

1. If 20% of  $a = b$ , then  $b\%$  of 20 is the same as:  
A. 4% of  $a$   
B. 5% of  $a$   
C. 20% of  $a$   
D. None of these
2. A bookseller procures 40 books for Rs. 3200 and sells them at a profit equal to the selling price of 8 books. What is the selling price of one dozen books, if the price of each book is same?  
A. Rs. 720  
B. Rs. 960  
C. Rs. 1200  
D. Rs. 1440
3. A rectangular park 60 m long and 40 m wide has two concrete crossroads running in the middle of the park and rest of the park has been used as a lawn. If the area of the lawn is 2109 sq. m, then what is the width of the road?  
A. 2.91 m  
B. 3 m  
C. 5.82 m  
D. None of these
4. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?  
A. 3  
B. 4  
C. 9  
D. Cannot be determined
5. In a regular week, there are 5 working days and for each day, the working hours are 8. A man gets Rs. 2.40 per hour for regular work and Rs. 3.20 per hour for overtime. If he earns Rs. 432 in 4 weeks, then how many hours does he work for?  
A. 160  
B. 175  
C. 180  
D. 195
6. On January 12, 1980, it was Saturday. The day of the week on January 12, 1979 was:  
A. Saturday  
B. Friday  
C. Sunday  
D. Thursday
7. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, find out the dividend.  
A. 4426  
B. 3426  
C. 4336  
D. 5336
8. 5 gm of sugar solution has 30% sugar in it. Then the quantity of sugar that should be added to the solution to make the quantity of the sugar 70% in the solution, is:  
A. 130 gm  
B. 125 gm  
C. 100 gm  
D. 120 gm

9. A man deposited Rs 6000 in a bank at 5% P.a simple interest another man deposits Rs 5000 at 8% P.a Compounded interest. After 2 years the difference of their interest will be:  
A. Rs 230  
B. Rs 232  
C. Rs 600  
D. Rs 832
10. Here are some words translated from an artificial language.  
dionot means oak tree  
blyonot means oak leaf  
blycrin means maple leaf  
Which word could mean "maple syrup"?  
A. blymuth  
B. hupponot  
C. patricrin  
D. crinweel
11. Which term will come in place of the question mark: NMO, RQS, VUW, ZYA, ?  
A. DCE  
B. BCD  
C. ECD  
D. FCD
12. Which word does NOT belong with the others?  
A. unimportant  
B. trivial  
C. insignificant  
D. familiar
13. A number exceeds 20% of itself by 40. The number is:  
A. 50  
B. 60  
C. 80  
D. 320
14. How many three letter words are formed using the letters of the word TIME?  
A. 12  
B. 20  
C. 16  
D. 24
15. The ratio of the present ages of P and Q is 3:4. 5 years ago, the ratio of their ages was 5:7. Find their present ages.  
A. 30, 40  
B. 25, 30  
C. 50, 60  
D. 20, 40
16. P, Q and R get Rs.1105 for doing a job together. While working alone, P, Q and R need 7 days, 8 days and 11 days respectively to complete the job. Then what would be the share of each?  
A. P = Rs. 440; Q = Rs. 385; R = Rs. 280  
B. P = Rs. 500; Q = Rs. 400; R = Rs. 205  
C. P = Rs. 445; Q = Rs. 375; R = Rs. 285  
D. P = Rs. 446; Q = Rs. 381; R = Rs. 278

