ST. ANTHONY'S COLLEGE, SHILLONG

ENTRANCE TEST FOR ADMISSION INTO

Post Graduate Diploma in Computer Applications
2006

DATE	:	**10 June 2006**
TIME	:	**1:00 pm**
DURATION	:	**2 hours**

INSTRUCTIONS

⇨ There are 35 questions in this test.

⇨ **Write the steps to arrive at the correct answer to these questions. Only the answer is not enough.** Each question carries 4 marks.

⇨ The candidate is to answer as many questions as possible in the alotted time.

⇨ The required rough work may be done on the space provided at the bottom of each page.

⇨ Make sure that you have entered the hall ticket number properly in the place provided in the answer sheet.

⇨ 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 12 June, 2006. The final admission will have to be completed by 13 June, 2006.

1. A candidate got 20% of the total marks and failed by 18 marks. Another candidate who got 32% of the total marks got 42 marks more than the pass marks. What are the total marks and pass marks in the examination?

2. If 75% of a number is added to 75, the result is the number itself. What is the number?

3. Three numbers are in the ratio 4:5:6 and their average is 25. What is the largest number?

4. Which is the number that comes next in this sequence: 4,6,12,14,28,30…

5. The average mark of 48 students in a class is 45. The average mark of the boys in the class is 40 and the average mark of the girls in the class is 50. What is the ratio between the number of boys and girls in the class?

Space For Rough Work

6. A label identifier for a computer program consists of one letter followed by 3 digits. If repetitions are allowed how many distinct label identifiers are possible?

7. A person borrowed Rs. 500 at the rate of 5 % per annum Simple Interest. What amount will he pay to clear the debt after 4 years?

8. At what time between 2 and 3 o'clock will the hands of a clock be together?

9. The length of a rectangle is twice its breadth. If its length is decreased by 5cm and breadth is increased by 5 cm, the area of the rectangle is increased by 75 sq.cm. What is the length of the rectangle?

10. If the diagonal of a square is doubled to make the diagonal of another square, how many fold of the area of the first square will the area of the new square be?
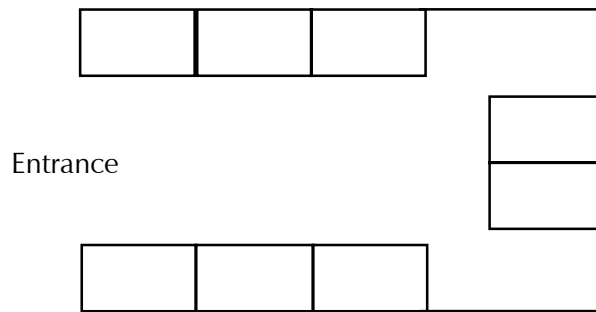

Space For Rough Work

11. If VICTORY is coded as YLFWRUB, how can SUCCESS be coded?

12. Ashok starts on his cycle from a certain point and cycle 6km towards south to reach a part which is a square field of perimeter 20 km. Ashok decides to take a clockwise round of the park but after covering three sides of the park he meets Rahul in the corner of the park. He stops to chat with him. How far is Ashok from the starting point and in which direction?

Directions for Question 13 and 14: *A construction company has to allot 8 shops in their commercial complex among 8 highest bidders A, B, C, D, E, F, G and H, keeping in view the following:*

(a) *G and H are friends and want adjoining shops.*

(b) *A's shop is to the right of H but faces that of D.*

(c) *E's shop is the first shop at the right hand side of the entrance and facing G's.*

(d) *C does not mind facing the Entrance so long as his shop is far away from E's as possible.*

(e) *F wants any shop adjacent to C's as they are related.*

The layout plan of the shops is given in the following diagram.

Entrance

13. Whose shop faces that of B's?

14. Who get corner shops at the start of the entrance on each side?

A blacksmith has five iron articles A, B, C, D and E, each having a different weights.

(a) A weighs twice as much as B.

(b) B weighs four and half times as much as C.

(c) C weighs half as much as D.

(d) D weighs half as much as E.

(e) E weighs less than A but more than C.

