Compare two values for conditional branching

Choose the correct answer from the options given below:

(1) I-B, II-C, III-D, IV-A

(2) I-A, II-B, III-C, IV-D

(3) I-C, II-D, III-A, IV-B

(4) I-D, II-A, III-B, IV-C

Answer Key: 2

Solution:

? MOV: Transfers data from source to destination, enabling data movement within the system.

? JMP: Alters program flow unconditionally, redirecting execution to another instruction.

? CMP: Compares two operands, setting condition flags for subsequent conditional tests.

? ADD: Performs arithmetic addition on operands, modifying register or memory contents.

Hence, Option (2) is the right answer.

--Question Starting--

3. Match the following network layer protocols with their characteristic features:

1. Protocol Feature

I. IP A. Provides connection-oriented reliable data transfer

II. TCP B. Handles logical addressing and routing

III. UDP C. Offers connectionless, best-effort delivery

IV. SCTP D. Supports multi-streaming and multi-homing

Choose the correct answer from the options given below:

(1) I-B, II-A, III-C, IV-D

(2) I-C, II-B, III-A, IV-D

(3) I-A, II-C, III-B, IV-D

(4) I-D, II-A, III-C, IV-B

Answer Key: 1

Solution:

? IP: Handles logical addressing and routing, enabling packet delivery across networks.

? TCP: Provides reliable, connection-oriented communication ensuring data integrity.

? UDP: Offers connectionless, unreliable data transfer with minimal overhead.

? SCTP: Supports multi-streaming and multi-homing for enhanced multi-path data transfer.

Hence, Option (1) is the right answer.