# APTITUDE

**1. $(165)^2 - (164)^2 =$**
(a) 1
(b) 100
(c) 329
(d) 49

**2. Two goats are tied with a rope of length 40m outside of a rectangular shed of dimensions 50m X 30m. The goats are tied to different corners which lie on the opposite ends of a diagonal of the shed. What is the area in which the two goats can eat grass, if they choose not to eat in the common approachable area?**
(a) 1200π
(b) 1225π
(c) 2400π
(d) 2450π

**3. What is the simplified result of following the steps below in order?**
(a) 3-x
(b) X+2
(c) X-3
(d) X2-x-6

**4. If PQR = 1, RST = 0, and SPR = 0, which of the following must be zero**
(a) P
(b) Q
(c) R
(d) S

**5. in a society of 80 resident families who subscribe newspapers, 60% of them subscribe the Hindu newspaper, 80% of them subscribe regional language newspaper and 70% of them subscribe TOI. How many families could, at the least, be subscribing to all the three newspapers**
(a) 0%

(b) 5%
(c) 10%
(d) 20%

**A, B, and C are three numbers,**
   Let **@(A, B)** = **Average of A and B**
      **\*(A, B)** = **Product of A and B**
      **/(A, B)** = **A divided by B**

**6. If A=2 and B=4 the value of @( / (\*(A,B),B),A) would be**

**7. Sum of A and B is given by?**

**8. Let x<0, z<0 and y<1 which of the following is false:**
(a) $(x^2-z^2)$ has to be positive.
(b) yz can be less than one.
(c) xy can never be zero
(d) $(y^2-z^2)$ is always negative

**9. If A's income is 25% less than B's, by what % is B's income greater than that of A?**

10. There is a 200 miles long tunnel. One train enters the tunnel at a speed of 200mph while the other trains enter the tunnel in the opposite direction at a speed of 1000 mph. A bee travels at a speed of 1500 mph enters the tunnel goes to and back until it reaches the train. What is the distance covered by the bee when the two train collides?

**11. Q is not equal to zero and k = (Q x n - s)/2 find n?**

(a) (2 x k + s)/Q
(b) (2 x s x k)/Q
(c) (2 x k - s)/Q
(d) (2 x k + s x Q)/Q
(e) (k + s)/Q

**14. A puts a share of 1/3, B puts a share of 1/2, and the remaining share is put by C, and start a business. Their total profit is Rs 4800, what is the share of A?**

**15.  What is the remainder of (3682\*3684\*3686) divided by 19?**

**16. Mr. Lloyd wants to fence his Square shaped land of 120sqft each side. If a pole is laid every 12ft how many poles does he need?**

**17. If 105 is represented as 253 in base 6, how is 253 represented in base 6?**

**18. the cost of 5 chairs and 3 mugs is Rs 1900, and the cost of 8 chairs and 5 mugs is Rs 2900, what is the cost of 5 chairs and 8 mugs?**

**19. Mr Roy found an old bill which shows that he brought 10 hens for Rs_ 67.92_ ,the first and the last digits were missing. What was the cost of each hen?**

**20. In a school football team the captain was the eldest of all with an age of 30 years. The next was the goal keeper with 26. In a particular match both the players were shown red cards. By how much the average age of the remaining people rose? What was the average age of the team?**

**21. How many mashes are there in 1 square meter of wire gauge if each mesh is 8mm long and 5mm wide?**
(a) 2500
(b) 25000
(c) 250
(d) 250000
      *Ans B*

**22. x% of y is y% of ?**
(a) x/y
(b) 2y
(c) x
(d) can't be determined
      *Ans. C*

**23. The price of sugar increases by 20%, by what % should a housewife reduces the consumption of sugar so that expenditure on sugar can be same as before?**
(a) 15%
(b) 16.66%
(c) 12%
(d) 9%
      *Ans B*

**24. A man spends half of his salary on household expenses, 1/4th for rent, 1/5th for travel expenses; the man deposits the rest in a bank. If his monthly deposits in the bank amount Rs.50, what is his monthly salary?**
(a) Rs.500
(b) Rs.1500

(c) Rs.1000
(d) Rs. 900
        *Ans C*

**25. The population of a city increases @ 4% p.a. There is an additional annual increase of 4% of the population due to the influx of job seekers, find the % increase in population after 2 years ?**

**26. The ratio of the number of boys and girls in a school is 3:2 Out of these 10% the boys and 25% of girls are scholarship holders. What is the percentage of students who are not scholarship holders?**

**27. 15 men take 21 days of 8 hrs. each to do a piece of work. How many days of 6 hrs. each would it take for 21 women if 3 women do as much work as 2 men?**
(a) 30
(b) 20
(c) 19
(d) 29
        *Ans. A*

**28. A cylinder is 6 cms in diameter and 6 cms in height. If spheres of the same size are made from the material obtained, what is the diameter of each sphere?**
(a) 5 cms
(b) 2 cms
(c) 3 cms
(d) 4 cms
        *Ans C*

