St.Joseph's Degree & PG College

Department of Mathematics & Statistics

Mathematics & Statistics Club

Math 4 All

This is to inform to all the students that the Mathematics & Statistics Club of Department of Mathematics & Statistics is resuming the club activity **Math 4 All from** the month of August, which features a comprehensive set of interactive arithmetic, logic & brain twisting Problems. These puzzles involve some novel way of thinking or looking at the problem from an unexpected viewpoint. Students who take various standardized tests such as SAT, GRE, GMAT, CAT and other MBA and MCA tests in which Math is one important skill tested will find these very helpful.

The Department would share every fortnight a few brain twisters which involve a combination of skills and traits, a few of which are creativity, perceptiveness, and the ability to identify and apply new approaches. If you feel you have a memorable math-related experience, then you may share it here. The puzzles also will be available in the College intranet site. Solve the Puzzles and your solutions can be handed over in the Department of Mathematics & Statistics. Your solutions should reach the Department within a fortnight along with suitable explanations. Those who answer all the questions correctly would be rewarded suitably.

For any queries you can contact the Mathematics department faculty

Mr. D. Srinivas Reddy

Mrs. G. Sunitha

Mrs. B. Kalavathi

PRINCIPAL HOD

St.Joseph's Degree & PG College

Department of Mathematics & Statistics

Math 4 All

1. There are one thousand lockers and one thousand students in a school. The principal asks the first student to go to every locker and open it. Then he has the second student go to every second locker and close it. The third goes to every third locker and, if it is closed, he opens it, and if it is open, he closes it. The fourth student does this to every fourth locker, and so on. After the process is completed with the thousandth student, how many lockers are open?
2. Each set of nine numbers relate to each other in a certain way. Work out the logic behind the numbers in the left hand box in order to determine which number is missing

2	9	4
5	16	3
5	11	2

3	7	2
3	28	9
7	?	6

3. Looking at straight lines horizontally, vertically or diagonally, what number is two places away from itself plus 2, three places away from itself multiplied by 2, three places away from itself divided by 2 and three places away from itself minus 2

11	13	18	1	16
12	10	20	6	19
14	2	5	24	7
40	8	22	26	16
3	9	15	4	32

4. "To err is human and to forgive is divine" is coded as 4 5 4 7 5 4 9 4 8 then "Help thyself God will help thee" can be coded as ----------

5. During a Brain Bashers thinking contest, the total number of points scored by the first six players was 103.
   - The first player scored half the points of the second player, who in turn scored 6 points fewer than the third player.
   - The third player in turn scored two thirds the points of the fourth player.
   - The fifth player managed to score the same number of points as the difference between the first and fourth player's points.
   - Finally, the sixth player scored 14 fewer than the fifth player.
     Can you determine how many points the sixth player managed to score?

HINT: The fourth player is the key to this tricky question.

Last date of Submitting the answers: On or before 17th Aug, 2013 (Saturday)