

# IIPS (MMS-5 years Integrated Course) Entrance Test = June 03, 2007 (Group D ANALYSIS)

We are glad to present you the detailed analysis of IIPS (MMS - 5 years) entrance test held on June 03, 2007 on various centres all over the country. The test comprised 75 questions divided into 5 sections viz. English Usage, Quantitative Aptitude, Data Interpretation, Logical Reasoning and General Knowledge to be solved in a time span of 90 minutes. There were 3 marks for each correct question and 1 mark was declared to be deducted for each wrong answer.

## Bird's eye view

- 1) This year the paper consisted of 75 questions in all .
- 2) There were five sections in all contributing to a grand total of 225 marks.
- 3) There was a marking scheme of 3 marks for every correct answer & a negative one mark for every wrong answer.
- 4) The section wise breakup of the 5 sections in the papers was as follows:-

Name of the section	Number of questions	Weightage
English	15	15 x 3 = 45
Quantitative aptitude	15	15 x 3 = 45
Data Interpretation	15	15 x 3 = 45
Logical Reasoning & general intelligence	15	15 x 3 = 45
General Awareness	15	15 x 3 = 45

- 5) The time limit for the entire test was 90 minutes with no sectional time limits .

Number of options : Five  
Overall Expected Cut-off : 170 + marks

# Section – I

## English

This section had 15 questions in all out of which 5 questions were based on antonyms , 5 on synonyms & five were of the fill in the blank type. The English section was having 15 questions out of which 5 were of the following type:

**DIRECTIONS:** Identify a word from ther options which is completely opposite in mening to the word given in the question.

1. **Private**

- (A) Public                      (B) Familiar                      (C) Crowd                      (D) Solicit  
(E) None of these.

The answer to this question was option (a).

2. **Humble**

- (A) Proud                      (B) Houghty                      (C) Shrewd                      (D) Paranoid  
(E) None of these.

The answer to this question was option (A)

There were 3 more questions like the above two.

The next 5 questions were of the following type:

6. Identify a word from the following words ,a word which is closest in meaning to the word highlighted below:-

**Adorable**

- (A) Lovable                      (B) Caring                      (C) Cute                      (D) Childish  
(E) None of these.

The answer to this question would be the option (A).

There were four more similar questions like the above question.

There were five more questions based on the use of phrases in the form of fill in the blanks type of questions. as below:

11. The policies implemented by the government were “flat & Square”.What does flat & square mean over here.

- (A) Arrogant                      (B) Fair &Ttransparent                      (C) Dictatorial                      (D) Healthy  
(E) None of these

The answer to the above question would be the option (B).

Similarly, there were two more phrases.

## Section – II

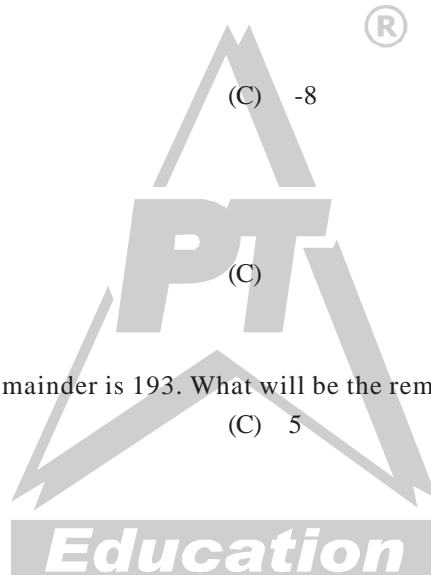
### Quantitative Ability

The whole section was having the following breakup :-

Name of the topic	Number of questions
Linear equations & Inequalities	2
Geometry & Mensuration	3
Number System	4
Speed, Time & Distance	1
Miscellaneous	5

16. In a group of cows and chickens the number of legs was 14 more than twice the number of heads. The number of cows was:
- (A) 5                                      (B) 7                                      (C) 10                                      (D) 14  
(E) None of these.
17. A father is now three times as old as his son. Five years back, he was four times as old as his son. The age of the son is
- (A) 12                                      (B) 15                                      (C) 18                                      (D) 20  
(E) None of these.
18. What is the value of  $\sqrt{0.04}$  ?
- (A) .002                                      (B) .02                                      (C) .2                                      (D) 2  
(E) None of these.
19. If 18th February, 1997 falls on Tuesday then what will be the day on 18th February, 1999 ?
- (A) Tuesday                                      (B) Thursday                                      (C) Wednesday                                      (D) Monday  
(E) None of these.
20. If  $x = -0.5$ , then which of the following has the smallest value?
- (A)  $2^{1/x}$                                       (B)  $1/x$                                       (C)  $1/x^2$                                       (D)  $2^x$   
(E) None of these.
21. A train passes two bridges of lengths 800 m and 400 m in 100 seconds and 60 seconds respectively. The length of the train is
- (A) 36 secs                                      (B) 30 secs                                      (C) 24 secs                                      (D) 18 secs  
(E) None of these.
22. A hemisphere and a cone have equal bases, If their heights are also equal, the ratio of their curved surfaces will be:
- (A)  $1 : \sqrt{2}$                                       (B)  $\sqrt{2} : 1$                                       (C)  $1 : 2$                                       (D)  $2 : 1$   
(E) None of these.
23. The base radii of two cylinders are in the ratio 2:3 and their heights are in the ratio 5:3. The ratio of their “volumes is”
- (A) 27 : 20                                      (B) 20 : 27                                      (C) 9 : 4                                      (D) 4 : 9  
(E) None of these.

