Narsee Monjee Management Aptitude Test
December 10, 2006
Bird's Eye View

We are please to present you the detailed analysis of Narsee Monjee Management Aptitude Test (NMAT) held on 10th December 2006. 10th December is celebrated as Human Rights Day all over the world. It was really inhumane to students who wrote two consecutive tests that Sunday. When students arrived for the NMAT paper in the afternoon, some of them feeling tired and some having lost the zeal to even attempt the second entrance exam of NMAT. But within a few minutes of receiving the booklets, every student tried to pull their energies and set their mood right to attempt the best of their abilities.

This year AIMA conducted a slightly tougher paper as compared to last year's paper. Total number of questions, total time allotted, number of options, marking pattern were the same as last year's NMAT. There were total 200 questions to be solved within the time span of 150 minutes. Four answer choices were given for each question. It was declared that one mark will be provided for each correct answer marked and a negative marking of −0.25 for each incorrect answer. The only change that AIMA made in this year's paper was that the paper didn't have any sections. Although the questions from different areas were segregated. No sections, means there will be no sectional cut-offs. As per AIMA's tradition, there were 40 questions each on the topics like RC (Reading Comprehension) & EU (English Usage), Quantitative Aptitude (QA), DI (Data Interpretation) and DS (Data Sufficiency), LR (Logical Reasoning) and GK (General Knowledge). AIMA provided total thirteen sets (A-M) of the paper to made selections fair. A bird's eye view of the test is as follows.

Total Number of Questions	: 200
Total Time	: 150 minutes
The Marking Scheme	: One Mark for each correct answer and − 1/4 mark for wrong answers.
Number of Options	: 4
Sectional Break-up	: There were no sections. But the questions of same areas were altogether.
	EU & RC − 16 & 24 Q. − Moderate to tough
	QA − 40 Q. − Easy to Moderate
	DI & DS − 26 & 14 Q. − Moderate
	LR − 40 Q. − Mixture of Easy and Moderate
	GK − 40 Q. − Mixture of Easy and Moderate
Expected Cut-offs	: **90+**

Detailed Analysis

In the starting of the paper there were three RC passages of length 850, 900 and 350 words approximately. The theme of the passages were on Nuclear Fission/Enriching Uranium **,** Teaching and Transformation of North Indian Classical Dance **and** Air Pollution in South Asia **. The first passage was technical in nature and non-science background students found difficult to understand the passage. Rest two passages were understandable. Total sixteen questions were asked on these passages. A bird's eye view of the RC questions is as follows.**

RC Passage	Theme	Number of Questions	Length	Difficulty Level
I	Nuclear Fission/ Enriching Uranium	6	850 words	Tough
II	Teaching and Transformation of North Indian Classiscal Dance	6	900 words	Moderate
III	Air Polution in South Asia	4	350	Easy

Questions from EU were manageable. In all 24 questions were asked on topics like Para-Jumble **,** Sentence Correction **,** Synonyms **,** Antonyms **,** Fill in the blanks **and** Idioms **.**

Synonyms: There were four questions on the similar meaning of words like CLOUT, INTRINSIC, BAWDY and GARGANTUAN.

Para Jumble: There were four questions on four sentence (ABCD) type of para-jumbles.

Fill in the blanks: There were four questions on two blanks in a sentence.

Sentence Corrections: Six questions.

Idioms: There were two Idioms; (1) make a bee in for something and (2) make a bones, about something were given and correct meanings of both were asked.

Antonyms: There were four questions on the opposite meaning of words like SUPINE, PANDER, NONCHALANT and PITTANCE.

Topic	Number of Questions
Synonyms	4
Para Jumble	4
Fill In the Blanks	4
Sentence Correction	6
Meaning of Idioms	2
Antonyms	4

Again in QA questions there were some Physics (Force, Acceleration and Mass) **based questions, which was unusual. Rest of the questions from this area were from traditional Arithmetic and Modern Maths topics like, Averages, Percentages, Ratio & Proportion, Time, Speed & Distance, Pipes & Cisterns, Work & Time, Permutation & Combination, Probability and Set Theory. A bird's eye view of the questions from this area is as follows.**

Topic	Number of Questions	Topic	Number of Questions
Averages, Percentages, Ratio and Proportion	4	Logarithm	1
		Physics Based	3
Numbers	4	Time, Speed and Distance	7
Mensuration 2D + 3D	3 + 2	SI and CI	4
Stocks and Shares	1	Permutation and Combination + Probability	4 + 4
Work and Time/Pipes and Cisterns	2	Set Theory	1

We have produced some of the questions, which are as follows.

