

## Microsoft Placement Paper

### MICROSOFT PAPER ON 29th JANUARY

- 1) Coldest planet:Pluto
  - 2) INS Shivali is the first:
  - 3) Which one of the following was NOT indigenously developed?:Prithvi/Akash/Agni
  - 4) Full form of SARS
  - 5) Anthrax is a :Virus/Bacteria/.../...
  - 6) Dakshina Gangothri is: Ganga's origin/Indian camp @ antartica/.../...
  - 7) Which of the following is a chemical weapon: Mustard Gas/Marsh Gas/.../...
  - 8) A question based on Coding and Decoding
  - 9) Another question similar to above
  - 10) Question on series completion
  - 11) Another series completion question
  - 12) Where is Institute of Forensic Science?:Hyderabad
  - 13)A G.K question based on chromosomes in males and females
- Sample technical questions asked in test last year in CSE :
- 1) Banker's algorithm is used for: Deadlock Avoidance
  - 2) A LOT of questions were based on generating strings from a given grammar.
  - 3) A circle(dot) shown in the PCB is:Vcc/Grnd/Pin 1/Pin 14
  - 4) Program Segment Prefix in MS-DOS 5.0 is:
  - 5) Some IP addresses were given and the question was to select the private address from it(?)
  - 6) 10Base2 and 10Base5 wires refers to:
  - 7) A question on sliding-window protocol
  - 8) Which of the following require a driver?:disk/cache/ram/cpu
  - 9) A LOT of mathematical questions which were asked from calculus, trigonometry...

The questions asked in ECE were mainly from Control Systems, Communications EMT and microprocessor. Make sure that u know the fundas of microprocessors useful in interview also: see if u know these questions

1. Which type of architecture 8085 has?
2. How many memory locations can be addressed by a microprocessor with 14 address lines?
3. 8085 is how many bit microprocessor?
4. Why is data bus bi-directional?
5. What is the function of accumulator?
6. What is flag, bus?
7. What are tri-state devices and why they are essential in a bus oriented system?
8. Why are program counter and stack pointer 16-bit registers?
9. What does it mean by embedded system?
10. What are the different addressing modes in 8085?
- 11.What is the difference between MOV and MVI?
12. What are the functions of RIM, SIM, IN?
13. What is the immediate addressing mode?
14. What are the different flags in 8085?
15. What happens during DMA transfer?
16. What do you mean by wait state? What is its need?

17. What is PSW?
18. What is ALE? Explain the functions of ALE in 8085.
19. What is a program counter? What is its use?
20. What is an interrupt?
21. Which line will be activated when an output device require attention from CPU?

Then comes the interview questions asked in ECE interview were fundamental. Questions asked in my interview were:

1. Which college and university are you coming from?
2. Did you appear for GATE? Why are you not interested in higher studies?
3. Did you appear for IES?
4. Did you appear for any other board interview of public sector?
5. The subjects you have learned in college can be divided into three- basic electronics, communication and digital logic. Tell me any five subjects you like.  
(I told radar and navigational aids, electronic warfare, satellite communication, biomedical instrumentation, fuzzy electronics and basic digital electronics as my subjects)

Board member1 (QUESTION LEVEL- MODERATE)

1. Write the truth table for full adder and implement it in NAND gate only.
2. What's the difference between looping 0s and 1s in K map?
3. Difference between microprocessor and micro controller
4. Microprocessors you are familiar with
5. How will you send and receive data to a micro-processor? (One method is I/O mapped I/O which is the other one?)
6. Radar range equation?
7. Does the radar range depend upon the frequency of the signal transmitted?
8. What is Doppler shift? What is its importance?

BOARD MEMBER -2 QUESTION LEVEL- TOUGH)

1. I will make two fuzzy statements. Pencil is long. Table is long. What is the term long signify?
2. What is a membership function?
3. What are the design criteria for very low frequency amplifier?
4. Can you measure distance with the help of CW radar? If so how?
5. How will you design a stable oscillator? (Not with crystal oscillator because temperature affects it)
6. You have designed an amplifier. After few days it is found that its gain have changed. What might be the reason?

BOARD MEMBER-3 (QUESTION LEVEL- MODERATE)

1. A plane is moving in a circular path around the transmitter of the radar. Will there be Doppler shift detected in the radar?
2. State Keplers laws
3. Why there is more geo synchronous satellite?
4. The angular difference between two satellites is 2 degree. What is the maximum number of satellites needed to cover the whole earth?
5. What is the minimum number of satellites needed to cover the whole earth?

BOARD MEMBER-4 QUESTION LEVEL- MODERATE)

1. Which is the law of conservation involved in the second of Keplers?
2. Why do you explain elliptical orbit while stating Kepler's law? Why not circular orbit?
3. What are the advantages of optical communication?
4. What are the invasive and non-invasive methods of instrumentation?

For CS guys they started with this question: What is a key board? Where u will connec? What will happen if you press the keys?..

For maths guys they asked some questions on series.. I don't know muchSome guys were selected just by describing the final year project.

1. How can you design a phase detector using a XOR gate?
2. Questions abt differentiator and integrator. What will happen if we increase/decrease the values of R/C?
3. how will a low/high pass filters behave to different signals ramp, pulse etc
4. questions on flip flops
5. Johnson counter
6. Questions on microprocessors- what is SIM?
7. Abt your project. What will happen when this/that happens to your project?
8. Radar, antenna and satellite communication.
9. Which is the first/latest communication satellite?
10. What is apogee /perigee?