24. If the area of a triangle with base 12 cm is equal to the area of a square with side 12 cm, then the altitude of the triangle is  
(A) 24 cm (B) 12 cm (C) 18 cm (D) 36 cm  
(E) None of these.
25. A sum of money becomes Rs. 4,500 after two years and Rs. 6,750 after 4 years on compound interest. The sum is:  
(A) 4,000 (B) 2,500 (C) 3,000 (D) 3,050  
(E) None of these.
26. The cost of manufacturing an article was Rs. 900. The trader wants to gain 25% after giving a discount of 10%. The marked price must be:  
(A) Rs. 1,500 (B) Rs. 1,250 (C) 1,200 (D) Rs. 1,000  
(E) None of these:
27. A and B can do a piece of work in 12 days, B and C in 8 days, and C and A in 6 days. How long would B take to do the same work alone?  
(A) 24 days (B) 32 days (C) 40 days (D) 48 days  
(E) None of these.
28.  $\{(-2)^{(-2)}\}^{(-2)}$  is equal to  
(A) 16 (B) 8 (C) -8 (D) -16  
(E) None of these.
29. The value of  $0.\overline{2} + 0.\overline{3} + 0.\overline{32}$  is  
(A) (B) (C) (D)  
(E) None of these.
30. If a number is divided by 893, the remainder is 193. What will be the remainder when it is divided by 47?  
(A) 2 (B) 15 (C) 5 (D) 7  
(E) None of these.



## Section – III

### Data Interpretation

**DIRECTIONS:** Study the following table carefully and answer the questions that follows.

**Table showing % of population of a state in different Age Groups**

Age group	Percentage
Upto 15	30
16-25	17.75
26-35	17.25
36-45	14.5
46-55	14.25
56-65	5.12
66 and above	1.13

41. Which one of the age groups listed below accounts for the maximum population in the state  
(A) 16-25                      (B) 26-25                      (C) 36-45                      (D) 56-65  
(E) None of these.                      (R)
42. Out of every 4200 the number of persons below 25 years is (approx.)  
(A) 2005                      (B) 1260                      (C) 746                      (D) 515  
(E) None of these.
43. There are 200 million people below 36 years. How many million people (approx.) are in the age group 56-65?  
(A) 30.07                      (B) 15.75                      (C) 12.72                      (D) 59.30  
(E) None of these.
44. If there are 10 million people in the age group 56 and above, what is the difference between the total number of people in the age group 16-25 and 46-55 (approx.):  
(A) 6.8 million                      (B) 5.6 million                      (C) 28.4 million                      (D) 34.7 million  
(E) None of these.
45. If the difference between the no. of People in the age groups 45-55 and 26-35 is 11.75 million, then the total population of the state is (approx.)  
(A) 400 million                      (B) 391.67 million                      (C) 360 million                      (D) 460 million  
(E) None of these.

