

# ADITI TECHNOLOGIES Placement Papers

## SECTION 1-LOGICAL REASONING

Each of the following series of statements is followed by four sets. Identify the set that is logically consistent.

EXAMPLE

1.

- (a) The gap between the average starting salaries of teachers and those of other professionals has shrunk in recent years.
- (b) The average age of first year teachers is same as it was in 1975.
- (c) Starting teachers are no longer underpaid.
- (d) The extent of a persons formal education is a measure by which to determine his level of salary.
- (e) Over the last few years, the average starting salaries of other professionals have increased by 20%

(a)ebd (b)bad (c)abc (d)aec

Answer is d; the statement a,e,c are logically sequenced.

Questions :

1.

- (a) Japan now produces more semiconductors, than US.
- (b) Semiconductors are one of the fastest growing industry segments.
- (c) A decade ago Japan was producing 24% and the US was producing 22% of the worlds semiconductors, respectively.
- (d) 10 years ago Japan ranked third in semiconductor production.
- (e) During the last 10 years Japans production of semiconductors has increased by 500% while that of the us has increased by 200%

(a)abd (b)cea (c) edc (d) bcd

2.

- (a) Coding program 1 (b) Writing specifications for program 1
- (c) Integrating program 1 with other programs (d) Testing program 1
- (e) Collecting cheque from the client of the program

(a)edcba (b)abcde (c)badce (d) abdce

3.

- (a) Bob is older than Dinku and Ismer (b) Rahul is oldet than Dinku
- (c) Rahul is younger than Bob (d) Rahul is older than Ismer (e) Dinku is older than Ismer

(a)edb (b)bcd (c)dab (d)abc

4.

- (a) Defining the data type of the variable (b) Using the variable (c) Declaring the variable
- (d) Initializing the variable (e) Remove the variable from the memory

(a)cadbe (b)abcde (c)cdb (d)acdbe

5.

- (a) In the last six months the number of robberies at gun point in the city has dropped by 18%
  - (b) Guns are necessary protection against robbers
  - (c) Strict gun control causes a decrease in violent crime
  - (d) Most crimes are committed with guns and knives
  - (e) Six months ago this city's council passed a gun control law
- (a)bda (b) acb (c) ebc (d) eac

6.

- (a) All missiles follow a fixed trajectory
- (b) The boomerang requires a high degree of skill
- (c) A boomerang is a missile
- (d) The boomerang is used by Australian aborigines to hunt
- (e) A boomerang normally has an elliptical flight path

(a) adc (b)aec (c) cba (d) ebd

7.

- (a) Saving the source file
  - (b) Compiler execution
  - (c) Pre-processor execution
  - (d) Bug fixing
  - (e) Reading the error file
- (a)eabcd (b)acbed (c)abced (d)cbeda

8.

- (a) But if powers that be, extended any, how will be the first one to take might claim
  - (b) I don't believe in seeking special privileges because I'm a woman
  - (c) Let me explain this in context of what happened the other
- (a)bac (b)acb (c) bca (d) abc

9.

- (a) A long search produce a comprehensive list of 203 manufacturing firms
  - (b) The number of workers employed by the firms in the area ranged from a dozen to approximately 3500
  - (c) Those concerned with mining and quarrying, construction ,transport, trade and commerce were excluded
  - (d) The investigation was confined to manufacturing firms in the area
- (a)bcda (b) bcab (c)abcd (d)dabc

10.

- (a) The quickly came back with pots laden with water
  - (b) The water gurgled out and the dying embers hissed and send up little curls of vapour
  - (c) The poured it on the glowing bed of charcoal
  - (d) The men jumped up and rushed to the river
- (a)acdb (b)bacb (c)dabc (d)dcba

## SECTION 2-DATA SUFFICIENCY

Each item has a question followed by two statements :

Mark a: If the question can be answered with the help of statement "1" alone

Mark b: If the question can be answered with the help of statement "2" alone

Mark c: If the question can be answered with the help of both the statements but not with the help of either statement by itself

Mark d: If the question cannot be answered even with the help of both the given statements

Example:

1. Does winking improve eye sight?

1) During the process of winking the focal power of eyes improves

2) Experiments have shown that eye exercise lead to an improvement in eye sight

Answer: d because neither 1 or 2 is adequate.

