

Microsoft Selection Process

Those who clear the first round that is Microsoft Aptitude Test are only applicable to appear for the further rounds. We have also given the Microsoft Interview Questions and Microsoft Mock Test And Online Test to boot up your levels. Follow the below selection rounds:

- *Aptitude written test online*
- *Technical interview*
- *HR interview*

Microsoft Test Pattern

Microsoft has tightened the competition level because a hefty number of candidates have been participating in the **Microsoft Aptitude Online Test** so that they decided to conduct the recruitment test very complicated.

Name Of The Section	Number Of Questions	Time Allocated
Online Coding test	2	60 Minutes
Written Round	50	60 Minutes

Detailed Microsoft Syllabus

In the below, we have given C, C++ & Java, and Reasoning topics. So that you can easily get an idea of the topics to need to prepare. Technical subjects are more difficult than the general subjects so focus the below-given topics.

Coding

- C (Preprocessor, Conditional Expressions, Constants, Data Types, Declarations, File Access, Pointers, Standard Input, and Output, Storage Management, Typedef, Variable Names, Structures, Unions, Bit-fields, C Functions, C Data Types, C Operators, Control Flow Statements)
- C++ (Arrays, Classes, Constants, Functions, Inheritance, Interfaces, Macros, Namespaces, Operators and Statements, Pointers, Templates, Input-Output Streams)
- Java (Data Types, Operators, Applets, Arrays, Collections, Exception Handling, Input-Output Streams, Interfaces, java.io Package, java.lang Package, java.util Package, Packages, Serialization, Strings, Threads).

Logical Reasoning

- Puzzles (Sudoku, Number Puzzles with Solution, Missing letters puzzles, Logical puzzles, Playing cards puzzles, Clock puzzles with Solution, Analytical Puzzles)
- Logical Reasoning (Number Series, Letter Series, Symbol Series, Logical Problems, Analogies, Essential Part, Artificial Language, Matching Definitions, Making Judgments, Analyzing Arguments, Picture Analogies)
- Non-Verbal reasoning (Series, Spotting Out The Embedded Figure, Classification, Water Images, Mirror Images, Completion of Incomplete Pattern)
- Analytical Reasoning
- Verbal Reasoning
- Data Sufficiency and Data Interpretation.

Microsoft Technical Interview Questions

In this section, we have included Microsoft's Frequently Asked Interview Questions in the Technical Interview Round. As you now have an inclination about what you can anticipate in the Microsoft Technical Interview do follow below reference Microsoft Technical Interview Questions to know the difficulty level and how you can prepare for it henceforth. In most case scenarios candidates were asked to write a program for a certain problem. Thus, ensure you guys brush up on your coding skills and perform well.

1. To find the Inorder successor of a node in a binary tree, provided you have a parent pointer
2. A binary tree is given. You have to check whether left node data is greater than right node data for all nodes.
3. To find Inorder successor of a node in a binary tree, provided you do not have a parent pointer.
4. You are given a sorted integer array, create a height-balanced binary search tree.
5. Construct a data structure that can push, pop, and find minimum in $O(1)$ time.
6. Explain the difference between the process and thread.
7. A file consists of numerous words in it. You have to print the 10 most frequent words. Given a linked list a random ptr also exists. Clone the original linked list.
8. You have a linked list and two integers, a and b, modify the linked list such that you retain first a nodes, then delete b nodes, then retain a nodes, and so on.
9. Given a two-dimensional array, if any element within is zero, make its whole row and column zero.
10. Given the head pointers of two linked lists where each linked list represents an integer number (each node is a digit), add them and return the resulting linked list.

11. Write a function to check that a binary tree is a valid binary search tree
12. Implement a queue with 2 stacks. Your queue should have an enqueue and a dequeue method and it should be “first in first out”
13. Write an efficient function that checks whether any permutation of an input string is a palindrome
14. Given a sorted array of size n . Each element in the array is unique and lies from 1 to $n+1$. Find the missing element.
15. Given a singly linked list, delete the middle of the linked list.
16. Given an array where every element occurs three times, except one element which occurs only once, find the element that occurs once. The expected time complexity is $O(n)$ and $O(1)$ extra space.
17. Find a substring in a string and replace it with another string.
18. Write code to convert a given number into words.
19. Print the last 10 lines of a big file or big string.
20. Given a binary tree of size N and an integer K , print all nodes that are at distance k from root (root is considered at distance 0 from itself). Nodes should be printed from left to right. If k is more than the height of the tree, nothing should be printed.