1. If A and B are two mutually exclusive events, then

    (1) $P(A) < P(\bar{B})$　　(2) $P(A) > P(\bar{B})$　　(3) $P(A) < P(B)$　　(4) None of these

2. A train whose weight is 16 metric tons, moves at the rate of 72 kmph. After applying brakes it stops in 500 meters. What is the force executed by brakes?

    (1) 600 N　　(2) 1600 N　　(3) 3200 N　　(4) 6400 N

3. Three groups A, B and C are contesting for position on the Board of Directors of a company. The probabilities of their winning are 0.5, 0.3 and 0.2 respectively. If the group A wins the probability of introducing a new position is 0.7 and the corresponding probabilities for group B and C are 0.6 and 0.5 respectively. The probability that a new position introduced is

    (1) 0.52　　(2) 0.63　　(3) 0.74　　(4) None of the above

4. If a boy can throw a cricket ball 100 m, then the time required for the ball to touch the ground is

5. A biased coin with probability p; 0<p<1 of head is tossed until a head appears for the first time. If the probability that the number of tosses required is even is 2/5, then p equals to
   (1) 1/5   (2) 2/3   (3) 2/5   (4) 3/5

6. A club consist of members whose age are in AP. The common difference between the ages is 3 months. If the youngest member is 7 years old and the sum of the ages of all the members is 250, then the number of members in the club is
   (1) 15   (2) 25   (3) 20   (4) 30

7. In a forest there are as many Santa Trees as there are Ajanta Trees. One-fourth of all the tree are old. One-half of the total trees are in flowering stage. Which of the following statement is true?
   (1) All Ajanta Trees are in flowering stage   (2) All Santa Trees are in flowering stage
   (3) Atleast half Ajanta Trees are old   (4) None of the above

Two sets on line graphs **, one on** pie + table **, one on** bar-line **, one on** table **and a set on** logic **were the representatives of the DI. On an average 4-5 were asked on these sets. In all 26 questions were on DI. Most of the questions were calculative. Questions on one line graph were analytical. One set of five questions were based on logic in this area. There were total fourteen questions on two statement and three statement DI.**

Topic	Number of Questions	Topic	Number of Questions
Line Graph	3	Line Graph	5
Table	6	Bar-Line Graph	3
Pie + Table	4	Data Sufficiency (two statements)	6
Logic	5	Data Sufficiency (three statements)	8

We have produced some of the questions, which are as follows.

DIRECTIONS: The following table shows the timings of two trains running between Bombay VT and Pune. Study the table carefully and answer the questions that follow.

Station	a/d	Train A	Train B
Bombay VT	d	7:50	12:50
Dadar	a	8:00	13:00
Dadar	d	8:02	13:02
Kalyan	a	8:50	13:40
Kalyan	d	8:55	13:42
Karjat	a	9:38	14:38
Karjat	d	9:40	14:40
Lonavala	a	10:32	15:30
Lonavala	d	10:35	15:32
Pune	a	10:55	17:10

1. The ratio of the total stoppage time of train A to that of train B is
   (1) 2:3   (2) 3:2   (3) 3.5:4   (4) 4:3

2. The ratio of the average speed of train A to train B is
   (1) 1.1   (2) 1.02   (3) 0.9   (4) 0.5

3. The highest difference between the speeds of the two trains is in the stretch of
   (1) Lonavala–Pune   (2) Karjat–Lonavala   (3) Bombay VT – Kalyan   (4) Bombay VT – Lonavala

4. If the speed of the train A is increased by 20% in all sections, keeping stoppage time unchanged, when will it reach pune if the departure time from Bombay VT is as before?

   (1) 11:17   (2) 11:04   (3) 11:08   (4) 11:22

5. The train B started from Pune for Bombay VT at the same time as train A's departure for Bombay VT. If the train B maintained the some speed in its reverse journey, at what time would train A and train B cross each other?

   (1) 9:50   (2) 10:10   (3) 9:47   (4) 9:57

DIRECTIONS : Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer as

   (1) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
   (2) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
   (3) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
   (4) if the data even in both statements I and II together are not sufficient to answer the question.

