

## Cognizant Technology Latest Placement Paper (English, Quantitative & Analytical)

### CTS Placement Paper 2010:

Aptitude Test is of 3 parts

English

Quantitative

Analytical

(total 70 questions.—20+30+20)



### English—(20 min,25 marks)

- 1) Two very long difficult passages (total 10 questions)
- 2) Correct sentences. – 5 questions
- 3) Incorrect sentences. – 5 questions
- 4) Logical Order. – 5 questions.

### Quantitative—(30 min,25 marks)

- 1) Two Venn diagram – 5 questionseach.
- 2) Logical reasoning. – 4 questionseach
- 3) Coding(replace 1 by \$ and 0 by \* for decimal to binary conversions) – 5 questions
- 4) Data Sufficiency- 5 questions
- 5) Cube problems- 5 questions

(For all these sections prepare thoroughly from R.S. Agarwal—Verbal and Non-Verbal Reasoning)



### Analytical– (20 min,20 marks)

#### APTITUDE TEST

Questions = 70 ; time limit = 70 minutes... Correct answer carry one mark and wrong answer carry 0.25 marks. , Offline (paper & pen) test

#### ANALYTICAL section (25 Q's – 30 mins)

**Directions for Questions 1-5:** Read the following information and answer the questions given below it:

Seven students P, Q, R, S, T, U and v take a series of tests. No two students get similar marks. V always scores more than P. P always scores more than Q. Each time either R scores the highest and T gets the least or alternatively S scores the highest and U or Q scores the least.

#### 1.If S is ranked sixth and Q is ranked fifth, which of the following can be true?

- A. V is ranked first or fourth B. R is ranked second or third  
C. P is ranked second or fifth D. U is ranked third or fourth  
E. T is ranked fourth or fifth.

Ans: D

#### 2. If R gets more, V should be ranked not lower than:

- A. second B. third C. fourth D. fifth E. sixth

Ans: C

**3. If R is ranked second and Q is ranked fifth, which of the following must be true?**

- A. S is ranked third B. T is ranked sixth
- C. P is ranked sixth D. V is ranked fourth
- E. U is ranked sixth

Ans: B

**4. If S is ranked second, which of the following can be true?**

- A. U gets more than V B. V gets more than S
- C. P gets more than R D. P gets more than V
- E. T gets more than Q

Ans: A

**5. If V is ranked fifth, which of the following must be true?**

- A S scores the highest B. R is ranked second
- C. T is ranked third D. Q is ranked fourth
- E. U scores the least

Ans: A

**Questions 6-10 :**

**6. You are having 31kg of rice. You are provided with a 1kg stone for weighing. In how many weights the 31kg of rice can be weighed. ?**

Ans: 5

**7. A starts at 11:00AM and travels at a speed of 4km/hr. B starts at 1:00PM and travels at 1km/hr for the first 1hr and 2km/hr for the next hr and so on. At what time they will meet each other ?**

Ans: 8:45 pm

**8. There are 80 coins, among them one coin weighs less compared to other. You are given a physical balance to weigh. In how many weighing the odd coin can be found.**

Ans: 5

**9. Dia of the circle 4cm. The shaded part is  $\frac{1}{3}$  of the square area. What is the side of the square.**

Ans: root of  $3\pi$

**10. A,B,C, can do a work in 8,14,16 days respectively. A does the work for 2 days. B continues from it and finishes till 25% of the remaining work. C finishes the remaining work. How many days would have taken to complete the work?**

Ans:  $10\frac{9}{8}$

**Directions for Questions 11-15 : Each question given below has a problem and two statements numbered I and II giving certain information. You have to decide if the information given in the statements are sufficient for answering the problem. Indicate your answer as:**

- (a) if the data in statement I alone are sufficient to answer the question;
- (b) if the data in statement II alone are sufficient to answer the question;
- (c) if the data in either in I or II alone are sufficient to answer the question;
- (d) if the data even in both the statements together are not sufficient to answer the question;
- (e) if the data in both the statements together are needed;

**11. A) The report was useless to them because there was no needed information.**

**B) Since the report lacked needed information it would have not been useful to them.**

**C) Since the report did not contain the needed information it was not real useful to them**

- D) Being that the report lacked the needed information, they could not use it.  
E) since the report lacked needed information it was of no use to them.