Microsoft HR Interview Round

Microsoft HR Interview will be basic, sometimes HR round will not be conducted separately but as a part of technical interview. In this round, the interviewer will be asking basic HR-related questions. The aspirants who will be having strong communication skills can simply get through this round without any pressure. Just to give you a heads-up we have filtered a few Microsoft HR Interview Questions for Freshers that will help you to prepare for easily facing the HR Recruiter.

Microsoft HR Interview Questions and Answers for Freshers

1. Tell me about yourself.

The basic and common question that every individual will be facing at the time of the interview. The answer which you will provide for this question will act as a deciding factor for the rest of the interview. aspirants can answer this question in n different ways. Do remember to not give the by-hearted answers. Learn how you can be creative while saying about your Educational Qualifications, Family Background, Certification Courses you did, Internships, your mini, and main project details. If you want your technical expertise to be enhanced you can briefly explain the technologies you used in your project.

2. What are your favorite products from Microsoft?

Everyone will be very familiar with most of Microsoft Products. If you aren't very sure, do check the product list before appearing for the interview. The aspirants while answering this question have to make themselves ready to answer the next obvious question of why do you like it? make a specific point about why you have liked that product for example – For their Accessibility, App Interface, User-Friendly, Security, etc., This shows your technical expertise too.

3. What are your favorite subjects from your academics and why them?

A subject can be your favorite due to many reasons, so while answering this question do reason out on why do you consider it as your favorite among many. For example, if you say you are interested in DBMS, list out the features/ properties/ concepts for which you like this subject more than the remaining. Further, prepare yourself for any questions that the interviewer will ask regarding DBMS. As you said this is your favorite subject the interviewer will assume that you are well versed and familiar with every concept that exists in DBMS.

4. What steps do you take to keep your skills current?

Technology is ever-changing. New technology gets emerged after every few days. And in order to sustain in this fast-growing domain one has to keep themselves amidst the change. They need to update with new information often. The interviewer by asking this question, expects the candidates to be flexible and wants the candidates to be continuous learners. So, while answering this question, point out on how you constantly keep yourself updated by reading Technology-Related Blogs, and how you frequently follow different IT Industry's to know about their latest trends and all that.

5. Where do you see yourself in the next 10 years?

The future is uncertain this is known by everyone. Even though it is uncertain, you need to make plans for it to have clarity on where you want to see yourself in the future. By asking this question the interviewer wants to know whether you will be continuing as an employee in Microsoft or not. Therefore, you can answer this question by saying that as long as the work you do challenges you and enables you to have professional growth in the company and in turn helps the company to get a profitable business you will be wishing to continue to work there. And all this will reflect you as a person of being a career-oriented individual.

Reasoning Test Placement Papers

1. Class A has a higher enrollment than Class B.

Class C has a lower enrollment than Class B.

Class A has a lower enrollment than Class C.

If the first two statements are true, the third statement is

- A. true
- B. false
- C. uncertain
- D. None

Answer: Option B

2. All animals have

- A. Eyes
- B. Four legs
- C. Horns
- D. Instincts

Answer: Option D

3. We, at Comfort Stationers, have always been striving to provide stationery items that would make your work more enjoyable and less strenuous. Our latest innovations are a smooth-flow pen and gradual-friction paper. A combination of these two reduces strain on your fingers and allows faster writing the causes lesser fatigue. Therefore, replacement of your pen and paper with our innovative products reduces cost of clerical jobs. Which of the following, if true, would weaken the conclusion drawn in the above argument?

- A. Those who are already using the above new products report greater difficulty in transition from new products to regular ones than from the regular ones to the new ones.
- B. The cost of manufacturing these new products is not more than the cost of manufacturing the regular ones and the new products last longer than the regular ones.
- C. The number of offices using the new products is increasing month by month.

D. These products need to be purchased in huge lots and need to be stored in special conditions. The cost of procurement and storage is quite high.

Answer: Option D

Solution:

The passage talks about the advantages in writing by using the new kind of pen and paper and arrives at a conclusion about the cost of clerical job. We have to show that the new products do not lead to decrease in cost of clerical job.

None of the choice (a), (c) and (e) has anything about the cost. Hence, none of them weakens the conclusion.

Choice (b) states that the new products can be manufactured and they also last longer. This information strengthens the conclusion.

According to choice (d) the procurement and storage costs are very high. This casts a doubt on the conclusion that the cost of clerical job can be decreased by using these new products. Hence, (d) weakens the conclusion.

4. Choose the correct alternative that will continue the same pattern and fill in the blank spaces:

2, 3, 5, 7, 11, (...), 17

A. 12

B. 13

C. 14

D. 15

Answer: Option B

Solution:

Clearly, the given series consists of prime numbers starting from 2. The prime number after 11 is 13. So, 13 is the missing number

5. (A) The Archaeological Survey of India has submitted a report for the Supreme Court that there is no evidence to prove that the Rama Sethu is man made.

