HCL Previous years questions with answers

Compulsory Modules (all 3)

1. English Comprehension

2. Quantitative Ability

3. Reasoning and Logical Ability

Optional Modules (1 or more)

1. Computer Programming Principles and Application

2. Computer Fundamentals

3. Electronics and Semiconductor

HCL Verbal Ability Topics

Synonyms/Antonyms/Word Meaning (Vocabulary)

Complete the Sentence (Grammar)

Spot error/Correct sentence (Grammar/sentence construction)

Sentence Ordering (Comprehension skills)

Questions based on passage (Comprehension skills)

HCL Quantitative Aptitude and Reasoning Topics
Basic Math Understanding and Algebra: Decimals, fractions, powers, HCF, LCM, Solving equations, etc.

Word Problems

Understanding of Logarithms and exponents

Permutation and Combination, Probability

Analogical Reasoning: Analogy and Classification questions

Deductive Logic: Statement-Conclusion, Statement-Assumption, Data-sufficiency type, Syllogisms, etc.

Pattern Recognition: Coding and Decoding Questions, Alphabet Test

Composition of Complex relations: Blood Relation, Direction Understanding, Logical Word Sequence

Reasoning Puzzles, Theme Detection

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HCL Technical written Test Topics

1.Computer Programming Principles and Application

This test is based on no particular programming language. The test is completely language independent and tests the programming and algorithm development concepts of the candidate.

The topics include:

1. Structure and constructs of Computer Programs

Programming flow, Procedures, Functions and Arguments, Methods

Data-types, how data is stored in computers, input/output, manipulation, methods of referencing and assessing data (including pointers).

Iteration, decision-making, recursions

Algorithm Complexity: Space and time Complexity, Asymptotic Notation

Compilation, Linking and Execution; debugging, kinds of errors.

2. Data-structures and Basics Algorithms

Data Storage Methods: Linked lists, Arrays, Queues, Stacks, Trees, Heaps, Hash tables, graphs; Stress on which data structure to use for a given application

Data retrieval, Insertion of new data, merging of data from two data structures

Data search and sorting, Methods of array sorting and trade-off

3. Object Oriented Programming Concepts

Classes, objects and methods

Data Encapsulation, Data hiding, Inheritance

Polymorphism, Overloading, AbstractionAnchor
2. Computer Fundamentals
Basic Hardware Usage, Maintenance and Organization
Operating System Usage
Basic Software and Internet
3Electronics and Semiconductor
Basics only

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HCL Placement Model Papers

ENGLISH COMPREHENSION

In the following question select the word which is OPPOSITE in the meaning of the given word.

Q1. INDISCREET

a. reliable
b. honest
c. prudent
d. stupid

Q2. SOLICITUDE

a. insouciance
b. ingenuity
c. propriety
d. austerity

Q3. In the sentence there is a bold word or phrase. One of the words or phrases given in the options conveys almost the same meaning as the bold word or phrase in the sentence. Select that option which is nearest in meaning.

It is preposterous on your part to look for a job without first completing your education.

a. Wise
b. Imperative
c. Advisable
d. Most admirable
e. Very absurd

In the following questions, fill in the blank space.

Q4. The success that he has gained, though striking enough, does not, however, commensurate . . . . the efforts made by him.

a. About
b. From
c. With
d. Beside
e. Over

Q5. Vinod took his meals after he . . . .

a. Had completed his work

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b. Had been completing his work
c. Was completing his work
d. Had been completed his work
e. Had got completed his work

In the following questions, select the word or phrase that is similar in meaning to the given word.

Q6. Nonchalance

a. Neutrality
b. Indifference
c. All-knowing
d. Ignorance
e. Untimeliness

Q7. Conceal

a. Hide
b. Seal
c. Ceiling
d. Horrifying

Q8. Read the sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The letter of that part is the answer. If there is no error, the answer is 'D'. (Ignore - the errors of punctuation,if any)

(A) The whole thing moves/ (B) around the concept of building a small dynamic/(C) organisation into a larger one./(D) No error.
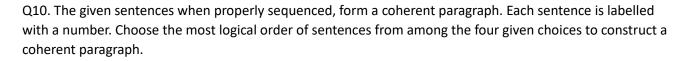
a. (A)
b. (B)
c. (C)
d. (D)

Q9. In the question a part of the sentence is italicised. Alternatives to the italicised part is given which may improve the sentence. Choose the correct alternative. In case no improvement is needed. Option 'D' is the answer.

She gave most of her time to music.

a. spent
b. lent
c. devoted
d. No improvement

Q10. The given sentences when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Choose the most logical order of sentences from among the four given choices to construct a coherent paragraph.