**Ans: E**

12. A) Anitha was sitting with her husband on the steps of the temple with her lap full of newspapers, when Bunty and Bittoo came up.  
B) Anitha, with her lap full of newspapers, was sitting with her husband on the steps of the temple when Bunty and Bittoo came up.  
C) With her lap full of newspapers, Anitha was sitting with her husband on the steps of the temple when Bunty and Bittoo came up.  
D) Anitha was sitting with her husband on the steps of the temple when Bunty and Bittoo came up with her lap full of news papers.

**Ans: A**

13. A) Since managers can motivate people in the tasks that need to be done by getting them involved.  
B) The managers can motivate people in tasks by getting them involved that needs to be done  
C) The managers not only do the tasks that need to be done by getting them involved but also can motivate people.  
D) People can be motivated by getting them involved in the tasks that need to be done by the managers  
E) The managers can motivate people by getting them involved in the tasks that need to be done.

**Ans: E**

14. A) I went yesterday to the bank to collect the pass-book.  
B) I went to the bank yesterday to collect the pass -book  
C) Yesterday to collect the pass-book I went to the bank  
D) To collect the pass-book yesterday I went to the bank

**Ans: B**

15. A) The early age of three or four years, would begin our first recollection of the world, for many of us.  
B) Our first recollection of the world, for many of us, would be early age of three or four years.  
C) For many of us, our first recollection of the world being the early age of only three or four years.  
D) For many of us, our first recollection of the world has been the early age of only three or four years  
E) For many of us, our first recollection of the world is from the early age of only three or four years.

**Ans: A**

**Directions(21-25):** A cube is coloured orange on one face , pink on the opposite face , brown on one face and silver on a face adjacent to the brown face. The other two faces are left uncoloured. It is then cut into 125 smaller cubes of equal size. Now, answer the following questions based on the above statements:

**21. How many cubes have at least one face coloured pink ?**

- A. 1 B. 9 C. 16 D. 25

**Ans: D**

**22. How many cubes have all the faces uncoloured ?**

- A. 24 B. 36 C. 48 D. 64

**Ans: C**

**23. How many cubes have at least two faces coloured ?**

A. 19 B. 20 C. 21 D. 23

**Ans:**C

24. How many cubes are coloured orange on one face and have the remaining faces uncoloured ?

A. 19 B. 12 C. 14 D. 16

**Ans:** D

25. How many cubes one coloured pink ?

A. 8 B. 10 C. 12 D. 16

**Ans:** A

**Directions 7-15:**In each of the following questions one word is different from the rest. Find out the word which does not belong to the group

7. A) Handle B) Cycle C) Chain D) Break

**Ans:** B

8. A) Butchers B) Police Station C) Newsagents D) Opticians

**Ans:** B

9) A) TV B) FG C) KL D) PQ

**Ans :** (A)

10. A) Gloves B) Sandals C) Socks D) Shoes

**Ans:** A

11. A) ACEG B) MOQS C) GHJL D) RTVX

**Ans :** (C)

12. A) Kindergarten B) Office C) College D) University

**Ans:** B

13. A) Cow B) Pork C) Lamb D) Chicken

**Ans:** A

14. A) Bus B) Lorry C) Van D) Bicycle

**Ans:** D

15. A) Grape B) Orange C) Potato D) Lemon

**Ans:** C

16. There are five different houses. A to E, in a row. A is to the right of B and E is to the left of C and right of A. B is to the right of D. Which of the houses is in the middle.

A) A B) B C) D D) E

**Ans:** A

17. Five girls are sitting in a row. Rashi is not adjacent to Sulekha or Abha. Anuradha is not adjacent to Sulekha. Rashi is adjacent to Monika. Monika is at the middle in the row. Then, Anuradha is adjacent to whom out of following?

A) Rashi B) Sulekha C) Abha D) Monika E) Cannot determined

**Ans:** A

18. You drive to the store at 20 mph and return by the same route at 30 mph. Discounting the time spent at the store, what was your average speed?

**Ans:** 24 mph



19. Two trains travel toward each other on the same track, beginning 100 miles apart. One train travels at 40 miles per hour; the other travels at 60 miles an hour. A bird starts flight at the same location as the faster train, flying at a speed of 90 miles per hour. When it reaches the slower train, it turns around, flying the other direction at the same speed. When it reaches the faster train again, it turns around — and so on. When the trains collide?