17. In a question paper, there are four multiple choice type questions, each question has five choices with only one correct answer. What is the total number of ways in which a candidate will not get all the four answers correct?
- A. 19
  - B. 120
  - C. 624
  - D. 1024
18. At an examination in which full marks were 500, A got 10% less than B, B got 25% more than C and C got 20% less than D. If A got 360 marks, what percentage of full marks was obtained by D?
- A. 70%
  - B. 90%
  - C. 80%
  - D. 75%
19. Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are:
- A. 39, 30
  - B. 41, 32
  - C. 42, 33
  - D. 43, 34
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21. What is the sum of two consecutive even numbers, the difference of whose squares is 84?
- A. 34
  - B. 38
  - C. 42
  - D. 46
22. Solve:  $100 - 96 \div (4 \times 3) + 8 \div 2 - 2 =$
- A. 10
  - B. 12
  - C. 6
  - D. 0
23. If a number is chosen at random from the set  $\{1, 2, 3, \dots, 100\}$ , then the probability that the chosen number is a perfect cube is:
- A.  $1/25$
  - B.  $1/2$
  - C.  $4/13$
  - D.  $1/10$
24. The radius of a wheel is 22.4 cm. What is the distance covered by the wheel in making 500 revolutions?
- A. 252 m
  - B. 704 m
  - C. 352 m
  - D. 808 m
25. In an election only two candidates contested. A candidate secured 70% of the valid votes and won by a majority of 172 votes. Find the total number of valid votes.

- A. 430
- B. 570
- C. 480
- D. 520

26. If the side of a square is increased by 30%, its area is increased by:

- A. 9%
- B. 30%
- C. 60%
- D. 69%

27. In a school, 40% of the students play football and 50% play cricket. If 18% of the students play neither football nor cricket, the percentage of students playing both is:

- A. 40%
- B. 32%
- C. 22%
- D. 8%

28. A bag contains equal number of Rs.5, Rs.2 and Re.1 coins. If the total amount in the bag is Rs.1152, find the number of coins of each kind.

- A. 432
- B. 288
- C. 144
- D. 72

29. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?

- A. A
- B. X
- C. S
- D. Z

30. A fires 5 shots to B's 3 but A kills only once in 3 shots while B kills once in 2 shots. When B has missed 27 times, A has killed:

- A. 30 birds
- B. 60 birds
- C. 72 birds
- D. 90 birds

31. Which of the following commands will allow the user to search contents of a file for a particular pattern?

- A. touch
- B. grep
- C. find
- D. ls

32. What is the output of this program?

```
#!/bin/bash
var1=10
$var1=20
echo $var1
exit 0
```

- A. program will print 10
- B. program will generate a warning message
- C. program will print 20
- D. program will print 10 & 20

33. Which of these is the correct method for appending "foo" in /tmp/bar file?
- A. echo foo > /tmp/bar
  - B. echo foo >> /tmp/bar
  - C. echo foo | /tmp/var
  - D. /tmp/bar < echo foo
34. Executing cat /etc/passwd > /dev/sda as superuser will:
- A. Write data into a regular file called /dev/sda
  - B. Write data to the physical device sda
  - C. Create a temporary file /dev/sda and write data to it
  - D. None of the mentioned
35. What command would send the output of cmd1 to the input of cmd2?
- A. cmd1 | cmd2
  - B. cmd1 || cmd2
  - C. cmd1 && cmd2
  - D. cmd1 ; cmd2
36. Pipes are used rather than temporary files for communication between the various stages of compilation in gcc when
- A. -pipe option is used
  - B. -temp option is used
  - C. -disable-temp option is used
  - D. none of the mentioned
37. Which of these commands will set the permissions on file textfile to read and write for the owner, read for the group, and nothing for everyone else?
- A. chmod 046 textfile
  - B. chmod 640 textfile
  - C. chmod 310 textfile
  - D. chmod rw r nil textfile
38. Which filesystem can be used to change certain kernel parameters at runtime using sysctl command?
- A. Ext3
  - B. Sysfs
  - C. Ext4
  - D. Procfs
39. Which command is used to mount file system read only?
- A. mount -a
  - B. mount -v
  - C. mount -f
  - D. mount -r
40. What is the meaning of \$ sign in awk programming?
- A. the word following is the name of variable
  - B. we are referring to a field or column in the current line
  - C. \$ sign is used for comment
  - D. none of the mentioned
41. When discussing IDS/IPS, what is a signature?
- A. It refers to "normal," baseline network behavior
  - B. It is used to authorize the users on a network
  - C. An electronic signature used to authenticate the identity of a user on the network
  - D. Attack-definition file