**29. A rectangular plank (2)1/2 meters wide can be placed so that it is on either side of the diagonal of a square shown below.(Figure is not available)What is the area of the plank?**
        *Ans :7*(2)1/2*

**30. The difference b/w the compound interest payable half yearly and the simple interest on a certain sum lent out at 10% p.a for 1 year is Rs 25. What is the sum?**
(a) Rs.15000
(b) Rs.12000
(c) Rs.10000
(d) none of these
        *Ans C*

**31. What is the smallest number by which 2880 must be divided in order to make it into a perfect square?**

(a) 3
(b) 4
(c) 5
(d) 6

**32. A father is 30 years older than his son however he will be only thrice as old as the son after 5 years**
**what is father's present age?**

(a) 40 yrs
(b) 30 yrs
(c) 50 yrs
(d) none of these
*Ans:A*

# ENGLISH

**1. Swiss curator Hans Ulrich Obrist talks and _____ incessantly, barely sleeps and never cooks**

(a) Travelled
(b) Travels
(c) Travel
(d) Is travelling

**2. Along with the recent incidents of acid rains, the strong pollution level figures released today seem like it is indicative that the environment, although various reforms introduced, is not being protected enough**
(a) like it is indicative that
(b) to indicate that
(c) indicative of
(d) like an indication of

**3. Based on his personal email account, the manager has shared the daily tasks for the team. This activity is considered unauthorized and the manager may have to face serious consequences for such unethical practices**
((a) based on his personal email account
(b) basing on his personal email accounts

(c) by various personal email accounts
(d) using his personal email account

**4. Scientists _____ a Terminator 2-inspired 3D printer that _____ objects fully formed from a pool of goo in a matter of minutes**
(a) create.....will lift
(b) will be creating....lifted
(c) have created.....lifts
(d) will create....lifted

**5. During the summers of 2012 and 2013, I walked more than a thousand miles on the Camino de Santiago. Also called the Way of St. James, or simply the Way, by English speakers, it is a centuries-old Christian pilgirmage path through France and Spain. In each of the past few years, between 183,000 and 273,000 people from around the world travelled the route, which runs through cities, across mountains, and along Roman roads. It ends at the cathedral in Santiago de Compostela, where the supposed remains of St. James, one of Jesus Christ's Twelve Apostles, are enshrined**
(a) The Way is famous because it leads to the burial place of St. James, one of Jesus's twelve apostles
(b) The walk on the Camino is called the Way because it is believed that this path often shows a way to people's problems
(C) People generally walk the Way in the name of Christian faith
(d) The only way to reach the cathedral in Santiago de Compostela is through the Way

# LOGICAL REASONING

**1. Which letter should be in place of question mark**
**B C D**
**A E C**
**F A ?**
(a) A
(b) B
(c) C
(d) D

**2. College first year students were asked to know about college presidential elections and vote for their preferred candidate. What is the most logical question that the students want an answer for**

(a) What are the manifestos of the presidential candidates
(b) Which candidate has the majority support as per the college surveys
(c) How are historical performance and credibility ratings of the candidate
(d) To which college association does the presidential candidate belong to

## Directions for Questions Nos: 3 to 4

*Kya-Kya is an island in the south pacific .The inhabitants of Kya-Kya always Answerany question with two sentences, one of which is always true and other is always false.*

**3. You are walking on a road and came to a fork. You asked the inhabitants Ram, Laxman, Lila,"Which road will take me to the village?"**
**Ram says,"I never speak to strangers. I am new to this place"**
**Laxman says,"I am married to Lila. Take the left road".**
**Lila says,"I am married to ram. He is not new to this place"**
**Which of the following is true?**

A) Left road takes you to the village
B) Right road takes you to the village
C) Lila is married to Laxman
D) None of above

*[Ans: Ram said he never talked to strangers, but he spoke to a stranger, this means that this statement is false, hence his other statement must be true, hence the second statement of Lila is false, hence her first statement is true that is she is married to ram, hence the first statement of Laxman is false, hence his second statement is true, that is take the left road.]*

**4. You find that your boat is stolen. You question three inhabitants of the island and they reply as follows:**
**John says,"I didn't do it. Mathew didn't do it"**
**Matthew says,"I didn't do it. Krishna didn't do it."**
**Krishna says,"I didn't do it .I don't know who did it."**

# CRITICAL THINKING

**1. Your project mate and good friend is going through a rough patch in his relationship and he is not contributing enough to the project. This slows the progress of the project, and the rest of the team demand for his removal from the team**
(a) You stay out of this and let your manager figure out the right thing to do
(b) You talk to your team and ask them to stand by your friend during his tough times


**2. Your friends want to volunteer for the upcoming cultural fest in your college as they think the experience might be good. You wanted to volunteer for sports club. They need another member to volunteer and want you to join them**
(a) Be a good sport and join your friends in volunteering for cultural fest
(b) Convince your friends why your choice is better and why they should
join you instead (c) Let your friends volunteer for cultural fest and you volunteer for sports club