15. Which of the articles is the lightest in weight?

16. E is lighter in weight than which of the other two articles?

17. E is heavier than which of the other two articles?

18. Which article is the heaviest in weight?

Space For Rough Work

Directions for questions 19 to 22: *Swetha, Swarna, Sneha and Soumya are four sisters who have an agreement that they share all snacks equally among themselves. One day, uncle Prem gave a box of cookies to Swetha. Since the other sisters were not around Swetha divided the cookies into four equal parts ate her share and put the rest into the box. As she was closing the box, Swarna came in, she took all the cookies from the box and divided them into four equal parts. Swetha and Swarna ate one part each and put the rest into the box. Just then, Sneha walked in. She took all the cookies from the box, divided them into four equal parts. The three of them ate their respective shares and put the rest into the box. Later when Soumya came, she divided all the cookies into four equal parts and all four sisters ate their respective shares. In total Soumya ate 3 cookies.*

19. How many total cookies did Sneha eat?

20. How many total cookies did Swarna eat?

21. How many cookies did Swetha eat?

22. How many cookies did Uncle Prem give to Swetha?

23. In a line of boys, Rajan is on 10th position from right and Suraj is on 10th position from left. When they both interchange their positions Suraj becomes 27th from left. What will be the position of Rajan from right?

Space For Rough Work

Directions for Questions 24 to 26: On the shelf are placed six volumes of books side by side labelled A, B, C, D, E and F. Three volumes C, B and E have blue covers while the rest have red covers. D and F are new volumes while the rest are old volumes. A, C and D are law reports while the rest are gazetteers.

24. Which is the red covered new law report volume?

25. Which two volumes are old gazetteers and have blue covers?

26. Which volume is new, red covered and a gazetteer?

Directions for Questions 27 and 28 : *M, N, O, B and P are all different individuals. M is the daughter of N. N is the son of O. O is the father of P. B is the daughter of N.*

27. What is the relation between M and B?

28. What is the relation between M and O?

Space For Rough Work

29. X introduces Y saying, *"He is the husband of the grand daughter of the father of my father."* How is Y related to X?

30. A and B are brothers. C and D are sisters. A's son is D's brother. How is B related to C?

Directions for Questions 31 to 35: *Following are the criteria for admission to Post Graduate course in a management institute. A candidate must*

a)   *be a graduate from a recognised –university from any discipline with at least 50% marks*

b)   *not more than 24 years as in 1.4.92*

c)   *have secured at least 60% marks in the entrance examination*

d)   *be able to pay one time deposit of Rs 20,000 at the time of admission*

e)   *be able to pay tution fee of Rs 400 per month*

f)   *in the case of the candidate who does not fulfill only the condition at (d) above, he/she may be referred to Chairman Admissions*

g)   *in the case of a candidate who has secured 80% marks in the entrance examination but does not satisfy the condition at (a) above, he/she may be referred to the Director*

h)   *in the case of a candidate who has work experience of at least 10 years in supervisory cadre and does not satisfy the condition at (b) above, he/she may be admitted under sponsored quota*

Based on the above criteria and the information provided in each of the following questions, you have to decide which of the following courses of action should be taken. Remember you should not assume anything in the case of these candidates.

a)   *If the candidate is to be admitted*

b)   *If the candidate is not to be admitted*

c)   *If the candidate is to be referred to the Director*

d)   *If the candidate is to be referred to the Chairman Admissions*

e)   *If the candidate is to be admitted under sponsored quota*

f)   *If more information is required*

31. Jyoti was 31 years old as on 20.3.90. She worked in an organization as Supervisor for fifteen years. She has secured 55% and 65% marks in the degree and the entrance exam respectively. She can pay the stipulated one-time deposit and monthly tuition fees.

Space For Rough Work

32. Ashok secured 50 % marks in graduation and was born on 15th April 1970. He has secured 55% marks in the entrance examination. He can pay one time deposit of Rs 20,000 and monthly tuition fees of Rs 400.

33. Preeti has secured 60% marks in the entrance examination; she has obtained 70% marks in her graduation. She can pay one time deposit of Rs 20,000 and monthly tuition fees of Rs 400.

34. Geeta has secured 60% marks in her graduation. She has obtained 70% marks in the entrance examination. She has worked in an organization for 15 years in supervisory position. She can pay only Rs 15,000 as one time deposit and monthly tuition fees of Rs 400. She was 23 years old as on 15th November, 1991.

35. Prabodh is a commerce student with 65% marks. He has worked in supervisory cadre for twelve years. He has secured 80% marks in the entrance examination. He can pay the stipulated one time deposit and the monthly tuition fees. His date of birth was 20th October ,1970.

Space For Rough Work