Questions :

11. Each floor of a 3 storeyed building is occupied and a total of 15 people live in the building. How many live on the first floor?

1) The no. of people living in the first floor is an odd number

2) The no. of people living on the first floor double the number living on the second floor

12. Program 1 can be implemented

1) Program 1 is tested and error free

2) The implementation site is ready

13. The sum of digits of a 5 digit no. is 10. The digit in the ten thousandth place is cube of that of units place. what is the number.

1) The digits in the thousandth, hundredth and tenth place are equal

2) The digit in the units and tenth place are not equal

14. If I deposit Rs.1000 in the bank now and withdraw the amount only at the end of the year how much will I get?

1) The rate of compound interest is 12% per year

2) The interest is deposited in the account at the end of every six months

15. Variable "X" is an address variable.

1) The value of variable "X" is "adbcf"

2) Program has a statement  $X = \&Y$

16. Is white color the best reflector of light?

1) The lower a color's reflection index the better its power of reflection

2) White has a reflection index of 0.28

17. Does Mehta work in an advertising agency?

- 1) Mehta begins work at 9 am in the morning and works till 9 in the night
- 2) Mehta is a copywriter

18. Is it true that Maggi Noodles success was largely due to its ability to satisfy a latent consumer need?

- 1) Before the entry of Maggi Noodles, Others did not have access to a food item which was convenient to prepare and could be consumed between meals.
- 2) Maggi Noodles was an instant hit with ladies who had children in the range of 10 to 12 years

19. Sachin wrote Program 1

- 1) It is found in the directory c:\user\sachin
- 2) Sachin tested Program 1

20. Are all Argots also Knicks?

- 1) All Argots are Drones
- 2) All Drones are Knicks

21. Does classical music aid plant growth?

- 1) Music aids in the development of sugar in plants.
- 2) In an experiment conducted, it was observed that plants exposed to classical music grew by 5cm more than plants not exposed to classical music in the same period.

22. Are cheques the safest method of making a payment.

- 1) Cheques are more convenient than cash in making and resolving payments.
- 2) Payment by cheques eliminate the risk involved in handling cash.

23. Networking is working fine.

- 1) Computer A is able to talk to Computer B
- 2) Both Computer A & B are Pentium Machines.

24. Is it true that smiling is easier than frowning?

- 1) Smiling requires the movement of 14 facial muscles while frowning requires the movement of 24 facial muscles.
- 2) Moving every facial muscles requires the same amount of effort.

25. Is it true that the Carpenter lives on the first floor.?

- 1) the Barber lives two floors above the black smith who in turn stays one floor above the carpenter.
- 2) the blacksmith lives two floors above the weaver who lives one floor below the carpenter in a three storeyed building.

### SECTION 3 - ANALYTICAL

Questions 26-29 are based on the following:

At a formal dinner for 8, the host and the hostess are seated at opposite ends of a rectangular table, with 3 persons along each side. Each man must be seated next to at least to 1 woman, and vice versa. Alan is opposite to Diana, who is not the hostess. George has a woman on his right and is opposite to a woman. Helga is at the hostess's right, next to Frank. One person is seated between Belinda and Carol.

26. The 8th person present, Eric must be

- (a) the host
- (b) seated to Diana's right
- (c) seated opposite to Carol
- (d) a, b and c

27. If each person is placed directly opposite to his or her spouse, which of the following pairs must be married.

- a) George and Helga
- b) Belinda and Frank
- (c) Carol and Frank
- (d) George and Belinda

28. Which person is not seated next to a person of the same sex.?

- (a) Alan (b) Belinda (c) Carol (d) Diana

29. George is bothered by the cigarette smoke of his neighbor and exchanges seats with the person 4 places to his left. Which of the following must be true following the exchange?

- (a) No one is seated between two persons of the opposite sex.
- (b) one side of the table consists entirely of persons of the same sex.
- (c) Either the host or hostess has changed seats
- (d) A only (b) C only (c) A and B (d) B and C

Questions 30 - 33 are based on the following:

The hotel Miramar has two wings, the east wing and the west wing. Some east wing rooms but not all, have an ocean view. All west wing rooms have a harbor view. The charge for all rooms is identical except for the following.

