

## 02. IT Fundamentals

15 questions, 1 mark each

**Q 26.** Which of the following network device receives a signal and retransmits it at a higher level or higher power so that the signal can cover longer distances?

- Ops:**
- A. ☒ Repeater
  - B. ☐ Router
  - C. ☐ Gateway
  - D. ☐ Modem

Reset

**Q 27.** If there are 6 computers connected through a hub then how many broadcast domain(s) will be there?

- Ops:**
- A. ☒ 1
  - B. ☐ 0
  - C. ☐ 3
  - D. ☐ 5

Reset

**Q 28.** Identify the highest normal form of relation  $R(k, l, m, n)$  with functional dependencies  $f\{k \rightarrow m, l \rightarrow n\}$ .

- Ops:**
- A. ☒ 2NF
  - B. ☐ 3NF
  - C. ☐ 1NF
  - D. ☐ BCNF

Reset

**Q 29.** The given relation  $R(m, n, o, p, q)$  with functional dependencies  $f\{mn \rightarrow op, mno \rightarrow q, o \rightarrow q\}$  follows the criteria of all the normal form except which one?

- Ops:**
- A. ☒ 1NF

Q 29. The given relation  $R(m,n,o,p,q)$  with functional dependencies  $f\{mn \rightarrow op, mno \rightarrow q, o \rightarrow q\}$  follows the criteria of all the normal form except which one?

- Ops:
- A. ☒ 2NF
  - B. ☐ 3NF
  - C. ☐ None of the above mentioned option
  - D. ☐ 1NF

Reset

Q 30. Which of the following statement is FALSE if a relation is decomposed into two different relations?

- 1. Decomposition always dependency preserving.
- 2. Decomposition always Lossless Join.
- 3. Decomposition always dependency preserving and lossless Join.

- Ops:
- A. ☐ Only 2
  - B. ☐ 1, 2 & 3
  - C. ☒ Only 1
  - D. ☐ 1 & 2

Reset

Q 31. Which of the following is not the type of functional dependency in DBMS?

- Ops:
- A. ☐ Multivalued functional dependency
  - B. ☒ Normalized functional dependency
  - C. ☐ Transitive functional dependency
  - D. ☐ Trivial functional dependency

Reset



**Q 32.** In the functional dependency  $A \rightarrow B$ , the attribute A is -

- Ops:**
- A. ☐ Simple attribute
  - B. ☒ Determinant
  - C. ☐ Dependent
  - D. ☐ Complex attribute

**Reset**

**Q 33.** To reduce cost of deployment and control the usage, which of the following pay model is used in cloud services?

- Ops:**
- A. ☐ Pay-Per-Click (PPC)
  - B. ☐ Pay-As-You-Use
  - C. ☒ Pay-Per-Lead (PPL)
  - D. ☐ Pay-Per-Impression (PPI)

**Reset**

**Q 34.** Due to which of the following characteristic of cloud computing additional resources are added when an application load increases?

- Ops:**
- A. ☐ Per-Usage Billing
  - B. ☒ Elasticity
  - C. ☐ Self Service
  - D. ☐ Customization

**Reset**

**Q 35.** Arrange the following types of topologies in descending order of the cabling cost if 50 computers are there in the network.

1. Full mesh topology
2. Star topology
3. Ring topology

- Ops:**
- A. ☐ 1-3-2

**Q 35.** Arrange the following types of topologies in descending order of the cabling cost if 50 computers are there in the network.

1. Full mesh topology
2. Star topology
3. Ring topology

- Ops:**
- A. ☐ 1-3-2
  - B. ☒ 3-1-2
  - C. ☐ 3-2-1
  - D. ☐ 1-2-3

**Reset**

**Q 36.** Bridge (networking component) can be used to join -

- I. An unshielded twisted-pair (UTP) cabling and fiber-optic cabling
- II. Token Ring and Ethernet

- Ops:**
- A. ☐ Neither I Nor II
  - B. ☐ Only I
  - C. ☐ Both I and II
  - D. ☒ Only II

**Reset**

**Q 37.** In order to avoid any distributed denial of service (DDoS) attacks on switches, if you want switch port security then which of the following you should use?

- Ops:**
- A. ☐ All of the emntioned options
  - B. ☒ ARP inspection
  - C. ☐ DHCP snooping
  - D. ☐ MAC address filtering

**Reset**



**Q 38.** Which of the following cloud computing technology helps to use applications as a service for other applications regardless the type of vendor, product or technology?

- Ops:**
- A. ☐ Utility Computing
  - B. ☐ Grid Computing
  - C. ☐ Virtualization
  - D. ☒ Service-Oriented Architecture (SOA)

**Reset**

**Q 39.** Which of the following provides connectivity between the cloud services users and devices such as desktop computers, laptops, mobile phones, Iphone, I-pad etc.?

- Ops:**
- A. ☐ Cloud auditor
  - B. ☐ Monitor of services
  - C. ☐ Load dispatcher
  - D. ☒ Cloud carrier

**Reset**

**Q 40.** Which of the following compares the performance levels of services with the agreed service levels?

- Ops:**
- A. ☐ Cloud carrier
  - B. ☐ Load dispatcher
  - C. ☐ Monitor of services
  - D. ☒ Cloud auditor

**Reset**

SECTION 01/02  
**Previous Section**

SECTION 01/02  
**Next Section**