1. He was so busy with them that he did not get time to eat. 2. Thousands of people came to him and asked different types of questions. 3. No one cared to see that he had his food or rest that night. 4. Swami Vivekanand once stayed in a small village.

a. 2341
b. 3214
c. 4213
d. 4231

Answer the question based on the given passage

Management is a set of processes that can keep a complicated system of people and technology running smoothly. The most important aspects of management include planning, budgeting, organising, staffing, controlling, and problem-solving. Leadership is a set of processes that creates organisations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles. This distinction is absolutely crucial for our purposes here: Successful transformation is 70 to 90 per cent leadership and only 10 to 30 percent management. Yet for historical reasons, many organisations today don't have much leadership. And almost everyone thinks about the problem here as one of managing change. For most of this country, as we created thousands and thousands of large organisations for the first time in human history, we didn't have enough good managers to keep all those bureaucracies functioning. So many companies and universities developed management programs and hundreds and thousands of people were encouraged to learn management on the job. And they did. But, people were taught little about leadership. To some degree, management was emphasised because it's easier to teach than leadership. But even more so, management was the main item on the twentieth-century agenda because that's what was needed. For every entrepreneur or business builder who was a leader, we needed hundreds of managers to run their ever-growing enterprises. Unfortunately for us today, this emphasis on management has often been institutionalised in corporate cultures that discourage employees from learning how to lead. Ironically, past success is usually the key ingredient in producing this outcome. The syndrome, as I have observed it on many occasions, goes like this: success creates some degree of marked dominance which in turn produces much growth. After a while keeping the ever-larger organisation under control becomes the primary challenge. So attention turns inward and managerial competencies are nurtured. With a strong emphasis on management but not leadership, bureaucracy and an inward focus takeover. But with continued success, the result mostly of market dominance, the problem often goes unaddressed and an unhealthy arrogance begins to evolve. All of these characteristics then make any transformation effort much more difficult. Arrogant managers can over-evaluate their current performance and competitive position, listen poorly and learn slowly. Inwardly focused employees can have difficulty seeing the very forces that present threats and opportunities. Bureaucratic cultures can smother those who want to respond to shifting conditions. And the lack of leadership leaves no force inside these organisations to break out of the morass.

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Q11. Why did companies and universities develop programmes to prepare managers in such a large number?

a. (A) Companies and universities wanted to generate funds through these programmes
b. (B) The large number of organisations were created as they needed managers in good number
c. (C) Organisations did not want to spend their scarce resources in training managers
d. (D) Organisations wanted to create communication network through trained managers

Q12. How has the author defined management?

a. It is the process of adapting organisations to changing circumstances.
b. It is the system of aligning people with the direction it has taken.
c. It refers to creating a vision to help direct the change effectively.
d. Creating better performance through customer orientation.

Q13. What is the historical reason for many organisations not having leadership?

a. A view that leaders are born, they are not made
b. Leaders lack managerial skills and organisations need managers
c. Leaders are weak in carrying out traditional functions of management
d. Leaders allow too much complacency in organisations

Q14. Which of the following characteristics help organisations in their transformation efforts?

a. Emphasis on leadership but not management
b. A strong and dogmatic culture
c. Bureaucratic and inward-looking approach
d. Failing to acknowledge the value of customers and shareholders

Q15. Which of the following is similar in meaning of the word 'smother' as used in the passage?

a. Suppress
b. Encourage
c. Instigate
d. Criticise

HCL Quantitative Aptitude

QUANTITATIVE ABILITY

Q1. In a kilometre race, if A gives B a 40 m start, A wins by 19 s. But if A gives B a 30 s start, B wins by 40 m. Find the time taken by B to run 5,000 m?

a. 150 s
b. 450 s
c. 750 s

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d. 825 s

Q2. Pipe A takes 16 min to fill a tank. Pipes B and C, whose cross-sectional circumferences are in the ratio 2:3, fill another tank twice as big as the first. If A has a cross-sectional circumference that is one-third of C, how long will it take for B and C to fill the second tank? (Assume the rate at which water flows through a unit cross-sectional area is same for all the three pipes.)

a. 66/13
b. 40/13
c. 16/13
d. 32/13

Q3. Three consecutive whole numbers are such that the square of the middle number is greater than the product of the other two by 1. Find the middle number.

a. 6
b. 18
c. 12
d. All of these

Q4. The arithmetic mean of 2 numbers is 34 and their geometric mean is 16. One of the numbers will be

a. 4
b. 16
c. 18
d. 12

Q5. If x% of a is the same as y% of b, then z% of b is :

a. (xy/z)% of a
b. (yz/x)% of a
c. (xz/y)% of a
d. None of these

Q6. The letters of the word WOMAN are written in all possible orders and these words are written out as in a dictionary, then the rank of the word 'WOMAN' is

a. 117
b. 120
c. 118
d. 119

Q7. What least number must be subtracted from 9400 to get a number exactly divisible by 65?

a. 40
b. 20
c. 80
d. none of these

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Q8. If 2505 / 0.5 = 5010 then 25.05 / 0.5 = ?

