Time: 2 hour   Max. Marks: 80

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Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Network congestion occurs
Option A:	**in case of traffic overloading**
Option B:	when a system terminates
Option C:	when connection between two nodes terminates
Option D:	when system fails
2.	Implementation and _____ begins after the design has been approved.
Option A:	**verification**
Option B:	validation
Option C:	requirement
Option D:	correction
3.	The _____layer provides local and remote workgroup or user access to the network.
Option A:	**Access layer**
Option B:	Distribution layer
Option C:	Core layer
Option D:	Physical layer
4.	The most common design for remote users is to use_____
Option A:	**multilayer switches or routers**
Option B:	hubs
Option C:	switches
Option D:	routers
5.	A _____ is a formal request to vendors for proposals that meet the requirements that the document identifies.
Option A:	RPF
Option B:	**RFP**
Option C:	RFF
Option D:	RFC
6.	A _____ is sent when specific conditions occur, such as a change in the state of a device, a device or component failure, or an agent initialization or restart.
Option A:	Get request
Option B:	Get next request

Option C:	Set request
Option D:	**Trap**
7.	_____attacks typically exploit well-known weaknesses in common software programs to gain access to a computer.
Option A:	**Application layer**
Option B:	Session layer
Option C:	Transport layer
Option D:	Data link layer
8.	Route summarization is also called as _____
Option A:	subnetting
Option B:	**supernetting**
Option C:	masking
Option D:	routing
9.	IP telephony is a part of _____
Option A:	**application layer**
Option B:	interactive service layer
Option C:	network infrastructure layer
Option D:	business layer
10.	Which of the following is the correct order of the six phases of PPDIOO?
Option A:	Plan Prepare Design Implement Optimize Operate
Option B:	**Prepare Plan Design Implement Operate Optimize**
Option C:	Plan Prepare Design Implement Operate Optimize
Option D:	Prepare Plan Design Implement Optimal Operate

Please use either of the 3 option given below while setting up the subjective/descriptive questions

Q2.	Solve any Four out of Six	5 marks each
A	*Explain 3 layers of SONA framework.*	
B	*Explain the role of Access layer.*	
C	*Which are the network services imbedded in infrastructure services?*	
D	*Explain traditional WAN technologies.*	
E	*What is IPsec?*	
F	*Explain route summarization with example.*	

Q3	Solve any Two Questions out of Three 10 marks each
A	*Write a short note on MPLS.*
B	*Explain the role of SNMP in network management*
C	*State and explain IPv4 to IPv6 Transition strategies*

Q4.	
A	**Solve any Two** **5 marks each**
i.	*Compare the top down and bottom up approach*
ii.	*Explain different external threats hampering the integrity of the enterprise network.*
iii.	*Explain the hierarchical network model of network design.*
B	**Solve any One** **10 marks each**
i.	*Explain EIGRP in detail*
ii.	*Write a note on SDN architecture.*