



Question-wise Details

Statistics

Question 1: If $x_1, x_2, x_3, \dots, x_n$ has standard deviation 6, then standard deviation of $x_1+k, x_2+k, x_3+k, x_4+k, \dots, x_n+k$ will be

- A. $6+k$
- B. $6-k$
- C. 6
- D. $6k$

Ans: (C)

Probability

Question 1: In an interview for various posts, 30% of the applicants are offered HR jobs, 20% are offered marketing and 10% are offered both. If a candidate is selected on random basis, what is the probability that he has been offered either HR or marketing job?

- A. $3/5$
- B. $2/5$
- C. $7/15$
- D. $1/2$

Ans: (B)

Comprehension

Question 1: Read the following passage and answer the given questions.

On August 9, 2016, Raghuram Rajan, the governor of Reserve Bank of India (RBI), released the last bimonthly monetary policy statement that would be drafted under his leadership. There were no changes made. According to the RBI, the growth in the current fiscal year is projected at 7.6 percent because of the beneficial effects of good monsoon and the expansionary effects of the implementation of the Seventh Pay Commission's recommendations. Therefore, growth is not an immediate problem.

However, in RBI's view, this growth brings with it the risk of inflation. Hence, any further reduction in interest rates was not warranted, at least not for now.

Rajan has the image of a policymaker with a penchant for a high-interest rate regime. When he took over as the governor of RBI in the first week of September 2013, the repo rate stood at 7.25 percent. It was raised to 7.5 percent soon thereafter, and then to 7.75 percent on October 29, 2013, and to 8 percent on January 28, 2014, where it stayed until January 15, 2015. Since then, the repo rate has been reduced thrice by 25 basis points (a quarter of a percentage point) and once by 50 basis points to bring it to its current level.

Rajan claims that a high-interest rate policy was needed to fight the actual inflation or predict the inflation rate in the future. In fact, inflation targeting moved to centre stage of monetary policymaking under Rajan. Inflation was to be the focus of the monetary policy and had to be kept within a 2 percent band around an annual 4 percent rate. Among the measures that had to be adopted to realize this objective, was a manipulation of interest rates and adjustments of the level of liquidity in the economy.

One of the measures suggested to control inflation is_____.

- A. the adoption of contractionary monetary policy**
- B. the adoption of expansionary monetary policy**
- C. interest rate manipulation**
- D. framing a discretionary fiscal policy**

Ans: (C)