6. What is the original number?
   I.   Sum of two digits of a number is 10. The ratio between the two digits is 1:4.
   II. Product of two digits of a number is 16. Quotient of the two digits is 4.

7. In what time does a sum of money become four times on simple interest?
   I.   Rs.4000 amounts to Rs.4800 in two years on SI.
   II. The difference between compound interest and simple interest at the end of two years is Rs.40.

8. A train crosses a signal post in X seconds. What is the length of the train?
   I.   The train crosses a platform of 100 meters in Y seconds.
   II. The train is running at the speed of 80 km/hr.

9. Ram works for 5 days and leaves the job. Then in how many days will the remaining work be done by Vikas and Sarfaraz together?
   I.   Ram alone can do the entire work in 30 days and Sarfaraz is twice as efficient as Vikas.
   II. $33\frac{1}{3}$% of the work is done by Ram in 10 days whereas Vikas and Sarfaraz together can do $33\frac{1}{3}$% work in 2 days.

10. Ram's efficiency is 50% more than Shyam's. In how many days can Shayam alone do the whole work?
   I.   Ram and Shyam together can do the whole work in 12 days.
   II. Ram worked for 4 days and left the work and the remaining work was done by Shyam alone in 24 days.

11. By selling a product at 20% profit, how much profit was earned?
   I.   The difference between cost and selling price is Rs.40.
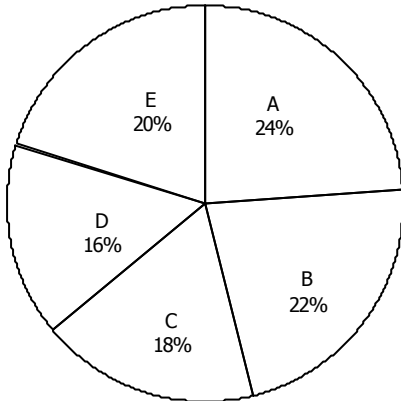   II. The selling price is 120 per cent of the cost price.

DIRECTIONS : The following questions are accompanied by three statements (A), (B) and (C). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.

12. How much marks did Mohan obtain in Hindi? To get the answer which of the following information is/are necessary/sufficient?
   A. The average marks obtained by Mohan in Hindi, Math and Biology are 72.
   B. The total marks obtained by him in Hindi and Math are 129.
   C. The total marks obtained by him in History and Biology are 143.
   (1) Only A and B together are sufficient   (2) Only A and C together are sufficient
   (3) Only A and B or C are sufficient   (4) All A, B and C even together are not sufficient

13. What is the ratio of the present ages of X and Y?
    A.   The ratio between the present ages of X and Y after 10 years is 11:15.

    B.   The present age of Y is $66\frac{2}{3}$% more than that of X.

    C.   The product of the present ages of X and Y is 240 years.
        (1) Any of them   (2) Only C and either A or B
        (3) Any two of them   (4) Only A and B together

14. A company has two kinds of employees - supervisors and clerks. The total monthly salary of the employees is Rs.2,85,000. What is the total number of employees in that company?
    A.   The ratio of the number of supervisors to that of clerks in the company is 4:5.
    B.   The total monthly salary of all the supervisors is 28% more than that of clerks.
    C.   20% of the clerks' monthly salary is Rs.25,000.
        (1) Only A and B together
        (2) Only A and C together
        (3) Only C
        (4) Question can't be answered even after using all the information

15. Rajnish buys 30 books and 65 pens. What money does he have to pay for this?
    A.   At a profit of 20% he sells all the objects for Rs.3,828.
    B.   The CP of one book and one pen is Rs.90.
    C.   The difference of sum and difference of buying price of one pen and one book is Rs.28.
        (1) Only A alone is sufficient   (2) B and C together are sufficient
        (3). A alone or B and C together are sufficient   (4) All together are necessary

16. Find the length of the side of a square.
    A.   Total cost of flooring the square is Rs.1,000 at the rate of Rs.40 per square meter.
    B.   A rectangle whose perimeter is 20 m is equal to the perimeter of the square.
    C.   A square of area equal to 50 sq. m can be made on the diagonal of the given square.
        (1) Any of them   (2) Any two of them   (3) Either B or C only   (4) Either A or B only

DIRECTIONS: Each question is followed by three statements. You have to study the question and all the three statements given and decide whether any information provided in the statements) is redundant and can be dispensed with while answering the questions.

