Academic Year 2017-2018
Questions & Answers

1. **India and this country signed Memorandum of Understanding (MoU) to cooperate in the areas of Information & Broadcasting (I&B) and space.**
   Ans.Vietnam

2. **India-Japan Smart Grid Pilot Project inaugurated in _____ at Haryana.**
   Ans. Panipat

3. **Who lays foundation stone for National Technology Centre for Ports, Waterways and Coasts (NTCPWC) at IIT Chennai?**
   Ans.Nitin Gadkari

4. **Which state cricket team has won the 2018 Vijay Hazare trophy?**
   Ans.Karnataka

5. **The Bharat Sanchar Nigam Limited(BSNL) has signed MoU with which technology giant to offer telecom and IT solutions?**
   Ans.Microsoft

6. **Which company has recently launched Virtual Reality Headset called Project Alloy?**
   Ans.Intel

7. **What is the full form of IEEE?**
   Ans .Institute of Electric and Electronic Engineers

8. **When was the first smart phone launched?**
   Ans .1992 (IBM Simon)

9. **Which of the following banks has tied up with online portal "magicbricks.com" to conduct joint marketing activities?**
   Ans.State Bank of India

10. **Who headed the Committee to Review the Framework Related to Digital Payments?**
    Ans.Ratan P Watal

11. **Who is the leading the Indian delegation in the 2017 SAARC programming committee?**

Ans.Prashant Agarwal

12. How much amount has been sanctioned by the World Bank for "Third Technical Education Quality Improvement Programme (TEQIP III)? of India?
Ans.$201.50 million

13. Who has been named as the "Captain of the Year" at 2017 ESPNcricinfo Awards?
Ans.Virat Kohli

14. Which state is going to host the river festival called 'Namami Brahmaputra'?
Ans.Assam

15.P and Q started a partnership business investing some amount in the ratio of 3:5. R joined them after six months with an amount equal to that of Q. In what proportion should the profit at the end of one year be distributed among P, Qand R?
A.5 : 8 : 10
B.6 : 10 : 5
C.6 : 4 : 10
D.10 : 6 : 3

16.A milk vendor purchased pure milk at Rs 40 per litre. He diluted the milk with water and sold at Rs 40 per litre and in this he gains 60% profit. In diluted milk what is the amount of pure milk taken?
A) 375 ml
B) 500 ml
C) 625 ml
D) 600 ml
E) 525 ml

17.5 kgs of wheat costing Rs 15 per kg is mixed with 10 kgs of wheat costing Rs 12 per kg. The mixture is then sold at 20% profit. Find the selling price of the mixture in Rs/kg.
A) 14
B) 15.60
C) 16
D) 14.40
E) None of these

18.An old advisor of a company was replaced by a young man. As a result, the average age of the board of ten advisors of the company was the same as it was 4 years ago. How much younger is the young man who replaced the old advisor?
A) 42 years
B) 40 years
C) 36 years
D) 32 years

19.A, B and C enter into a partnership and their shares are in ratio 1/2 : 1/3 : 1/4, after 2 months, A withdraws half of his capital and after 12 months, a profit of Rs 1050 is divided among them. What.is.B's.share?

A.Rs.420
B.Rs.300
C.Rs.400
D.Rs.350

20.3 years ago, the average of a family of 5 members was 17 years. A baby having been born, the average age of the family is the same today. The present age of the baby is:
A.5 years
B.2 years
C.1year
D.4years

21.Two trains are moving in opposite directions at 60 km/hr and 90 km/hr. Their lengths are 1.10 km and 0.9 km respectively. The time taken by the slower train to cross the faster train in seconds is:

A.58 sec
B.50 sec
C.48sec
D.56sec

22.Anju and Bimal are partners in a business. Anju contributes 1 / 4 of the capital for 15 months and Bimal received 2 / 3 of the profit, for how long Bimal's money was used ?

A.5 months
B.3months
C.8 months
D.10 month

23.The average price of 10 books is Rs. 12 while the average price of 8 of these books is Rs. 11.75. Of the remaining two books, if the price of one book is 60% more than the price of the other, what is the price of each of these two books?

    A.Rs 10 and Rs 16
    B.Rs 12 and Rs 24
    C.Rs 24 and Rs 18
    D.Rs 28 and Rs 12
    E.None of these

24.P and Q started a partnership business investing some amount in the ratio of 3:5. R joined them after six months with an amount equal to that of Q. In what proportion should the profit at the end of one year be distributed among P, QandR?
    A.5 : 8 : 10
    B.6 : 10 : 5
    C.6 : 4 : 10
    D.10 : 6 : 3

25.A person was asked to state his age in years. His reply was, "Take my age three years hence, multiply it by 3 and then subtract three times my age three years ago and you will know how old I am." What was the age of the person?

