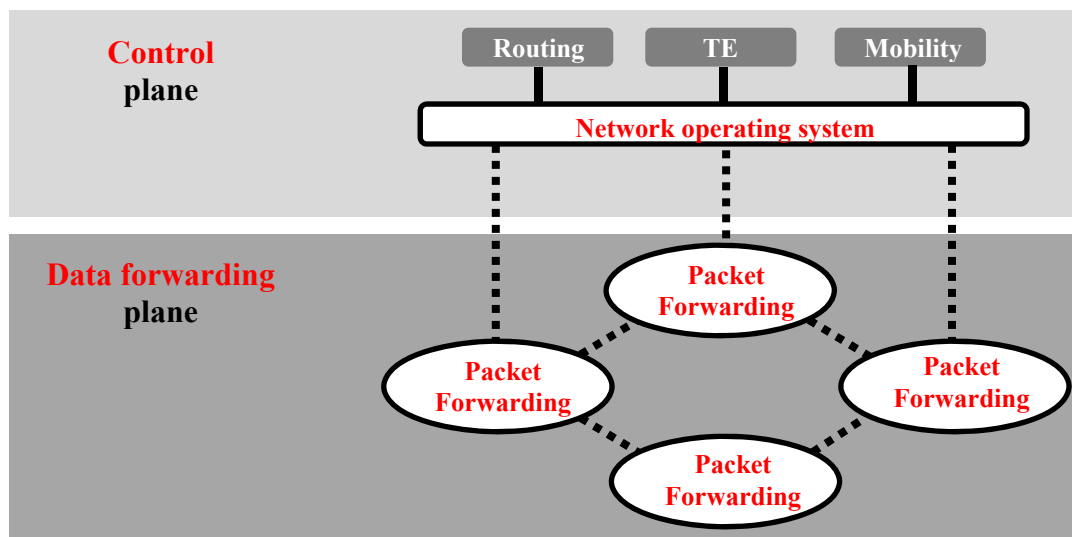


1. Assign layer names (access, service, control, management, transport) to corresponding definitions for conceptual model of NGN (*Next Generation Networks*).

Name of layer	Layer characteristics for NGN network conceptual model
control	This layer is responsible for set-up/establishing, control and canceling of the multimedia session.
access	This layer provides the infrastructure, for example an access network between the end user and the transport network.
service	It offers the basic service functions, which can be used to create more complex and sophisticated services and applications.
transport	It ensures the transport between the individual nodes of the network.
management	It manages resources (capacity, ports, and physical elements), QoS in access to the network and in the transport network, various media processing, encoding, data transfer (information flows).

2. Fill in names of planes and empty components to the picture for SDN (*Software Defined Networking*) architecture.



3. Mark correct combination of network devices which are used by the NFV (*Network Functions Virtualization*) architecture.

☐ PE routers, BRAS servers, storages

X Ethernet switches, high volume servers and storages

☐ Ethernet switches, high volume servers, BRAS servers

☐ storages, PE switches, Ethernet switches

4. Assign abbreviations/names in left column to corresponding statements.

NETCONF	hardware based networking research solutions for line-rate processing of the traffic.
Cisco ONE	protocol based on Forwarding Element Model that enables description of new forwarding plane functionality without changing the protocol between control and forwarding planes.
OpenFlow	developed as a successor to SNMP and some of the CLI protocols for configuration of network elements.
NetFPGA	technology similar to SDN but with no centralized control plane.
ForCES	an open standard developed by Open Network Foundation (ONF).
MPLS	provides programmatic interface to directly control Cisco equipment.



5. Mark correct groups of components for Network Functions Virtualization Infrastructure (NFVI).

X computing hardware, storage hardware, network hardware

☐ element management system, virtual storage, virtual network

X computing hardware, virtual storage, network hardware

☐ orchestrator, element management system, network hardware

6. Mark correct characteristics of NFVI (*Network Functions Virtualization Infrastructure*).

☐ NFVI is divided into 4 domains and a Compute domain is one of them

X NFVI is divided into 3 domains and a Hypervisor domain is one of them

☐ NFVI is divided into 4 domains and an Infrastructure networking domain is one of them

X NFVI is divided into 3 domains and a Compute domain is one of them

7. Sort devices (on the right) connected to the Internet in 2020 based on their quantity (start with the lowest quantity) following forecasts.

1. **smart TVs**

2. **personal computers**

3. **tablets**

4. **smartphones**

tablets, smartphones, personal computers, smart TVs