42. Which organization has authority over interstate and international commerce in the communications field?
- A. ITU-T
  - B. IEEE
  - C. FCC
  - D. ISOC
43. Which of the following function is used as a consequence of not including semicolons, commas or whitespace in the Cookie value?
- A. EncodeURIComponent()
  - B. EncodeURI()
  - C. EncodeComponent()
  - D. Encode()
44. Which statement is true regarding classless routing protocol?
- A. The use of discontinuous networks is not allowed
  - B. Use of variable length subnet masks is permitted
  - C. RIPv1 is a classless routing protocol
  - D. IGRP supports class routing within the same autonomous system
45. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called:
- A. DNS lookup
  - B. DNS hijacking
  - C. DNS spoofing
  - D. DNS authorizing
46. Which of the following is not a type of MAC address?
- A. Uni-cast MAC address
  - B. Multicast MAC address
  - C. Broadcast MAC address
  - D. Multiple cast MAC address
47. Which of the following are the types present in the hubs?
- A. Passive, active
  - B. Active, intelligent
  - C. Passive, Intelligent, non-intelligent
  - D. Passive, active, intelligent
48. Which one of the following event is not possible in wireless LAN?
- A. collision detection
  - B. acknowledgement of data frames
  - C. multi-mode data transmission
  - D. connection to wired networks
49. In a LAN configuration, hubs can be seen as a DTE (Data Terminal Equipment) that are connected using:
- A. switches
  - B. routers
  - C. modem
  - D. repeaters
50. Which protocol is used by the router to determine the port associated with the destination address?
- A. Simple Network Management Protocol (SNMP)
  - B. Border Gateway Protocol (BGP)
  - C. Routing Information Protocol (RIP)
  - D. Address Resolution Protocol (ARP)

51. Someone (from outside) who tests security issues for bugs before launching a system or application, and who is not a part of that organization or company are:
- A. Black Hat hacker
  - B. External penetration tester
  - C. Blue Hat hacker
  - D. White Hat Hacker
52. If the data stored in the \_\_\_\_\_ is not encrypted, then after cookie stealing, attackers can see information such as username and password stored by the cookie.
- A. memory
  - B. quarantine
  - C. cookies
  - D. hard drive
53. Fraudulent email messages are some fake email messages that seem legitimate which asks for your confidential bank details such as \_\_\_\_\_ details \_\_\_\_\_ and passwords.
- A. credit card, antivirus name
  - B. credit card, login ID
  - C. cell phone, antivirus name
  - D. car model, account ID
54. Which of the following case comes under victims' list of an active online attack?
- A. Strong password based accounts
  - B. Unsecured HTTP users
  - C. Open authentication points
  - D. Logged in systems and services
55. \_\_\_\_\_ is a network construct over the internet that is encrypted. It offers anonymity to its users. Tor (The Onion Router) is a common service of Darknet.
- A. Freenet
  - B. Darknet
  - C. ARPANET
  - D. Stuxnet
56. \_\_\_\_\_ are those search engines that are intended and designed not to take our searched data or browsing habits hence do not hamper our online privacy.
- A. Paid search engines
  - B. Incognito mode
  - C. In-private mode
  - D. Private search engines
57. Connection authentication is offered for ensuring that the remote host has the likely Internet Protocol (IP) \_\_\_\_\_ & \_\_\_\_\_.
- A. address, name
  - B. address, location
  - C. network, name
  - D. network, location
58. Which 2 protocols are used in the Transport layer of the TCP/IP model?
- A. UDP and HTTP
  - B. TCP and UDP
  - C. HTTP and TCP
  - D. ICMP and HTTP

59. The stored cookie which contains all your personal data about that website can be stolen away by \_\_\_\_\_ using \_\_\_\_\_ or trojans.
- A. attackers, malware
  - B. hackers, antivirus
  - C. penetration testers, malware
  - D. penetration testers, virus
60. Using email hacking illicit hackers can send & spread \_\_\_\_\_ virus \_\_\_\_\_ and spam emails.
- A. trojans, redirected malicious URLs
  - B. antivirus, patches
  - C. cracked software, redirected malicious URLs
  - D. malware, security patches