

HALL TICKET NO:



## ST. ANTHONY'S COLLEGE, SHILLONG

ENTRANCE TEST FOR ADMISSION INTO

### DOEACC 'O' Level 2006

DATE : 16 May 2006  
TIME : 2.00 pm  
DURATION : 2 hours

#### INSTRUCTIONS

- ⇒ There are 35 questions in this test, divided into two parts. Part A deals with computational ability, while Part B tests logical reasoning.
- ⇒ **Write the steps to arrive at the correct answer to these questions.** Questions 1 to 10 carry 1 mark each, and questions 11 to 35 carry 4 marks each.
- ⇒ The candidate is to answer as many questions as possible in the allotted time.
- ⇒ The required rough work may be done on the last sheet that is provided for the purpose.
- ⇒ Make sure that you have entered the hall ticket number properly in the place provided in space provided above.
- ⇒ Please preserve your hall tickets. They will be required at the time of admission.
- ⇒ The hall ticket numbers of those shortlisted for admission on the basis of the entrance test will be published on the college notice boards and on the college web site on 18 May, 2006.

Signature of the Invigilator .....

## Part-A: Numerical Ability

1. Find the sum of the following series  $(\frac{1}{2} + \frac{1}{4} + \frac{1}{4}) + (\frac{1}{2} + \frac{1}{4} + \frac{1}{4}) + (\frac{1}{2} + \frac{1}{4} + \frac{1}{4}) + (\frac{1}{2} + \frac{1}{4} + \frac{1}{4})$
2. Five years ago the average age of a family of 3 members was 27 years. A child has been born, due to which the average age of the family is 25 years today. What is the present age of the child?
3. A man left one half of his property to his wife, one-third to his son and the remainder to his daughter. If the daughter's share was worth Rs. 45000, how much money did the man leave?
4. Each passenger in a transport bus contributed as many rupees as the number of passengers in the bus towards accident relief fund. The conductor contributed Rs. 49 to make the total collection of Rs. 625. How many passengers were there in the bus?
5. The sum of a positive number and its reciprocal is thrice the difference of the number and its reciprocal. What is the number?



## Part B- Logical reasoning

**Directions (Questions 11-14):** Read the following information carefully to answer these questions:

(A) Six flats on a floor in two rows facing North and South are allotted to P,Q,R,S,T and U.

(B) Q gets a North-facing flat and is not next to S.

(C) S and U get diagonally opposite flats.

(D) R, next to U, gets a South-facing flat and T gets a north-facing flat.

11. Who are the people allotted South-facing flats?

12. Whose flat is between Q and S?

13. If the flats of T and P are interchanged, then whose flat will be next to that of U?

14. Whose flat is leftmost among the north facing flats?

**Directions (Questions-15-16):** The government is arranging an expedition to an underdeveloped area of the world and has to select a four-member team. Two of the members must be engineers. The following professionals applied for the expedition.

A is an architect.

E is an engineer.

B is a biologist.

F is a field engineer.

C is a chemist.

G is a general engineer.

D is a doctor.

The architect and the engineer will not go together.

The doctor and the general engineer will not go together.

The biologist and the architect will not go together.

The biologist and the field engineer will not go together.

15. If A is selected, then who are the other people to be included in the expedition team?

16. If the doctor is selected, then who are the other people to be included in the expedition team?

**Directions (Questions 17-20):** A boy is asked to put in a basket one mango when ordered 'One', one orange when ordered 'Two', one apple when ordered 'Three', and is asked to take out from the basket both one mango and one orange when ordered 'Four'. The sequence of the orders is :

1 2 3 3 2 1 4 2 3 1 4 2 2 3 3 1 4 1 1 3 2 3 4.

17. How many oranges were there in the basket at the end of above sequence?

18. What was the total number of fruits in the basket at the end of the above order sequence?

19. How many mangoes were in the basket at the end of the above order sequence?

20. How many apples were in the basket at the end of the above order sequence?

**Directions (Questions 21-23):** A bus has exactly six stops on its route, numbered 1 to 6. The bus travels in the order of the bus stops, and after the bus leaves stop six, the bus turns and returns to stop one and repeats the cycle. The stops are at six buildings that are marked as L, M, N, O, P, and Q. P is the third stop. M is the sixth stop. The stop O is the stop immediately before Q. N is the stop immediately before L.

21. In case N is the fourth stop, which is the stop immediately before P?

22. In case L is the second stop, which is the stop immediately before M?

23. In case a passenger gets on the bus at O, rides past one of the stops, and gets off at P, which is stop one?

24. A boy was misdirected from his way while returning to his home from school. In order to reach his home he first moved 3 kms to the south and then turned to his left and moved 2 kms straight on the road leading to the east. From there he moved to his left and walked 3 kms. After this he again turned to his left and moved 1 km. Finally he reached his home. The home of the boy was in which direction from his school?

25. How many 8's are there in the following number series which are exactly divisible by its immediate preceding number and also divisible by its immediately succeeding number?

8 2 4 5 1 7 2 8 4 8 4 2 2 8 2 6 9 8 4 5 4 8 3 2 8 4 3 1 8 3

26. Gaytri remembers that the birthday of her sister Anuradha falls after 5th January but before 8th January, while her father remembers that Anuradha's birthday falls before the 10th of January and after 6th January. On what day of January does the birthday of Anuradha fall?

27. If MASTER is coded as RETMAS then how is CARROT coded?

28. If TOUR is written in a certain code as 1234, CLEAR as 56784 and SPARE as 90847, what will be the fifth digit for SCULPTURE in the same code?

**Directions (Questions 29-32):** A is the father of C. But C is not his son. E is the daughter of C. F is the spouse of A. B is the brother of C. D is the son of B. G is the spouse of B. H is the father of G.

29. Who is the son-in-law of H?

30. Who is the granddaughter of A?

31. Who is the common grandchild of both F and H?

32. How is A related to G?

**Directions (Questions 33-35):** Following are the criteria for admitting a student in the first year engineering course in a college. The student must-

(a) Have passed XII standard examination in science with at least 80% marks.

(b) Not to be more than 20 years old as on 1.8.94

(c) Have secured at least 90 marks in the entrance test out of a total of 150.

(d) Be able to pay Rs. 15,000 as tuition fees for the first semester as Rs. 5000 admission charges at the time of taking admission.

In the case of the candidate who satisfies all other criteria except -

(e) (d) but can pay at least 60% of the stipulated fees, the case may be referred to the Admission Committee.

(f) (e) but has secured more than 95% marks in the XII standard examination, the case may be referred to Chairman-Admissions.

Read the above information carefully and give your decision for the cases given below (To be admitted / NOT to be admitted / to be referred to Admission Committee / to be referred to Chairman-Admissions), giving reasons for your answer. You are not to assume beyond the facts supplied; if the data is inadequate, your decision will be "NOT to be admitted". The cases are given to you as on 1.8.1994.

33. Salil Malhotra was born on 25th September 1975. He has secured 85% and 65% marks in the XII standard science stream and entrance examinations respectively. He can pay the required tuition and admission fees.

34. Jason Marbaniang has secured 95% marks in the XII standard science stream examination and 70% marks in the entrance examination. He can pay only 65% of the required tuition and admission fees.

35. Reema Sen was born on 20th July 1974. She has secured 85% and 75% marks in the XII standard science and entrance examination respectively. She can pay only 60% of the required tuition and admission fees.

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**ROUGH WORK**

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