(B) Mr. Kailash which is a natural formation, is considered holy and is received by Hindus and Buddhists the world over.

- A. if statement (A) is the cause and statement (B) is its effect.
- B. if statement (B) is the cause and statement (A) is its effect.
- C. if both the statements (A) and (B) are independent causes.
- D. if both the statements (A) and (B) are effects of independent causes.

Answer: Option D

Solution:

The cause for ASIs report and the cause for Hindus and Buddhists considering Kailash as holy mountain are different.

(B) Mr. Kailash which is a natural formation, is considered holy and is received by Hindus and Buddhists the world over.

- A. if statement (A) is the cause and statement (B) is its effect.
- B. if statement (B) is the cause and statement (A) is its effect.
- C. if both the statements (A) and (B) are independent causes.
- D. if both the statements (A) and (B) are effects of independent causes.

Answer: Option D

Solution:

The cause for ASIs report and the cause for Hindus and Buddhists considering Kailash as holy mountain are different.

6. Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement:

Input: 39 121 48 18 76 112 14 45 63 96

Step I: 14 39 121 48 18 76 112 45 63 96

Step II: 14 39 48 18 76 112 45 63 96 121

Step III: 14 18 39 48 76 112 45 63 96 121

Step IV: 14 18 39 48 76 45 63 96 112 121

Step V: 14 18 39 45 48 76 63 96 112 121

Step VI: 14 18 39 45 48 63 76 96 112 121

This is the final arrangement and step VI is the last step for this input. How many steps will be required for getting the final output for the following input?

Input: 101 85 66 49 73 39 142 25 115 74

A. 5

B. 6

C. 7

D. 8

Answer: Option D

Step VI: 14 18 39 45 48 63 76 96 112 121

This is the final arrangement and step VI is the last step for this input.

How many steps will be required for getting the final output for the following input?

Input: 101 85 66 49 73 39 142 25 115 74

A. 5

B. 6

C. 7

D. 8

Answer: Option D

Solution:

Step I: The smallest number becomes first and the remaining numbers shift one position rightward.

Step II: The largest number among given numbers becomes last and the remaining numbers shift one position leftward.

The steps are repeated alternately till all the numbers get arranged in ascending order and that will be that last step for that particular input.

7. Statement:

The principal instructed all the teachers to be careful in class because some students may disturb other students.

Assumptions:

I. The teachers may handle the situation properly and they may restrict the naughty students.

II. The students will welcome the decision of the Principal.

A. If only assumption I is implicit

B. If only assumption II is implicit

C. If either I or II is implicit

D. If neither I nor II is implicit

Answer: Option A

Solution:

I is implicit; that is why the principal instructed the teachers to carry the responsibility. II is not implicit. The mischievous section may not welcome the decision.

8. Labourer is related to wages in the same way as an entrepreneur is related to?

A. Loan

B. Interest

C. Taxes

D. Profit

Answer: Option D

Solution:

First earns in the form of a second.

9. Event (A): Company X is opening an office in city Y for marketing the company's products.

Event (B): Company X has chalked out an expansion plan, involving raising production capacity at its existing plants.

A. If 'A' is the effect and 'B' is its immediate and principle cause.

B. If 'B' is the effect and 'A' is its immediate and principle cause.

C. If 'A' is the effect but 'B' is not its immediate and principle cause.

D. If 'B' is the effect but 'A' is not its immediate and principle cause.

Answer: Option C

Solution:

Events (A) and (B) are related events and chronologically (B) occurs before (A) and because of as they are planning to increase capacity, they have to make a plan to sell their products also so they open new offices for marketing those products. But opening an office in a particular city, requires other events such as market survey etc. It is not the immediate and principle cause.

10. Statement:

Cutting down of forests is a threat to the wild life. Most of the species of animals are on the verge of extinction.

Courses of Action:

I. The species of animals, which are on the verge of extinction, must be protected by creating wild life sanctuaries which contain flora that defines the native habitat of the endangered animals.

II. To the maximum extent possible we should stop deforestation.

III. Growing urban forests to compensate for deforestation.

A. Only II follows

B. Only III follows

C. Only I and II follow

D. Only I and follows

Answer: Option C

Solution:

Here the problem is extinction of various species of animals, so providing them their native habitat is the proper solution for the problem. II is a proper course of action, as stopping deforestation can solve the problem to some extent. III is not a proper course of action as urban forest cannot be the habitat for the wild animals.

From the first two statements, we know that of the three classes, Class A has the highest enrollment, so the third statement must be false.

11. 522 1235 2661 4800 7652 11217 ?

A. 15495

B. 16208

C. 14782

D. 16921

Answer: Option A