a. 5.010
b. 50.10
c. 501.0
d. None of these

Q9. Which pair of rational numbers lie between 1/5 and 2/5 -

a. 262/1000, 275/1000
b. 362/1000, 562/1000
c. 451/1000, 552/1000
d. 121/1000,131/1000

Q10. What is the value of the following expression: 2 log10 5 + log10 4 ?

a. 2
b. 2.5
c. 3
d. None of these

Q11. If x increases linearly, how will a-x behave (a>1) ?

a. Increase linearly
b. Decrease linearly
c. Increase exponentially
d. Decrease exponentially

Q12. What is the probability of getting the sum 5 in two throws of the dice?

a. 1/12 b. 1/5 c. 1/9 d. None of these

LOGICAL ABILITY

Q1. The question shows a pair of words in which the first is related to the second in some way. It is followed by a single word which bears a similar relation to one of the given alternatives. Find the correct alternative to complete the analogy.

Melt: Liquid:: Freeze: ?

a. Ice
b. Condense
c. Solid
d. Crystal

Q2. Fill in the blank Guilt is to Past as Hope is to ......

a. Present
b. Future
c. Today
d. Despair
e. Hopeless

Q3. From the given choices select the odd man out:

a. Bird
b. Kite
c. Crow
d. Pigeon
e. Sparrow

Q4. Find the missing pattern

BOQD: ERTG:: ANPC : ?

a. DQSF
b. FSHU
c. SHFU
d. DSQF

Q5. Find the missing number

5: 24:: 8 : ?

a. 65
b. 63
c. 62
d. 64

Q6. From the given choices select the odd man out

a. DFHEG
b. TWXUV
c. OQSPR
d. JLNKM

Q7. If HARD is coded as 1357 and SOFT is coded as 2468, what will 21448 stands for?

a. SHAFT
b. SHORT
c. SHOOT
d. SHART

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Q8. Find the next number in the series

1, 6, 13, 22, 33, ...

a. 44
b. 45
c. 46
d. 47

Q9. The question contains some statements followed by some conclusions. Decide which of the given conclusions logically follow from the given statements, disregarding commonly known facts.

Statements:
I) All tomatoes are red.
II) All grapes are tomatoes.
Conclusions:
I) All grapes are red.
II) Some Tomatoes are grapes.

a. Only conclusion I follows.
b. Only conclusion II follows.
c. Neither I nor II follows
d. Both I and II follow.
e. Either I or II follows

Q9. Old woman's son is my daughter's uncle, then what relation has the old woman to me?

a. Sister
b. Mother
c. Grandmother
d. Mother - in - law

Q10. Ramu was facing East. He walked 4 km forward and then after turning to his right walked 6 km. Again, he turned to his right and walked 7 km. After this he turned back. Which direction was he facing at the time?

a. East
b. North
c. South
d. West
e. North-East

Q11. Raman is not wearing purple and Aman is not wearing black. Raman and Sahil wear different colours. Avinash alone wears green. What is Sahil's colour, if all four of them are wearing different colours.

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a. Green

b. Black

c. Purple

d. Can't Say

Q12. The question is followed by two arguments numbered I and II. You have to decide which of the arguments is a strong argument and which is a weak argument.

Statement:
Should a total ban be put on trapping wild animals?
Arguments:
I. Yes, Trappers are making a lot of money.
II. No, bans on hunting and trapping are not effective.

a. Only argument I is strong.

b. Only argument II is strong.

c. Either I or II is strong.

d. Neither I nor II is strong.

e. Both I and II are strong

Q13. The question contains a statement followed by two Assumptions I and II. Find out which assumption(s) is implicit.

Statements:
Vitamin E tablets improve circulation, keep your complexion in glowing condition.
Assumptions:
I. People like glowing complexion.
II. Complexion becomes dull in the absence of circulation.

a. Only assumption I is implicit

b. Only assumption II is implicit

c. Both assumption I and II are implicit.

d. Neither assumption I nor II is implicit

Q14. Study the statement(s) and the conclusions and select the correct option.

Statement:
No country is absolutely self - dependent these days.
Conclusions:
I. It is impossible to grow and produce all that a country needs.
II. Countrymen in general have become lazy.

a. Only Conclusion I follows

b. Only Conclusion II follows

c. Both the conclusion I and II follow

d. Either conclusion I or II follows

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e. Neither conclusion I nor II follows

Q15. In the question a statement is followed by some courses of action. A course of action is a step or administrative decisions to be taken for improvement, follow-up, or further action in regard to the problem, policy, etc. You have to assume everything in the statement to be true and then decide which of the given suggested course(s) of action logically follows for pursuing.

Statement:
'The World Bank has approved a $ 300 million loan to finance a project to construct coal ports by Madras Port Trusts.
Courses of Action:
I. India should take financial help from other international financial institutions to develop such ports in other places.
II. India should not seek any help from the international financial institutions.

a. Only I follow
b. Only II follows
c. Either I or II follows
d. Neither I nor II follows
e. Both I and II follow.