Solved SAIL(MT) Exam Paper for Computer Science

Computer Science and Engineering all tech from comp science.

All Technical questions were from object oriented programming, Dbms and Computer networks \& OOps.

Technical (Section 1) 100 marks, 0.25 negative for every wrong answer.

1. main()
\{
Printf("main");
main();
\}

What is the output ?
2. Which one is the OOP language
a. Small talk, b. Pascal. c. Basic
3. Which is not the featues of OOP
a. Reflection b. Encapsulation, c. Abstraction d. Inheritence
4. What is the typed language of C++
a. Static b. Dynamic c. Link-binding
5. Which property of OOP makes let the user know only the functinality of method but not the detail how it is working
a. Abstraction b. Encapsulation c. Inheritence
6. How you define abstract class in C++
a. Using abstract mentod b. By writing keyword "abstract". c etc
7. Which one is the two way linked list
a. Circular linklist b. Node having header and trailer in the list C. Array
8. Which one uses the indexing
a. Linklist b. Arrays c. Stack d. Queue
9. Which is having many to many mapping
a. graph, b. tree, c. stack etc
10. Which one is not the behaviour of binary search
a. Deletion of any node. b. comparing with the middle value. etc
11. When data moves from lower layer to upper layer in OSI then what happens to headed a. Removed b. Added.
12. What is called packets in network layer
a. Datagram b. Frame. etc
13. What switching is used in conventional land line
a. Packet b. Circuit. etc
14. What scheduling algo is used for real time OS
a. Round robin b. FIFO. c. Pre-emptive. etc
15. How many layers are there in OSI model
a. 7 b. 8 c. 6 etc
16. Repeaters work in which layer
a. Datalink b. physical c. Network etce
17. Process to process communication happens in layer
a. Session b. Transport c. Application d. Network
18. Which one is not in application layer
a. FTP b. TFTP. c. Virtual network terminal.
19. Which one return the acknowledgement
a. UDP. b. TCP etc
20. Which one is DDL
a. Trancate b. Delete c. Both d. None
21. Which one is true/false for using indexing in data base
a. Slow b. Fast C More space
22. Four DML given to find out the where indexing need not be used.
23. Which one create the deadlock
a. Mutex b. Semaphore c. Hold and wait
24. One numirical to find out the effective average access time where the cache and RAM memory speed given with hit/miss percentage
25. Which one do not require the context switcing
a. General registers b. PC. c. Look aside table buffer
26. What is the size of address location for 8085
a. 1 MB b .128 kb c. 64 KB etc
27. What is the layer where the user comes in picture
a. Session b. Application c. Transport d. Network
29. Why NAND gate is called universal gate.
a. Using this, all other gates can be realised
b. This is largely used
c. etc etc
30. For 3 bits adder, what is the number of adder required
a. 2 full adder\& 2 half adder b. 3 full adder and one half adder etc
31. One numiraical to find out the number of address bit from the 32 segments of 1 MB memory location
32. What comes previous to this 10000
a. 1111 (binary) b. FFFF (hex) c. 7777 (Oct)
33. Questions related to full binary tree to find the number of nodes in leaf
34. What does parity bit
a. Error detect b. Header c. Trailer
35. How to create and interface in C++
a. by virtual functions
b. by abstract class/method
c. by creating the class using "interface" keyword
36. What is for namesapace used in $\mathrm{C}++$
a. To resolve the name clashing
b. To create different name etc
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Section I

1. Language which support diamond inherritance
a) C++ b) Java c) Both a and b d) None

Dbms

Some basic sql functions like trunc some questions from Oracle in C.N

All of them basic questions

Diff b/w hub and switch?

What happend to header of packet if routed from bottom to top layer etc.

## Section II

## Refer any Text book of Quantitative Aptitude

Read Competition Success for G.K and English
Part -1 Technical ( 100 Questions Computer Science)
$Q(1)$ What will be output of the following-
main()
\{
printf("tim");
main();
\}
(a) tim (b) keep printing tim (c) black screen (d) none
$Q(2)$ In which Data structure insertion and deletion is not possible in middle but at ends.
(a) Linked list (b)Pointer Array (c) Queue (d) Dqueue.
(a) 2 (b)4 (c) 7 (d) 9

Q(4) Why NAND gate is called universal gate?

Q(5) Which of the following not supported by C++
(a) Encapsulation (b) Abstraction (c) Reflection (d) Inheritence

Q(6) Which of the following support Diamond Inheritence
(a) C++ (b) Java (c) C (d) none
$Q(7)$ Suppose $X$ is a class and arg is parameter then What is syntax of passing parameter in a copyconstructor
(a) $X(X$ arg $)(b) X(X$ arg) (c) $X(X$ \&arg) (d)none

Q(8) What is difference between Hub and Repeater?

Q(9) If there are 6 input to a Nand Gate the how many column will bw there in Full addre table?
$Q(10)$ Which of the following is a DDL statement
(a) Delete (b) Turncate (c)Both a and b (d) none

Some other questions I am not remembering exactly. But approx 8 simple questions were based on OSI model layer and 7 Question based on simple SQL queries and 15 questions based on Java and C++ and 7 question on digital electronics and 15 question on Operating System and 15 on Data structure.

C++, Java, DBMS, SQL, Computer Network, Operating System and Data Structure are the subject from which questions were asked in paper.

Overall Technicl section was easy but need some rivision of technical question.

Part - 2

Section (1) Generel awareness (25 Questions)

Q(1) Who have desinged the Symbol of Indian Rupee?

Q(2) Where is Jim Nationa Corbet park in India?

Q(3) Who have got the Rajiv Khel ratan award of 2010?
$\mathrm{Q}(4)$ In which state of India Population density is very High? gk question

1) olympic 2010 held in------london
2) Currency of Bhutan-------NUGULTRAM
3) Measles is a type of--------VIRUS
4) Heart beat of Adult---------72
5) Heavy, strongest and long bone of body------FEMUR
6) JIm Corbet national park-------------Uttarnchal
7) Rupess symbol designed by-------D. UDAY KUMAR
8) Durand line is Between--------pak \& afganistan
9) Winner of 20-20 world cup-----------england
10) winner of Rajiv gandhi khel rattan award-2010---------saina Nehwal
11) which river falls in arbian SEA--------------tapi
12) BIHU is a folk dance of-----------assam
13) budh name------------sidhart
14) brahm smaaj----------raja ram mohan roi
15) company related to insurance---------------IRDA
16) gadar movement telated with------------------hardyal singh
17) new member of SAARA------------------afganistan
18) olive branch signify-----------------------PEACE
19) language under 8th schedual---------------22
20) alpha keratin protien present in--------------------FIBER
21) Which state receieve winter rainfall by western disturbance------Tamilnadu
22) equality of oppertunity of all citizen in matter of public employement come under------ART 16
23) Kailasa temple-----------ajanta
24) EX-office planning commision------------Prime minister
25) Most dense populated state................UP

Some other questions were asked based on current gk.

Section(2) Reasoning(25 Question)

Just like R.S. Aggrawal book Questions
Section(3) English (25 Questions)

5 Question were Based on Article use, 5 on correct preposition based, and 10 Question were based on Comperihensive Passage

Most of questions were asked from Simple intreset, Compound intrest, Percentege, Time and work. Just follow R.S. Aggrawal.