There is an extra charge for all harbor view rooms on or above third floor. There is an extra charge for all ocean view rooms except those without balcony. Some harbor view rooms on the first two floors and some east wing rooms without ocean view have kitchen facilities for which there is an extra charge. Only the ocean view and harbor view rooms have balconies.

30. A guest may avoid an extra charge by requesting

- (a) A west wing room on one of the first two floors.
- (b) A west wing room on the fourth floor without balcony.
- (c) An East wing room without balcony. (d) Any room without kitchen.

31. Which of the following must be true if all conditions are as stated?

- (a) All rooms above the third floor involves extra charges.
- (b) No room without an ocean or harbor view or kitchen facilities involves extra charge.

- (c) There is no extra charge for an east wing room without ocean view.
- (d) There is no extra charge for any room without Kitchen facilities.

32. which of the following must be false if all conditions are as stated?

- (a) some ocean viewing rooms do not involve an extra charge
- (b) all rooms with kitchen facilities involve an extra charge
- (c) some west viewing rooms above the second floor do not involve an extra charge
- (d) some harbor viewing rooms do not involve an extra charge

33. Which of the following can not be determined on the basis of the information given?

- (a) whether there are any rooms without a balcony for which extra charge is imposed
- (b) whether any room without at kitchen or a view involves an extra charge
- (c) whether two extra charges are imposed for any room
- (d) none of the above

Questions 34 to 37 are based on the following:

Four cards of different suits are dealt one apiece to A, B, C and D.

B says: Mine is not a club. A says: Mine is not a spade.

D says: Mine is not a diamond. C says: Mine is not a spade.

A says: Mine is not a heart.

34. A held

- (a) heart (b) clubs (c) diamonds (d) spade

35. B held

- (a) heart (b) clubs (c) diamonds (d) spade

36. C held

- (a) heart (b) clubs (c) diamonds (d) spade

37. D held

- (a) heart (b) clubs (c) diamonds (d) spade

Questions 38 to 40 are based on the following:

In a magical temple there are 3 doorways each leading to the interior of the temple. Every doorway has an idol just inside. The magical powers of the temple doubles the flowers a devotee carries every time he/she passes under a doorway. Each devotee has to pass on straight through the doorway and cannot retrace his steps till he comes to the innermost idol.

38. Ram carries X flowers at each idol he places an identical number of flowers Y. He returns from the temple without a single flower. X was most probably

- (a) 2 (b) 5 (c) 6 (d) 7

39. In the situation above Y was most probably

- (a) 8 (b) 5 (c) 6 (d) 7

40. If Sita took 8 flowers to the temple and offered 4 flowers each to the first two idols then by

the time she faces the third idol she has

(a)40 flowers (b)36 flowers (c)52 flowers (d) 56 flowers

#### SECTION 4 - COMPUTATIONAL

41. 2 passengers have together 560 kgs of luggage and are charged for the excess above the weight allowed at 10\$ and 26\$. If all the luggage had belonged to one of them he would have to pay 46\$. The amount of luggage each passenger is allowed without any charge is

(a)100 kg (b)150 kg (c)160 kg (d)Insufficient data

42. 6 pigs cost the same as 9 sheep. 27 sheep cost the same as 30 goats. 50 goats cost the same as 3 elephants. If two elephants cost \$4800, then the cost of one pig in dollar is

(a)120 (b)240 (c)105 (d)250

43. A wholesaler allows a discount of 20 % on the list price to the retailer. The retailer sells at 5% below the list price. If the customer pays Rs.19 for an article what profit is made by the retailer on it?

(a)Rs.2 (b)Rs.3 (c)Rs.4 (d)Rs.4.5

44. A circular metal plate of even thickness has 12 holes of radius 1 cm drilled into it. As a result the plate lost  $\frac{1}{6}$ th its original weight. The radius of the circular plate is

(a) $16\sqrt{2}$  (b) $8\sqrt{2}$  (c) $32\sqrt{2}$  (d) $\sqrt{72}$

45. 3 machines a,b,c can be used to produce a product. Machine a will take 60 hours to produce a million units. Machine b is twice as fast as machine a. Machine c takes the same amount of time as machine a and b taken together. How much time will be required to produce a million units if all the three machines are used simultaneously?

(a)12 hours (b)10 hours (c)8 hours