**Ans:** in one hour

20. There are several chickens and rabbits in a cage (with no other types of animals). There are 72 heads and 200 feet inside the cage. How many chickens are there, and how many rabbits?

**Ans:** 44 chickens and 28 rabbits

### **VERBAL SECTION (25 questions-25min)**

**Directions for Questions 1-5: Read the passage and answer the questions that follow on the basis of the information provided in the passage.**

Few areas of neuron behavioral research seemed more promising in the early sixties than that investigating the relationship between protein synthesis and learning. The conceptual framework for the research was derived directly from molecular biology, which had shown that genetic information is stored in nucleic acids and expressed in proteins why not acquired information as well.

The first step towards establishing a connection between protein synthesis and learning seemed to be to block memory (cause amnesia) by interrupting the production of proteins. We were fortunate in finding a non lethal dosage of puromycin that could, it first appeared, thoroughly inhibit brain protein synthesis as well as reliability produce amnesia.

Before the actual connection between protein synthesis and learning could be established however we began to have doubts about whether inhibition of protein synthesis was in fact the method by which puromycin produced amnesia. First, other drugs, glutamimides themselves potent protein synthesis inhibitors either failed to cause amnesia in some situations where it could easily be induced by puromycin or produced an amnesia with a different time course from that of puromycin. Second, puromycin was found to inhibit protein synthesis by breaking certain amino acid chain, and the resulting fragments were suspected of being the actual cause of amnesia in some cases. Third, puromycin was reported to cause abnormalities in the brain, including seizures. Thus, not only were decreased protein synthesis and amnesia dissociated, but alternative mechanism for the amnestic action of puromycin were readily suggested.

So, puromycin turned out to be a disappointment. It came to be regarded as a poor agent for amnesia studies, although, of course, it was poor only in the context of our original paradigm of protein synthesis inhibition. In our frustration, our initial response was simply to change drugs rather than our conceptual orientation. After many such disappointments, however, it now appears unlikely, that we will make a firm connection between protein synthesis and learning merely by pursuing the approaches of the past our experience with drugs has shown that all the amnestic agents, often interfere with memory in ways that seem unrelated to their inhibition of protein synthesis. More importantly, the notion that the interruption or intensification of protein production in the brain can be related in cause and affect fashion to learning non seems simplistic and unproductive. Remove the battery from a car and the car will not go. Drive the car a long distance at high speed and the battery will become more highly charged. Neither of these facts proves that the battery power the car, only knowledge of the overall automotive system will reveal its mechanism of locomotion and the role of the battery within the system.

1. The primary purpose of the passage is to show that extensive experimentation has

1. Not supported the hypothesis that learning is directly dependent on protein synthesis
2. Cast doubt on the value of puromycin in the newer behavioral study of learning
3. Revealed the importance of amnesia in the neuron behavioral study of learning
4. Demonstrated the importance of amino acid fragmentation in the induction of amnesia.
5. Not yet demonstrated the applicability of molecular biology to behavioral research.

**Ans : A**

**2. According to the passage, neuron behaviorists initially based their belief that protein synthesis was related to learning on which of the following?**

1. Specific research into learning on which of the following
2. Traditional theories about learning
3. Historic experiments on the effects puromycin
4. Previous discoveries in molecular biology
5. New technique in protein synthesis.

**Ans : D**

**3. This passage was most likely excerpted from**

1. A book review in a leading journal devoted to genetic research.
2. A diary kept by a practicing neuron behavioral research
3. An article summarizing a series of scientific investigations in neuron behavioral research.
4. A news paper article on recent advances in the biochemistry of learning
5. A technical article on experimental techniques in the field of molecular biology.

**Ans : C**

4. It can be inferred from the passage that after puromycin was perceived to be a disappointment, researchers did which of the following?

1. They continued to experiment with puromycin until a neuron anatomical framework was developed.
2. They continued to experiment with puromycin, but also tried other protein synthesis inhibitors
3. They ceased to experiment with puromycin and shifted to other promising protein synthesis inhibitors.
4. They ceased to experiment with puromycin and reexamined through experiments the relationship between genetic information and acquired information.
5. They continued to experiment with puromycin, but applied their results to other facts of memory research.