    Ans.18 years

26.What is the largest 4 digit number exactly divisible by 88?
    A. 9944   B. 9999
    C. 9988   D. 9900

27.How long is an IPv6 address?
    Ans.128bytes long

28.What is Image Map?
    Ans. The <map> tag is used to define a client-side image-map. An image-map is an image with clickable areas.
    The required name attribute of the <map> element is associated with the <img>'s usemap attribute and creates a relationship between the image and the map.
    The <map> element contains a number of <area> elements, that defines the clickable areas in the image map.

29.Comparison between HTML and XML

HTML	XML
HTML is an abbreviation for HyperText Markup Language.	XML stands for eXtensible Markup Language.
HTML was designed to display data with focus on how data looks.	XML was designed to be a software and hardware independent tool used to transport and store data, with focus on what data is.
HTML is a markup language itself.	XML provides a framework for defining markup languages.
HTML is a presentation language.	XML is neither a programming language nor a presentation language.
HTML is case insensitive.	XML is case sensitive.
HTML is used for designing a web-page to	XML is used basically to transport data

30.What is fragmentation? Different types of fragmentation?

Ans. Fragmentation occurs in a dynamic memory allocation system when many of the free blocks are too small to satisfy any request. External Fragmentation: External Fragmentation happens when a dynamic memory allocation algorithm allocates some memory and a small piece is left over that cannot be effectively used. If too much external fragmentation occurs, the amount of usable memory is drastically reduced. Total memory space exists to satisfy a request, but it is not contiguous. Internal Fragmentation: Internal fragmentation is the space wasted inside of allocated memory blocks because of restriction on the allowed sizes of allocated blocks. Allocated memory may be slightly larger than requested memory; this size difference is memory internal to a partition, but not being used

31.What is meant by Middleware?

Ans. Middleware is a distributed software needed to support interaction between clients and servers. In short, it is the software that is in the middle of the Client/Server systems and it acts as a bridge between the clients and servers. It starts with the API set on the client

side that is used to invoke a service and it covers the transmission of the request over the network and the resulting response. It neither includes the software that provides the actual service - that is in the servers domain nor the user interface or the application login - that's in clients domain.

32. A binary tree with 20 nodes has …………null branches?
Ans. It will have only 6 (ie,5+1) null branches. In general, A binary tree with n nodes has exactly n+1 null nodes.

33. What is the type of the algorithm used in solving the 8 Queens problem?
Ans. Backtracking

34. What are proxy objects?
Ans. Objects that stand for other objects are called proxy objects or surrogates

35. switch(x)
```
{
 default:
 System.out.println("Hello");
}
```
Which two are acceptable types for x? 1. Byte 2. Long 3. Char 4. Float 5. Short
Ans. Byte & Char

36. public class While
```
{
 public void loop()
 {
 int x= 0;
 while ( 1 ) /* Line 6 */
 {
 System.out.print("x plus one is " + (x + 1)); /* Line 8 */
 }
      }
}
```
Which statement is true?
A. There is a syntax error on line 1.
B. There are syntax errors on lines 1 and 6.
C. There are syntax errors on lines 1, 6, and 8.
D. There is a syntax error on line 6.

Ans. D

37. How to store mobile number in database ?
Ans. varchar (10), for country code you can add (3)

38.. What is your idea for generating Random Number.

Ans.You can use Web Service

39.**What is Atomic Section in Java and How it is used.**

Ans. Atomic section is more efficient than Synchronization .Atomic operations are performed as single unit of task without interference from other operations. Atomic operations are necessity in multithreaded environment to avoid data inconsistency. It is explained with the help of example.

40.**Pascal's Triangle Challenge in C/C++.Write a program to compute the value of a given position in Pascal's . The program should prompt the user to input a row and a position in the row. The program should ensure that the input is valid before computing a value for the position.**

Ans.Write program for the following   using concepts of C and C++.

41.**Would you rather a crocodile attack you or an alligator?**

Ans.I would rather the crocodile attack the alligator. Read the sentence again to see the double meaning.

42.**Everything Mr Red owns is red, he lives in a red bungalow and his chairs are red, his tables are red. His ceiling, walls and floor are all red. All of this clothes are red, his shoes are red, even his carpet, television and phone are red. What colour are his stairs?**

Ans. He doesn't have any stairs because he lives in a bungalow!

43.**What has a neck, but no head?**

Ans.Bottle