17. An article is sold at 12% discount. Find the % gain.
    A.   If the article had been sold for Rs.120 less, there would have been no profit no loss.
    B.   Had the article been sold for Rs.30 more, the gain would have been 12.5%.
    C.   Cost price of the article is Rs.1,200.
        (1) Any two of them   (2) Only C   (3) Either A or B only   (4) Any of them

18. A person deposited two sums with a moneylender at 5% simple interest for 2 years and 3 years respectively. Find the two sums.
    A.   The two sums are equal.
    B.   Difference between the interests is Rs.250.
    C.   Had the sums been deposited at 5% compound interest, the difference would have been Rs.275.60.
        (1) A and either B or C   (2)   Only A
        (3) Only B   (4) Any one of them

19. Find the length of the platform.
    A.   A train X, which is running at the speed of 25 km/hr, takes 18 seconds to pass a platform.
    B.   The train X crosses a man who is walking at 5 km/hr in the opposite direction in 12 seconds.
    C.   The train X crosses a stationary pole in 14.4 seconds.
        (1) Any two of them   (2) Either B or C   (3) Any of them   (4) Only C

DIRECTIONS: Answer the questions on the basis of the information given below.

The following Pie Chart shows the expenditure of each of the companies A, B, C, D and E in year 2006.
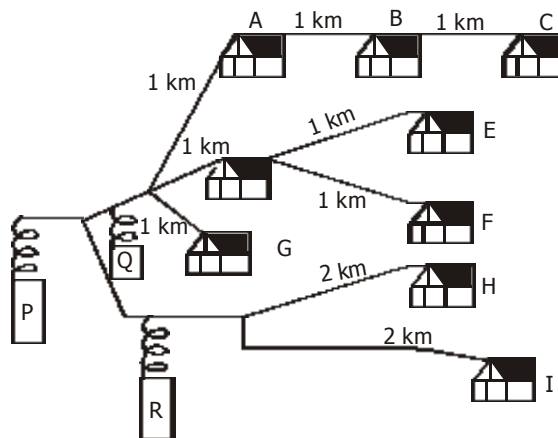
The following table shows the expenditure of each of the companies in its three items (Item I, Item II and Item III) and corresponding profit % in year 2005.

Total Expenditure = 9600 million

Name of the Company	Ratio of Expenditure	Corresponding Profit %		
	Item I : Item II : Item III	Item I	Item II	Item III
A	4:3:5	42%	48%	36%
B	3:4:4	44%	33%	27.50%
C	4:3:2	45%	36%	40.50%
D	5:7:4	48%	32%	40%
E	2:1:2	45%	35%	40%

20. Which company has the minimum profit in Item III?
    (1) A   (2) B   (3) D   (4) E

21. Which company has the minimum overall profit %?
    (1) A   (2) B   (3) C   (4) D

22. What is the income of company 'E'?
    (1) 2707.2 million   (2) 705.6 million   (3) 1770.2 million   (4) 2770.2 million

23. Which company has the maximum overall profit in all the three items together?
    (1) E   (2) B   (3) C   (4) A

DIRECTIONS: Power plant P produces certain amount of electricity, which it distributes equally to substations Q and R. They further distribute the obtained electricity equally to the different mini stations A, B, C, D, E, F, G, H and I. It is assumed that after the sub-stations, the wire loses 10% of the original electricity it is carrying for every kilometer, i.e., if 10 A is sent through a wire, after 1 km it will have 9 A and after 2 km it will have 8 A and so on.

Power Distribution from a Power Plant

Further it is known that every mini-station retains 50% of the electricity that it receives (after the losses) and passes on the remainder 50% of the electricity that it receives to the stations down the line.