**Section – IV**  
**Logical Reasoning And General Intelligence**

46. As Newspaper is to press, cloth is to  
(A) Tailor (B) Textile (C) Fiber (D) Mill  
(E) None of these.
47. As oxygen is to bum, carbon dioxide is to  
(A) Isolate (B) Foam (C) Extinguish (D) Explode  
(E) None of these
48. Identify odd item from the following items  
(A) Graphite (B) Pearl (C) Diamond (D) Coal.  
(E) None of these
49. Identify the group of letters which is different from others  
(A) BD (B) IK (C) PN (R) (D) SU  
(E) None of these.
50. Identify the group of letters which is different from others  
(A) AKEW (B) PNT0 (C) LCUF (D) HJMX  
(E) Noneofthese.
51. Which number would replace the question mark in the series  
7, 12, .19, ?, 39  
(A) 29 (B) 240 (C) 241 (D) 242  
(E) None of these.
52. In a school, there were five teachers. A and B were teaching Hindi and English, C and B were teaching English and Geography.  
D and A were teaching Mathematics and Hindi. E and B were teaching History and French. Who among the teachers were teaching maximum number of subjects  
(A) A (B) B (C) C (D) D  
(E) None of these.
56. There are five friends. They are standing in a row facing South. Jayesh is to the immediate right of Alok. Pramod is between Bhagat and Subodh. Subodh is between Jayesh and Pramod. Who is at the extreme left 'end'  
(A) Alok (B) Bhagat (C) Subodh (D) Data Inadequate  
(E) None of these.
57. A man is facing west. He turns 450 in the clockwise direction and then another 180° in the same direction and then 270° in the anticlockwise direction. Which direction, he is facing now?  
(A) South (B) North-West (C) West (D) South-West  
(E) None of these.
58. A clock is so placed that at 12 noon its minute hand points towards North-East. In which direction does its hour hand point at 1.30 p.m.?  
(A) North (B) South (C) East (D) West  
(E) None of these.

## Section – V

### General Awareness And Awareness Of Socio-Economic Environment

61. The mass of the Sun accounts of the total solar system's mass  
(A) About 99.8% (B) About 10% (C) About 75% (D) About 33%  
(E) None of these.
62. The speed of light will be maximum while passing through  
(A) Water (B) Air (C) Glass (D) Vacuum  
(E) None of these.
63. The missile testing Facility in India is  
(A) Kota (B) Sriharikota (C) Wheeler Island (D) Kalppakam  
(E) None of these.
64. The Arabian Sea exists in India's  
(A) East (B) West (C) North (D) South  
(E) None of these.
65. The decimal numeral system, including the concept of zero, was invented in  
(A) USA (B) UK (C) Russia (D) India  
(E) None of these.
66. Mahavira was born in  
(A) Lumbini (B) Vaishali (C) Magadha (D) Gaya  
(E) None of these.
67. The Chief Justice is appointed by  
(A) Prime Minister of India (B) Lok Sabha  
(C) President of India (D) Law Minister  
(E) None of these.
68. The currency of Kuwait is  
(A) Rupees (B) Taka (C) Dinar (D) Dollar  
(E) None of these.
69. Which is the smallest country in area in the world?  
(A) Pakistan (B) Spain (C) Bhutan (D) Vatican City  
(E) None of these.
70. Which river is flowing from East to West in Central India?  
(A) Narmada (B) Ganga (C) Kaveri (D) Brahmaputra  
(E) None of these.

# IIPS (MMS-5 years Integrated Course)

## Entrance Test = June 03, 2007

### (Group C ANALYSIS)

We are glad to present you the detailed analysis of IIPS (MMS - 5 years) entrance test held on June 03, 2007 on various centres all over the country. The test comprised 75 questions divided into 5 sections viz. English Usage, Quantitative Aptitude, Data Interpretation, Logical Reasoning and General Knowledge to be solved in a time span of 90 minutes. There were 3 marks for each correct question and 1 mark was declared to be deducted for each wrong answer.

#### **Bird's eye view**

Analysis for the 'C' group paper for the DAVV CET exam held on 03/06/07

- 1) The whole paper consisted of four sections summing upto a total of 225 marks in all for a total of 75 questions.
- 2) The marking scheme was 3 marks for a correct answer & a negative one mark for every wrong answer.
- 3) The sectionwise break up of the four sections is as follows:-

Name of the section	Number of questions
English	15
Physics	20
Biology or Maths	20
Chemistry	20

Number of options : Five  
Overall Expected Cut-off : 170 + marks



# Section – I

## English

This section had 15 questions in all out of which 5 questions were based on antonyms, 5 on synonyms & five were of the fill in the blank type. The English section was having 15 questions out of which 5 were of the following type:

**DIRECTIONS:** Identify a word from the options which is completely opposite in meaning to the word given in the question.

1. **Lethargic**

- (A) dull (B) Familiar (C) famous (D) active  
(E) None of these.

The answer to this question was option (D).

2. **Purile**

- (A) cunning (B) honest (C) innocent (D) practical  
(E) None of these.

The answer to this question was option (C)

There were 3 more questions like the above two.

The next 5 questions were of the following type:

6. Identify a word from the following words, a word which is closest in meaning to the word highlighted below:-

**Resolute**

- (A) adjusting (B) Caring (C) determined (D) Childish  
(E) None of these.

The answer to this question would be the option (C).

**Diligent**

- (A) lazy (B) intelligent (C) hardworking (D) determined  
(E) None of these.

The answer to this question would be the option (C). There were three more similar questions like the above

**DIRECTIONS:** There were five more questions based on the use of phrases in the form of fill in the blanks type of questions. as below.