**Ans : C**

5. In the example of the car the battery is meant to represent which of the following elements in the neuron behavioral research program?

1. glutarimides
2. acquired information
3. puromycin
4. amnesia
5. protein synthesis

**Directions for Questions 6-10:** Read the passage and answer the questions that follow on the basis of the information provided in the passage.

MARK HUGHES is a master of the fine art of survival. His Los Angeles-based Herbalife International

Inc. is a pyramid outfit that peddles weight-loss and nutrition concoctions of dubious value. Bad publicity and regulatory crackdowns hurt his U.S. business in the late 1980s. But Hughes, 41, continues to enjoy a luxurious lifestyle in a \$20 million Beverly Hills mansion. He has been sharing the pad and a yacht with his third wife, a former Miss Petite U.S.A. He can finance this lavish lifestyle just on his salary and bonus, which last year came to \$7.3 million.

He survived his troubles in the U.S. by moving overseas, where regulators are less zealous and consumers even more naive, at least initially. Today 77% of Herbalife retail sales derive from overseas. Its new prowling grounds: Asia and Russia. Last year Herbalife's net earnings doubled, to \$45 million, on net sales of \$632 million. Based on Herbalife's Nasdaq-traded stock, the company has a market capitalization of \$790 million, making Hughes 58% worth \$454 million.

There's a worm, though, in Hughes apple. Foreigners aren't stupid. In the end they know when they've been had. In France, for instance, retail sales rose to \$97 million by 1993 and then plunged to \$12 million last year. In Germany sales hit \$159 million in 1994 and have since dropped to \$54 million.

Perhaps aware that the world may not provide an infinite supply of suckers, Hughes wanted to unload some of his shares. But in March, after Herbalife's stock collapsed, he put off a plan to dump about a third of his holdings on the public.

Contributing to Hughes' woes, Herbalife's chief counsel and legal attack dog, David Addis, quit in January. Before packing up, he reportedly bellowed at Hughes, "I can't protect you anymore." Addis, who says he wants to spend more time with his family, chuckles and claims attorney-client privilege.

Trouble on the home front, too. On a recent conference call with distributors, Hughes revealed he's divorcing his wife, Suzan, whose beaming and perky image adorns much of Herbalife's literature.

Meanwhile, in a lawsuit that's been quietly moving through Arizona's Superior Court, former Herbalife distributor Daniel Fallow of Sandpoint, Idaho charges that Herbalife arbitrarily withholds payment to distributors and marks up its products over seven times the cost of manufacturing. Fallow also claims Hughes wanted to use the Russian mafia to gain entry to that nation's market.

Fallow himself is no angel, but his lawsuit, which was posted on the Internet, brought out other complaints. Randy Cox of Lewiston, Idaho says Herbalife "destroyed my business" after he and his wife complained to the company that they were being cheated out of their money by higher-ups in the pyramid organization.

Will Hughes survive again? Don't count on it this time.

**6. Herbalife Inc is based in:**

1. Los Angeles
2. Columbus
3. New York
4. Austin

**Ans : A**

**7. Daniel Fallow:**

1. Was a former attorney for Hughes
2. Was a former distributor of Herbalife

3. Co-founded Herbalife
4. Ran Herbalife's German unit

**Ans : B**

**8.** The complaint of Randy Cox of Lewiston, Idaho, against Herbalife was:

1. The company did not pay them their dues
2. The products supplied by Hughes were inferior
3. Their higher-ups in the pyramid cheated them
4. Hughes had connections with the Russian mafia

**Ans : C**

**9.** In the year in which Hughes' salary and bonuses came to US\$ 7.3 million, what was the retail sales for Herbalife in France?

1. \$12 million
2. \$159 million
3. \$54 million
4. \$97 million

**Ans :A**

**10.** At the time when this article was written, if Herbalife had had a market capitalisation of \$ 1 billion, what would have been Hughes' share?