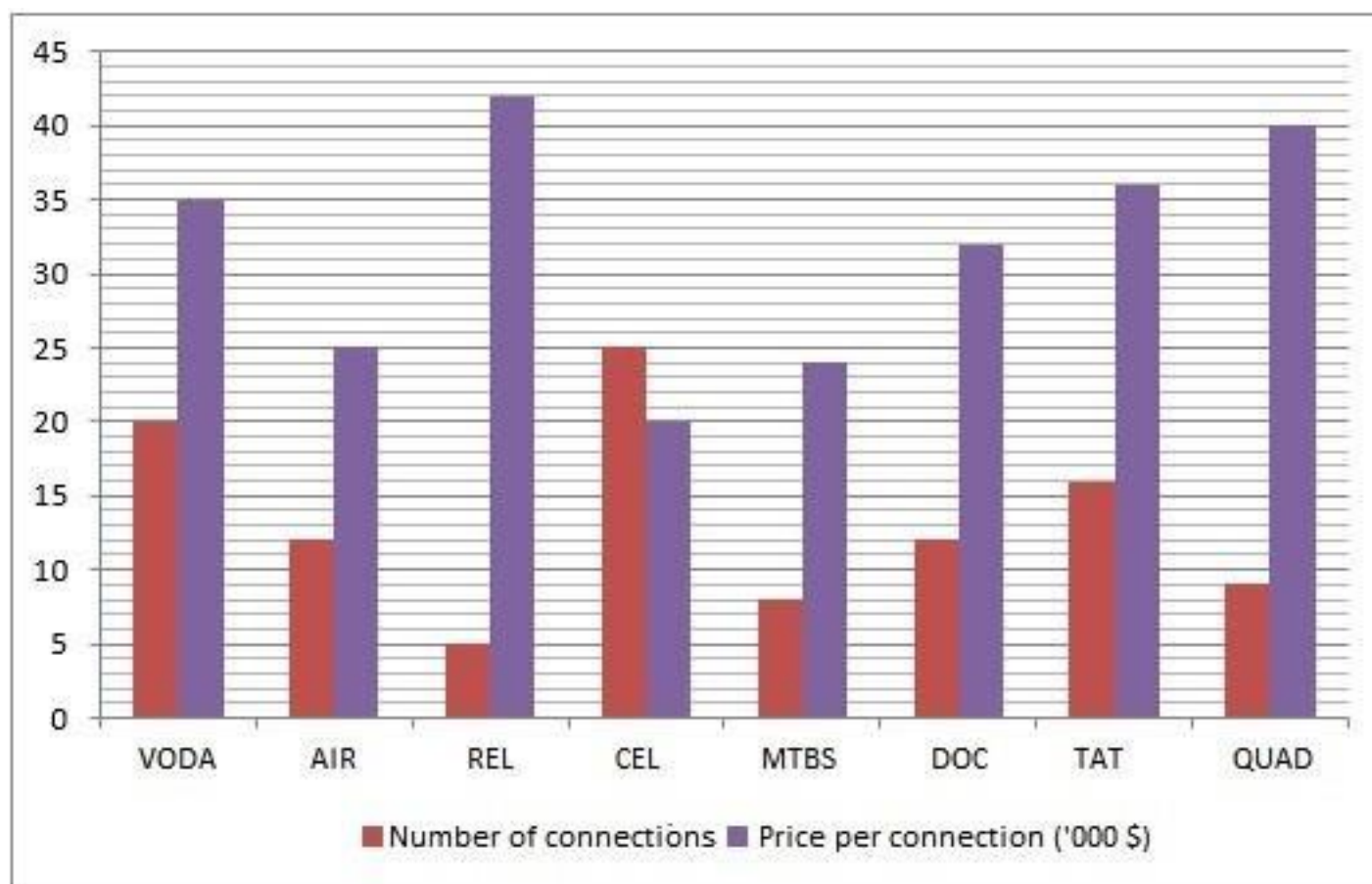
Data Interpretation

Directions : The questions given below are based on the graph. Read the graph carefully and answer the questions that follow

The graph given below shows the Number of connections sold by different telecom companies in a particular month and the Price per connection (in '000 \$).

Example: Price per connection of VODA is \$35,000 and the number of connections sold by VODA is 20.

Also, the revenue generated by the sale of those connections = Price per connection * Number of connections.



Question 1: What is the difference (in '000 \$) between the revenue generated from the connection having the highest number of units sold and the connection having the highest price per connection?

- A. 210
- B. 290
- C. 310
- D. 430

Ans: (B)

Logical Reasoning

Five movies were released on five consecutive days of a week. An action movie was released on Saturday. The romantic movie was released two days before the thriller movie which was released one day before the horror movie. The comedy movie was released one day after the romantic movie, which was released on Tuesday.

Question 1: Which days of the week have no movie releases?

- A. Wednesday and Thursday
- B. Saturday and Sunday
- C. Sunday and Monday
- D. Sunday and Wednesday

Ans: (C)

Answer Explanation

Romantic Movie - Tuesday

Comedy Movie - Wednesday

Thriller Movie - Thursday

Horror Movie - Friday

Action Movie - Saturday

Linear Algebra

Question 1:

If $A = \begin{bmatrix} 6 & 4 \\ 2 & 2 \end{bmatrix}$, and I is an identity matrix such that $A^2 - kA + 4I = 0$ what is the value of k ?

- A. 2
- B. 4
- C. 8
- D. 16

Ans: (C)

Calculus

Question 1: What is the value of $\int_0^1 \frac{\log(1+x)}{1+x^2} dx$?

- A. $\pi/8 \log 2$
- B. $\pi/4 \log 2$
- C. $\pi \log 2$
- D. $\pi^2 \log 2$

Ans: (A)

Technology and Business Awareness

Question 1: Identify the key reasons for using Rapid Prototyping:

1. To increase effective communication.
2. To decrease development time.
3. To decrease costly mistakes.
4. To minimize sustaining engineering changes

- A. 1, 2, 3
- B. 2, 3, 4
- C. 1, 3, 4
- D. 1, 2, 4
- E. 1, 2, 3, 4

Ans: (E)

Answer Explanation:

Some of the key reasons for using Rapid Prototyping:

1. To increase effective communication.
2. To decrease development time.
3. To decrease costly mistakes.
4. To minimize sustaining engineering changes

Basic Coding

Question 1 : What will be the output of the following code if n=4?

```
1  FUNCTION doMath(integer n)
2      BEGIN IF n <= 1
3          return n
4      ELSE
5          return n * doMath(n-1);
6
```

- A. 16
- B. 12
- C. 24
- D. 64

Ans: (C)