PACE Junior Science College, THANE

FINAL EXAMINATION

SCHEDULE (2014-15)

STD. XI

DATE	DAY	SUBJECT	TIME
19/03/2015	Thursday	Electrical Maintenance - I Computer Science - I Information Technology	10.00 am to 12.30 pm 10.00 am to 1.00 pm 10.00 am to 1.00 pm
20/03/2015	Friday	Electrical Maintenance - II Computer Science - II Biology	10.00 am to 12.30 pm 10.00 am to 1.00 pm 10.00 am to 1.00 pm
23/03/2015	Monday	Physics	10.00 am to 1.00 pm
24/03/2015	Tuesday	Chemistry	10.00 am to 1.00 pm
25/03/2015	Wednesday	Maths / Psychology	10.00 am to 1.00 pm
26/03/2015	Thursday	English Physical Education	10.00 am to 1.00 pm 01.00 pm to 2.00 pm

NOTE: PHYSICAL EDUCATION TOPICS

- **1. PHYSICAL FITNESS**
- 2. EXERCISE
- 3. GAMES & RULES OF GAMES
- 4. Maths Practical Final exam on 25th Mar '15 from 01.30-02.30 pm.

5. Biology and IT Practical Final Exam as follows

20/02/15-01.30-03.00 H1 (Biology) and H2 (IT)

26/02/15--- 02.00-03.30 H2 (Biology) and H1 (IT)

11th std FINAL EXAMINATION MATHS PRACTICAL QUESTIONS (20 marks*)

1. Find x, y, z using Cramer's rule, if
$$\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = -2$$
, $\frac{1}{x} - \frac{2}{y} + \frac{1}{z} = 3$, $\frac{2}{x} - \frac{1}{y} + \frac{3}{z} = -1$

2. The sum of three numbers is 6. Thrice the third number when added to the first number gives 7. On adding the sum of second and third numbers to three times the first number, we get 12. Find the three numbers using determinants.

3. Find **K**, if following equations are consistent
$$(\mathbf{K} + 1) \mathbf{x} + (\mathbf{K} - 1) \mathbf{y} + (\mathbf{K} - 1) = 0$$
, $(\mathbf{K} - 1) \mathbf{x} + (\mathbf{K} - 1) = 0$, $(\mathbf{K} - 1) \mathbf{x} + (\mathbf{K} - 1) \mathbf{y} + (\mathbf{K} - 1) = 0$

4. Find the value of **K**, if the equations $\mathbf{K}x + 3\mathbf{y} + 4 = 0$, $x + \mathbf{K}y + 3 = 0$, 3x + 4y + 5 = 0 are consistent. Find their common solution for the smallest value of **K**.

5. Find $K_{,}$ if the area of the triangle with vertices at P(3, -5), Q(-2, K) R(1, 4) is 33/2 sq. units.

6. Find the equation of the line joining the points P (2, - 3) and Q (- 4, 1), using determinants.

7. Using logarithms find, x, if
$$x = \sqrt{\frac{(2.3)^5 + (0.537)^3}{(72.5)^4 - (18.25)^2}}$$

8. Using logarithms find, x, if $x = \sqrt{\frac{(42.3)^3 + (50.37)^3}{(7.205)^4 - (1.825)^2}}$
9. Using logarithms find, x, if $x = \sqrt{\frac{(23.5)^5 + (0.537)^3}{(725)^4 - (1.85)^2}}$
10. Using logarithms find, x, if $x = \sqrt{\frac{(2.3)^5 + (0.537)^3}{(72.5)^4 - (18.25)^2}}$
11. Using logarithms find, x, if $x = \sqrt{\frac{(23)^5 + (0.537)^3}{(72.5)^4 - (18.25)^2}}$
12. Using logarithms find, x, if $x = \sqrt{\frac{(23)^5 + (0.537)^3}{(72.5)^2 - (0.1825)^3}}$

Note*

1. Total marks (100) = Theory (80) + Practicals(20)

2. For Practicals, students will get 6 questions. Out of which they have to solve any 4. Each question carries 5 marks.