Aptitude Questions :-

1. Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is:
A. 1:3
B. 3:2
C. 3:4
D. None of these
2. The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is:
A. 200 m
B. 225 m
C. 245 m
D. 250 m
3. A sum fetched a total simple interest of Rs. 4016.25 at the rate of 9 p.c.p.a. in 5 years. What is the sum?
A. Rs. 4462.50
B. Rs. 8032.50
C. Rs. 8900
D. Rs. 8925
E. None of these
4. A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C?
A. Rs. 375
B. Rs. 400
C. Rs. 600

D. Rs. 800 5. 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 6. A and B invest in a business in the ratio 3:2. If 5% of the total profit goes to charity and A's share is Rs. 855, the total profit is: A. Rs. 1425 B. Rs. 1500 C. Rs. 1537.50 D. Rs. 1576 7. Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1 : 1 : 2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be: A. Rs. 169.50 B. Rs. 170 C. Rs. 175.50 D. Rs. 180 8. A can contains a mixture of two liquids A and B is the ratio 7:5. When 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7: 9. How many litres of liquid A was contained by the can initially? A. 10 B. 20 C. 21 D. 25

9. The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?
A. 76 kg
B. 76.5 kg
C. 85 kg
D. Data inadequate
10. A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?
A. Rs. 4991
B. Rs. 5991
C. Rs. 6001
D. Rs. 6991
Technical Questions :-
1. Which type of entity cannot exist in the database unless another type of entity also exists in the database, but does not require that the identifier of that other entity be included as part of its own identifier?
A. Weak entity
B. Strong entity
C. ID-dependent entity
D. ID- independent entity
2. In a one-to-many relationship, the entity that is on the one side of the relationship is called a(n) entity.
A. parent
B. child
C. instance
D. subtype

3. The following are components of a database except
A. user data
B. metadata
C. reports
D. indexes
4. Which of the following describe router functions?
A. Packet switching
B. Packet filtering
C. Internetwork communication
D. Path selection
E. All of the above
5. Acknowledgments, sequencing, and flow control are characteristics of which OSI layer?
A. Layer 2
B. Layer 3
C. Layer 4
D. Layer 7
6. What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?
A. Application
B. Host-to-Host
C. Internet
D. Network Access
7. Minimum number of queues needed to implement the priority queue?
Two. One queue is used for actual storing of data and another for storing priorities.
8. Explain different way of using thread?

The thread could be implemented by using runnable interface or by inheriting from the Thread class. The former is more advantageous, 'cause when you are going for multiple inheritance, the only interface can help.

9. What is the purpose of garbage collection in Java, and when is it used?

The purpose of garbage collection is to identify and discard objects that are no longer needed by a program so that their resources can be reclaimed and reused. A Java object is subject to garbage collection when it becomes unreachable to the program in which it is used.

10. What is a FIFO?

FIFO are otherwise called as 'named pipes'. FIFO (first-in-first-out) is a special file which is said to be data transient. Once data is read from named pipe, it cannot be read again. Also, data can be read only in the order written. It is used in interprocess communication where a process writes to one end of the pipe (producer) and the other reads from the other end (consumer).