## Aptitude prelims

1. The rupee/coin changing machine at a bank has a flaw. It gives 10 ten rupee notes if you put a 100 rupee note and 10 one rupee coins if you insert a 10 rupee note but gives 10 hundred rupee notes when you put a one rupee coin. Sivaji, after being ruined by his rivals in business is left with a one rupee coin and discovers the flaw in the machine by accident. By using the machine repeatedly, which of the following amounts is a valid amount that Sivaji can have when he gets tired and stops at some stage (assume that the machine has an infinite supply of notes and coins):

a. 26975 b. 53947 c. 18980 d. 33966

- **2.** Anand packs 304 marbles into packets of 9 or 11 so that no marble is left. Anand wants to maximize the number of bags with 9 marbles. How many bags does he need if there should be atleast one bag with 11 marbles
- a. 33
- b. 32
- c. 31
- d. 30
- 3. Two vehicles A and B leaves from city Y to X. A overtakes B at 10:30 am and reaches city X at 12:00 pm. It waits for 2 hrs and return to city Y. On its way it meets B at 3:00 pm and reaches city Y at 5:00 pm. B reaches city X, waits for 1hr and returns to city Y. After how many hours will B reach city Y from the time A overtook him for the first time?
- a. 50 hrs
- b. 49.5 hrs
- c. 41.5 hrs
- d. 37.5 hrs
- 4. If the price of an item is decreased by 10% and then increased by 10%, the net effect on the price of the item is
- A. A decrease of 99%
- B. No change
- C. A decrease of 1%
- D. An increase of 1%
- 5. Two cyclists begin training on an oval racecourse at the same time. The professional cyclist completes each lap in 4 minutes; the novice takes 6 minutes to complete each lap. How many minutes after the start will both cyclists pass at exactly the same spot where they began to cycle?
- A. 10
- B. 8
- C. 14
- D. 12



- A. 1
- B. 5
- C. 4
- D. 9

7. Mary and John can do a piece of work in 24 day; John and Vino in 30 days; Vino and Mary in 40 days. If Mary, John and Vino work together they will complete work in ?

- a) 10 days
- b) 20 days
- c) 47 days
- d) 45 days

8. Find the day of the week on 16th July, 1776.

- a. Sunday
- b. Monday
- c. Tuesday
- d. Wednesday

9. A man can row a distance of 5 km in 60 min with the help of the tide. The direction of the tide reverses with the same speed. Now he travels a further 20 km in 10 hours. How much time he would have saved if the direction of tide has not changed?

- (a) 5 hrs
- (b) 4 hrs
- (c) 12 hrs
- (d) 6 hrs

10. A father's age was 5 times his son's age 5 years ago and will be 3 times son's age after 2 years, the ratio of their present ages is equal to:

- a) 3:7
- b) 5:11
- c) 10:3
- d) 10:7

11.  1) B is mother of D but D is not daughter of B. 2) A is son of M and brother of G. 3) G is sister of D Which of the following cannot be referred from the given information?  (A) B has 3 children (B) M has two sons (C) G is younger to B. (D) A is younger to D
12. A single discount % equal to three successive discounts of 30%, 20% and 10%. A. 49.6% B. 50.4% C. 40% D. 60% E. None of these
13. In how many ways a team of 11 must be selected from 5 men and 11 women such that the team must comprise of not more than 3 men?  A.1565  B.1243  C.2256  D.2456
14. Esha bought 18 sharpeners for rs.100 she paid 1 rupee more for each white sharpener than for each brown sharpener. What is the price of a white sharpener and how many white sharpener did she buy?  A. Rs. 5,10  B. Rs. 6,10  C. Rs. 5,8  D. Rs. 6,8
15. A man has a job which requires him to work 8 straight days and rest on the ninth day . If he started work on Monday, find the day of the week on which he gets his 12th rest day .  A. Thursday B. Wednesday C. Tuesday D. Friday
16. The sum of digits of a three digit number is 17, and the sum of the squares of its digit is 109. If we subtract 495 from the number, we shall get a number consisting of the same digits written in the reverse order .find the number.

A.773 B.683 C.944

D. 863