All the Multiple Choice Question and Answer (MCQs) have been compiled from the books of Data Communication and Networking by The well known author behrouz A forouzan.

This Data Communication and Networking – **Switching Network** multiple choice based Questions and Answers (MCQ) PDF cover the below lists of topic.

1. Switching methods Multiple Choice Question and Answer.
2. circuit switching Multiple Choice Question and Answer.
3. packet switching Multiple Choice Question and Answer.
4. message switching Multiple Choice Question and Answer.
5. Space-division switch , Time-division switches Multiple Choice Question and Answer.

Practice now to sharpen your concept.

1. Traditionally, _____ methods of switching have been important.
A. four
B. three
C. five
D. six

2. We can divide today's networks into ____ broad categories.
A. four
B. three
C. five
D. two

3. Packet-switched networks can also be divided into _____subcategories: virtual-circuit networks and datagram networks
    A. four
    B. three
    C. two
    D. five

4. A _____ network is made of a set of switches connected by physical links, in which each link is divided into n channels.
    A. line-switched
    B. frame-switched
    C. circuit-switched
    D. none of the above

5. Circuit switching takes place at the _____ layer.
    A. data line
    B. physical
    C. network
    D. transport

6. In _____, the resources need to be reserved during the setup phase; the resources remain dedicated for the entire duration of data transfer phase until the teardown phase.
    A. datagram switching
    B. circuit switching
    C. frame switching
    D. none of the above

7. In _____, there is no resource allocation for a packet.

A. datagram switching
B. circuit switching
C. frame switching
D. none of the above

8. In _____, resources are allocated on demand.
A. datagram switching
B. circuit switching
C. frame switching
D. none of the above

9. In _____, each packet is treated independently of all others.
A. datagram switching
B. circuit switching
C. frame switching
D. none of the above

10. In _____ there are no setup or teardown phases.
A. datagram switching
B. circuit switching
C. frame switching
D. none of the above

Answer key for MCQ SET- 1	
Q-1	Correct Answer :three
Q-2	Correct Answer :three
Q-3	Correct Answer :two
Q-4	Correct Answer :circuit-switched
Q-5	Correct Answer :physical

Q-6	Correct Answer :circuit switching
Q-7	Correct Answer :datagram switching
Q-8	Correct Answer :datagram switching
Q-9	Correct Answer :datagram switching
Q-10	Correct Answer :datagram switching

Switching Network multiple choice questions and answers MCQ Set-2

1. A _____ network is a cross between a circuit-switched network and a datagram network. It has some characteristics of both.
   A. virtual-circuit
   B. packet-switched
   C. frame-switched
   D. none of the above

2. We can say that a packet switch has _____ types of components
   A. two
   B. three
   C. four
   D. none of the above

3. The simplest type of switching fabric is the _____ switch
   A. crosspoint
   B. crossbar
   C. TSI
   D. STS

4. A _____ switch is a multistage switch with microswitches at each stage that route the packets based on the output port represented as a binary string
    A. crossbar
    B. TSI
    C. banyan
    D. none of the above

5. In a banyan switch, for 8 inputs and 8 outputs, we have _____ stages
    A. 8
    B. 4
    C. 3
    D. 2

6. In a banyan switch, for 8 inputs and 8 outputs, we have _____ microswitches at each stage.
    A. 8
    B. 4
    C. 3
    D. 2

7. A _____ switch combines space-division and time-division technologies to take advantage of the best of both.
    A. TST
    B. SSS
    C. TTT
    D. none of the above

8. The most popular technology in time-division switching is called the _____

    A. STI

    B. ITS

    C. TSI

    D. none of the above

9. Based on the Clos criteria, if N = 200, then n must be equal to or greater than _____

    A. 10

    B. 20

    C. 30

    D. 40

10. Based on the Clos criteria, if N = 200, then k must be equal to or greater than _____

    A. 21

    B. 19

    C. 31

    D. 41

Answer key for MCQ SET- 2	
Q-1	Correct Answer :virtual-circuit
Q-2	Correct Answer :four
Q-3	Correct Answer :crossbar
Q-4	Correct Answer :banyan
Q-5	Correct Answer :3
Q-6	Correct Answer :4
Q-7	Correct Answer :TST
Q-8	Correct Answer :TSI

Q-9	Correct Answer :10
Q-10	Correct Answer :19

Switching Network multiple choice questions and answers MCQ Set-3

1. Based on the Clos criteria, if N = 200, then the minimum number of crosspoints is greater than or equal to _____
   A. 15,200
   B. 18,000
   C. 42,000
   D. 20,000

2. In a one-stage space division switch, if N = 200, the number of crosspoints is _____
   A. 10,000
   B. 20,000
   C. 40,000
   D. 30,000

3. In a three-stage space division switch, if N = 200, the number of crosspoints is _____
   A. 40,000
   B. greater than 40,000
   C. less than 40,000
   D. greater than 100,000

4. A _____ switch combines crossbar switches in several (normally three) stages
   A. multistage

B. multiple crossbar
C. multiple path
D. none of the above

5. In _____ switching, the paths in the circuit are separated from one another spatially
    A. time-division
    B. space-division
    C. two-dimensional
    D. three-dimensional

6. A switched WAN is normally implemented as a _____ network
    A. virtual-circuit
    B. datagram
    C. circuit-switched
    D. none of the above

7. In a _____ network, two types of addressing are involved: global and local
    A. virtual-circuit
    B. datagram
    C. circuit-switched
    D. none of the above

8. The network layer in the Internet is designed as a _____ network
    A. virtual-circuit
    B. datagram
    C. circuit-switched
    D. none of the above

9. A switch in a datagram network uses a routing table that is based on the _____ address

   A. source
   B. destination
   C. local
   D. none of the above

10. The _____ address in the header of a packet in a datagram network normally remains the same during the entire journey of the packet

   A. source
   B. destination
   C. local
   D. none of the above

Answer key for MCQ SET- 3	
Q-1	Correct Answer :15,200
Q-2	Correct Answer :40,000
Q-3	Correct Answer :less than 40,000
Q-4	Correct Answer :multistage
Q-5	Correct Answer :space-division
Q-6	Correct Answer :virtual-circuit
Q-7	Correct Answer :virtual-circuit
Q-8	Correct Answer :datagram
Q-9	Correct Answer :destination
Q-10	Correct Answer :destination