24. If mini-station I is receiving 10 A, then how much is mini-station 'A' receiving?
    (1) 7.5 A   (2) 8.2 A   (3) 10.5 A   (4) None of these

25. Approximate how much should P produces that C can get 10A of currents
    (1) 230A   (2) 300A   (3) 330A   (4) 360A

26. Mini-station H is having a device which decrease the current losses on the transmission route directly connected to it to 75%. If H is receiving 34A, then how much is G receiving
    (1) 80A   (2) 26.66A   (3) 24A   (4) None of these

27. If F is receiving 9A, then how much is G receiving
    (1) 40A   (2) 45A   (3) 20A   (4) 25A

28. What percent of the current produced by P reaches R?
    (1) 37.5%   (2) 13.5%   (3) 15%   (4) None of these

The questions from areas like Syllogism **,** Statement-Argument **,** Essence of the passage **,** CR(Critical Reasoning) **,** Coding-Decoding **,** Input and Output data analysis, Degree of Truthness, Blood Relation **,** Data Arrangement **and** Series **were the part of LR area. Questions apart from** CR **,** Essence of the passage **and** Statement-Argument **were manageable. A bird's eye view of the area is as follows.**

Topic	Number of Questions	Topic	Number of Questions
Statement-Argument	5	Data Arrangement	5
Degree of Tuthness	4	Essence of the passage	2
Critical Reasoning	6	Coding-Decoding	4
Syllogism	5	Blood Relations	4
Input and Output	3	Series	2

1. HHF, IGH, JFK, ...?..., LDG

DIRECTIONS: For the following questions mark your answer as (1) if quantity given in right bracket is wrong; (2) if quantity given in left bracker is wrong; (3) if none of the quantity is wrong; (4) if both quantities are wrong.

2. 4, 6, 10, (12), 16, (14), 22

3. 4, 7, (9), 10, 13, 15, (16)

4. Pointing to a boy a woman said, "His father is the only son of a person who is the father in law of my mother". How was that boy related to the woman?
   (1) Nephew   (2) Brother-in-law   (3) Son   (4) Brother-in-law

5. A is the brother of B and C. D is the mother of B, E is the father of A. Which of the following statements is definitely not true?
   (1) D is the wife of E   (2) A is the daughter of D (3) B is the brother of C   (4) E is the father of C.

In GK, there were questions from traditional **as well as** Current **GK. Around twenty questions were very easy and a candidate who has a reasonable preparation for the test can attempt them with no doubt at all. There were questions on areas like Book-Authors, Inventor-Inventions, Indian Economics, International Organisations, Indian Politics, Sports, Indian Administration and Judicial. We have produced some of the questions, which are as follows.**

1. Which of the following does not get Bharat Ratna Posthmously? (Netaji Subhash Chandra Bose, Pandit Madan Mohan Malviya, Vallabh Bhai Patel)

2. Which of the following Book-Author pair is correct?(The Dark Side of Coridor–Sulman Rushdee, The Everest Hotel–Alan Sealy, Canvas of Life–Sheila Gujral, Pride of India–Persis Khambata)

3. Nilgiri, Himgiri and Beas are

4. What are official languages of UNO

5. Which of the following states is most benefited by the Konkan Railway?

6. ELISA test is used for (Malaria, AIDS, Typhoid, None of these)

7. Which of the following Inventor-Invention pair is correct?(Fountain Pen–Waterman, Safety Razor–Gillette, Safety Pin–Hunt)

8. Hargobind Khurana credited to

9. Zero hours refers to

10. Lotteries came under which list of state government?

11. Panchayati Raj system is

12. Prasar Bharti bill proposed

13. Five year's plan finalised by

14. Which of the following countries is not a member of G-8?

15. Which sector has maximum share in union budget 2006-07?

16. Which of the following taxes/duties levied by union government but appropriated by state government?

17. The character 'Guliver' is created by

18. Kalsa-Banduri project is related to which state

19. Which of the following book is written by Bill Gates?

20. The four countries of Indian Continental India, Pakistan, Bangladesh and Srilanka will be the host for the World Cup Cricket (2007, 2011, 2015, 2019)

21. The headquarters of National Statistical Commission is situated at

22. Garib Nawaz Express travels from ..... to ......

23. Which of the following bank is the recipient of the recent golden peacock award?

24. The miniature paintings of music called Raagmala belongs to

25. Which of the following is not a Financial Institution? (ICICI, IDBI, LIC, IIPA)

26. Which of the following is likely to benefited by inflation?(Creditors, Debtors, Government)

On an average, students could succeed to attempt 100-120 questions. Therefore the cut-offs for the Narsee Monjee Institute of Management Sciences, Mumbai should be **90+**.

Expected Cut-offs 90+