11. The priest said in a meeting to “look before leaping”. What does look before leap mean over here.

- (A) Attacking (B) Be Cautious (C) Dictatorial (D) Healthy  
(E) None of these

The answer to the above question would be the option (B)

There were four more similar questions like the above question (C).

## Section – III

### MATHEMATICS / BIOLOGY

The section wise break up of the maths section was as follows; -

Name of the section	Number of questions
Trigonometry	5
Integration & differentiation	4
Functions	3
Geometry	3
Matrix & determinants	5

36. If  $\tan^{-1} x + \tan^{-1} y + \tan^{-1} z = \pi/2$  then the value of  $(xy + yz + zx)$  would be  
 (A) 0 (B) 1 (C)  $\infty$  (D)  $\pi/4$   
 (E) None of these.
37. A tangent to a circle will cut the circle at how many points?  
 (A) 1 (B) 2 (C) 4 (D) Infinite points  
 (E) None of these.
38. If a non-singular matrix  $A = \begin{vmatrix} 1 & 2 & 2 \\ 2 & 1 & 2 \\ 2 & 2 & 1 \end{vmatrix}$  satisfy the matrix equation  $A^2 - 4A - 5I = \bar{0}$  then diagonal elements of  $2A^{-1}$  are  
 (A) (3,3,3) (B) (-3, -3, -3) (C)  $\left(\frac{3}{5}, \frac{3}{5}, \frac{3}{5}\right)$   
 (D)  $\left(\frac{3}{5}, \frac{3}{5}, \frac{3}{5}\right)$   
 (E) None of these.
39. The equation of tangent to the parabola  $y^2 = 7x$  at a point  $(x, y)$ , which is perpendicular to line  $4x + y = 0$ , will be  
 (A)  $4y = x + 28$  (B)  $4x = y + 28$  (C)  $4x + 16y + 7 = 0$  (D)  $16x + 4y + 7 = 0$   
 (E) None of these.
40. Coefficient of  $x^n$  in the expansion of  $1 + \frac{1+x}{1!} + \frac{(1+x)^2}{2!} + \frac{(1+x)^3}{3!} + \dots + \frac{(1+x)^r}{r!} + \dots \infty$  is equal to  
 (A)  $\frac{e}{n}$  (B)  $\frac{e}{n}$  (C)  $\frac{e}{n}$  (D)  $\frac{e}{n}$   
 (E) None of these.
- Q41. If  $w$  be the cube root of unity, then value of the determinant  $\begin{vmatrix} 1 & w & w^2 \\ w & w^2 & 1 \\ w^2 & 1 & w \end{vmatrix}$  is:  
 (A) 1 (B) 0 (C)  $w^2$  (D)  $w$   
 (E) None of these.
42. If  $A$  be a non-singular matrix such that  $A \cdot A^t = I$ , then which of the following is true  
 (A)  $A$  is a symmetric matrix (B)  $A$  is an orthogonal matrix  
 (C)  $A$  is an idempotent matrix (D)  $A$  is skew – symmetric  
 (E) None of these.

## Section – III

### Chemistry

The section consisted of the following sub sections; -

Name of the section	Number of questions
Reaction based	4
Metallurgy	3
Forces & bonds	5
Hydrocarbons	5
Orbitization based	3

65. What is the name given to the equation  $PV = nRT$  ?  
(A) Law of partial pressure (B) Ideal gas equation  
(C) Quadratic equation (D) Raoult's equation  
(E) None of these.
66. The structure of an ammonia molecule can best be described as  
(A) linear (B) tetrahedral (C) pyramidal (D) trigonal planar  
(E) None of these.
67. What force between molecules tends to cause most common gases to behave as nonideal gases?  
(A) Vander Waal's force (B) ionic bonding force (C) gravitational force (D) covalent bonding force  
(E) None of these.
68. Which of the silver halides is very soluble in water?  
(A) AgF (B) AgCl (C) AgBr (D) AgI  
(E) None of these
69. Which of the d orbital participate in  $dsp^2$  hybridization?  
(A)  $d_{z^2}$  (B)  $d_{x^2-y^2}$  (C)  $d_{xy}$  (D)  $d_{yz}$   
(E) None of these
70. What is the BOND ORDER in  $NO^+$  molecule ion?  
(A) 2 (B) 1.5 (C) 3 (D) 2.5  
(E) None of these.
71. Ferrous is an equivalent name for which of the following  
(A) Iron (IV) (B) Iron (III) (C) Iron (II) (D) Iron (I)  
(E) None of these.

### Sectional break-up

Name of the section	Number of questions
Motion (2d)	4
Electricity & allied topics	6
Modern physics	5
Wave theory & universe	5

