	Marks	BL	CO	PO
29. a. Enumerate the data center demands.	10	4	4	1

(OR)

b. How SDN is related to wide area networks?	10	3	4	1
30. a. Explain different categories of open source licenses.	10	3	5	1

(OR)

b. Discuss about open source open flow switch implementation.	10	4	5	1

* * * * *

B.Tech. DEGREE EXAMINATION, NOVEMBER 2022
Sixth and Seventh Semester

18ECE320T – SOFTWARE DEFINED NETWORKS
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

Note:
(i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
(ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours   Max. Marks: 75

PART – A (25 × 1 = 25 Marks)
Answer **ALL** Questions

	Marks	BL	CO	PO
1. A number of universities collaborated to propose a new standard for networking called _____	1	1	1	1

  (A) Open flow   (B) Linux
  (C) VMware   (D) XEN

	Marks	BL	CO	PO
2. The action that is not taking at the data plane is _____	1	2	1	1

  (A) Forward   (B) Drop
  (C) Count   (D) RIB matching

	Marks	BL	CO	PO
3. The _____ was a multicast server that handled bum traffic for a specific elan.	1	2	1	1

  (A) Bus   (B) LEC
  (C) LECS   (D) LES

	Marks	BL	CO	PO
4. _____ environment encourage vendor lock in.	1	2	1	1

  (A) Open   (B) Closed
  (C) Mixed   (D) Autonomous

	Marks	BL	CO	PO
5. The _____ is programmed once the RIB is deemed consistent and stable.	1	2	1	1

  (A) Punt path   (B) FIB
  (C) RIB   (D) Data server

	Marks	BL	CO	PO
6. Which is not a trait of SDN?	1	2	2	1

  (A) Plane separation   (B) Simplified device
  (C) Distributed control   (D) Network automation

	Marks	BL	CO	PO
7. SDN applications are part of the _____ layer.	1	2	2	1

  (A) Application   (B) Network
  (C) Physical   (D) Session

	Marks	BL	CO	PO
8. The main drawback of API based SDN method is _____	1	2	2	1

  (A) Use of standard TCP port   (B) Firewall is not required
  (C) Extensibility   (D) Does not provide network wide view

9. _____was developed with major contributions from UC Berkeley. 1 1 2 1
   (A) ONIX   (B) NOX
   (C) MININET   (D) NICIRA

10. The primary job of PLEXXI controller is to gather information about _____ 1 2 2 1
    (A) Affinities dynamically from external system
    (B) Affinities dynamically from internal system
    (C) Routing dynamically from external system
    (D) Routing dynamically from internal system

11. Open flow protocol define communication between _____ 1 2 3 1
    (A) Controller and application   (B) Controller and switch
    (C) Switch and application   (D) Switches

12. _____is not a matching field used by the packet matching function. 1 2 3 1
    (A) Switch input port   (B) IP source address
    (C) VLAN ID   (D) MAC address

13. _____is not a additional functionality in open flow 1.3. 1 2 3 1
    (A) A multipart_request/multipart_ reply message pair
    (B) More flexible table miss flow entry support
    (C) Per user_per byte basis meter
    (D) Per flow basis meter

14. _____are used to track statistics relative to the flow in a flow table. 1 2 3 1
    (A) Counter   (B) Header
    (C) Action field   (D) Port information

15. _____are emitted asynchronously in response to some event within the network element. 1 2 3 1
    (A) Commands   (B) Notifications
    (C) Queries   (D) Responses

16. Organizations that provide specialized data center services on behalf of other client organizations are categorized as _____ 1 2 4 1
    (A) Private single tenant   (B) Private multi tenant
    (C) Public single tenant   (D) Public multi tenant

17. Google data center follows _____SDN implementation. 1 1 4 1
    (A) Overlay   (B) Underlay
    (C) Open   (D) Closed

18. The encapsulation of entire layer two MAC frame inside an IP packet is called _____tunneling. 1 2 4 1
    (A) MAC in MAC   (B) IP in IP
    (C) MAC in IP   (D) IP in MAC

19. _____is not the functional component of Hadoop. 1 2 4 1
    (A) Client   (B) Master
    (C) Slave   (D) Network slicer

20. Blacklist is a list of _____that are known or suspected to be malicious. 1 2 4 1
    (A) IP address   (B) MAC address
    (C) TEP   (D) TCP segment

21. _____incorporates the notion of copy left. 1 2 5 1
    (A) Apache   (B) Foss
    (C) GPL   (D) BSD

22. _____is a network management application for the floodlight controller. 1 2 5 1
    (A) Quagga   (B) Avior
    (C) Bird   (D) Pantou

23. The compute function in open stack is called _____ 1 2 5 1
    (A) Swift and cinder   (B) Horizon
    (C) NOVA   (D) Glance

24. Open flow energy saving mechanism in the data center is _____ 1 2 5 1
    (A) Elastic tree   (B) Mobile traffic off load
    (C) Hiding IP address (D) Multicore ASIC card

25. _____is a data plane function. 1 2 5 1
    (A) Mobility management   (B) Charging and accounting
    (C) User authentication   (D) Access control

PART – B (5 × 10 = 50 Marks)
Answer ALL Questions   Marks BL CO PO

26. a. Explain the functionalities of control plane and data plane and illustrate how information exchange takes place between them. 10 3 1 1

(OR)

b. Discuss about hybrid architecture models of SDN. 10 3 1 1

27. a. Expound the five essential traits of SDN. 10 3 2 1

(OR)

b. Illustrate about NICIra NVP controller and its relationship to idealized SDN framework. 10 4 2 1

28. a. How puppet helps system administrators to manage infrastructure? 10 4 3 1

(OR)

b. Enumerate the messages exchanged between the controller and switch. 10 4 3 1