- A. \$420 million
- B. \$580 million
- C. \$125 million
- D. \$500 million

**Ans : B**

**Directions for Questions 11-15:**Read each sentence to find if there is any grammatical error in it. If there is any error, it will be only one part of the sentence. The number or alphabet of that part is your answer.( Disregard punctuation errors if any)

**11.** Modern film techniques / are far superior / than that / employed in the past /

**12.** I believe / that respect / is more preferable than / money.

**13.** The principals of equal justice / for all is one of / the corner stones of our / democratic way of life. / no error

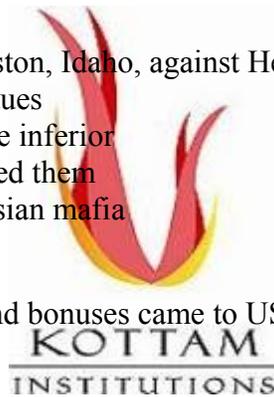
**14.** In order to save patrol, / motorists must have to/ be very cautious/ while driving along the highways/ no error

**15. Not one of the children / has ever sang/ on any occasion / in public before/ no error**

**Directions for Questions 16-20:** In each of the following questions, some sentence are given which are on the same theme. decide which sentence is the most preferable with respect to grammar; meaning and usage, suitable for formal writing in English. Find the correct sentence.

**16. A) He came in too quickly to avoid waking his father**

**B) He entered in quickly. so as not wake his father.**



- C) Having not to wake his father, he came in quickly  
D) He came in very quickly so that he might avoid waking his father.

Ans : D

17 A) The teacher asked the student with a frown on his face, to leave the room B) The teacher asked with a frown on his face the student to leave the room

Ans: C

18. A) Common people are rather impressed by the style of a speech than by its substance

- B) Common people are impressed rather by the style of a speech than by its substance  
C) Rather common people are impressed by the style of a speech than by its substance  
D) Common people are impressed by the style of a speech than by its substance.

Ans: D

19. A) I have read such a lot about him that I am looking forward to seeing him very much

- B) I am reading such a lot about him that I will be looking forward to seeing him very much  
C) Having read such a lot about him that I will be looking forward to seeing him very much  
D) I had read such a lot about him that I am looking forward to seeing him very much.

Ans: A

20. A) By June next year, Ajay will be twenty years working in the office.

- B) Being twenty years completed, Ajay will be working in this office till June next  
C) Till June next year, Ajay will work in the office for twenty years.  
D) Ajay will be working in this office upon completing twenty years by next June.

Ans : D

Directions for Questions 21-25: In each of the following questions, a paragraph or a sentence has been broken up into different parts. The parts have been scrambled and numbered as given below. Choose the correct order of these parts from the given alternatives.

21. 1) her 2) she 3) to 4) cancel 5) dental 6) appointment

- A) 2, 7, 3, 4, 1, 5, 6  
B) 2, 7, 3, 1, 4, 5, 6  
C) 1, 7, 3, 4, 5, 2, 6  
D) 2, 1, 3, 4, 7, 5, 6

Ans: A

22. 1) all 2) I 3) the 4) keep 5) sneezing 6) time

- A) 2, 4, 5, 3, 1, 6  
B) 2, 4, 6, 5, 3, 1

C) 1, 4, 5, 2, 3, 6

D) 2, 4, 5, 1, 3, 6

**Ans: D**

**23. 1) is 2) at 3) TV 4) film 5) midnight 6) a 7) on 8.) great 9) There**

A) 9, 1, 6, 8, 4, 7, 3, 5, 3

B) 9, 1, 6, 8, 4, 7, 3, 2, 5

C) 9, 6, 1, 8, 4, 7, 3, 2, 5

D) 9, 1, 6, 8, 7, 4, 3, 2, 5

**Ans: B**

**24. 1) fifty 2) I 3)a 4)cheque 5) for 6)pounds 7)him 8)wrote**

A) 2, 8, 7, 5, 4, 3, 1, 6

B) 2, 8, 7, 3, 4, 1, 5, 6

C) 2, 8, 7, 3, 4, 5, 1, 6

D) 2, 8, 7, 3, 4, 6, 5, 1

**Ans: C**

**25. 1) quickly 2) hills 3) weather 4) change 5) the 6)can 7)the 8)in 9) very**

A) 7, 3, 8, 5, 2, 6, 4, 9, 1

B) 1, 7, 3, 8, 5, 2, 6, 4, 9,

C) 1, 3, 8, 5, 2, 6, 4, 9, 7

D) 7, 3, 5, 8 2, 6, 4, 9, 1

**Ans: A**

