

Master series Mock CAT – 3 2018

Scorecard (procview.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Accuracy (AccSelectGraph.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Qs Analysis (QsAnalysis.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Booster Analysis (BoosterAnalysis.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Video Attempt (VideoAnalysis.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Solutions (Solution.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Bookmarks (Bookmarks.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

Toppers (Toppers.jsp?sid=aaa5BycB_LJvH-TdBuPHwSun Jan 20 08:10:07 UTC 2019&qsetId=K/2UfLW1C80=&qsetName=Master series Mock CAT – 3 2018)

VRC

DILR

QA

Sec 1

Directions for Questions 1 - 3: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

Starting with the pioneering and still unsurpassed Virtual History, a collection of scintillating essays edited by Niall Ferguson in 1997, an unceasing stream of books and essays has appeared.

Andrew Roberts, Robert Cowley, Geoffrey Parker and many others have edited further collections. The

prolific Jeremy Black has, inevitably, weighed in with a short survey of the genre. Military historians have produced hundreds of essays on what might have happened had this or that general adopted different tactics in this or that battle. Dominic Sandbrook wrote a sequence of 40 counterfactual essays for the *New Statesman*. Iain Dale and his collaborators at Bite back Publishing produced a string of collections imagining what things might have been like had Michael Portillo, or any one of a number of other politicians, become prime minister instead of the people who actually did. The cascade of books and essays seems never-ending. But how do we account for this trend?

Before the mid-1990s such speculations were few and far between. Occasional asides can be found in the works of historians going back to the ancient Greeks, but it took the end of Providentialist history, which viewed all events as part of the working-out of God's purposes, and the advent of the Romantic view of the past as a succession of epochs, each essentially different from the previous one, before writers began to speculate at greater length on what might have been.

The two earliest extended essays in the genre were both French. Louis-Napoléon Geoffroy's *The Apocryphal Napoleon* imagined what would have happened if the emperor had conquered Russia in 1812 instead of being defeated at Moscow; he would, in Geoffroy's alternative version, have gone on to conquer the known world eventually being crowned by the pope with the hereditary title "The All-Powerful". Later in the 19th century, Charles Renouvier coined the term "Uchronia" (in a novel of the same name) to denote "the rewriting of history not as it was, but as it could have been."

Both writers had axes to grind. Geoffroy was Napoleon's adopted son; he wrote his essay in the mid-1830s, when Bonapartism was beginning to re-emerge as a political force.

Renouvier, for his part, was prompted by Napoleon III's close alliance with the church to imagine a history of Europe based on the survival of a tolerant, multi-faith Roman empire. As these fantasies suggested, wishful thinking, along with a clear political purpose, has been a prime constituent of counterfactual history from the outset.

At the same time, however, this kind of writing has always coexisted with a view of what-if? history as an amusing entertainment – sometimes in the same book or article. In 1931 the first collection of essays in the genre – *If It Had Happened Otherwise*, edited by Sir John Collings Squire – presented two articles that adopted a procedure opposite to wishful thinking. GM Trevelyan's piece imagined the grim fate that England would have met had Napoleon won the battle of Waterloo, while Monsignor Ronald Knox's contribution depicted a Soviet-style regime that he posited would have descended upon Britain had the General Strike of 1926 been successful. The political thrust of such dystopian fantasies was obvious enough, but they have always represented a minority strand in the literature.

The publication of those essays perhaps reflected the political uncertainties of the early 1930s. But they had no successor for nearly half a century until 1979, when Daniel Snowman edited *If I Had Been... Ten Historical Fantasies*, in which 10 historians showed how they could have done better than the personalities they discussed – for example, by preventing American independence or avoiding the First World War. These essays were a product, perhaps, of the sentiment spread by Margaret Thatcher and her government – that Britain had taken a wrong turning in 1945, with the retreat from empire and the foundation of the welfare state.

Q.1

The author indulges in "if-then essays and analysis of existing History" to reflect that:

1 ☐ the particular genre is essentially a set of fantasies about a probable better world.

2 ☐ people have a chronic disapproval of history because it seems nothing but fabrication of facts.

3 ☐ people who disapprove of historical facts tend to create a counterfactual narrative in order to further their ideology.

4 ☐ recorded history is primarily assumed as political fabrication or suppression of facts and is thus fictitious and should entertain alternate explanations.

Solution:

Correct Answer : 3

The correct choice is 3.

The "better world" concept is irrelevant to the passage because there is no inferential link. Similarly, absolute statements are dangerous in the verbal section: "chronic disapproval" must be eliminated. Option 4 seems viable but the author doesn't mention that all recorded history is fabricated. As per the author the purpose in these attempts is political.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 1 - 3: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

Starting with the pioneering and still unsurpassed *Virtual History*, a collection of scintillating essays edited by Niall Ferguson in 1997, an unceasing stream of books and essays has appeared.

Andrew Roberts, Robert Cowley, Geoffrey Parker and many others have edited further collections. The prolific Jeremy Black has, inevitably, weighed in with a short survey of the genre. Military historians have produced hundreds of essays on what might have happened had this or that general adopted different tactics in this or that battle. Dominic Sandbrook wrote a sequence of 40 counterfactual essays for the *New Statesman*. Iain Dale and his collaborators at Bite back Publishing produced a string of collections imagining what things might have been like had Michael Portillo, or any one of a number of other politicians, become prime minister instead of the people who actually did. The cascade of books and essays seems never-ending. But how do we account for this trend?

Before the mid-1990s such speculations were few and far between. Occasional asides can be found in the works of historians going back to the ancient Greeks, but it took the end of Providentialist history, which viewed all events as part of the working-out of God's purposes, and the advent of the Romantic view of the past as a succession of epochs, each essentially different from the previous one, before writers began to speculate at greater length on what might have been.

The two earliest extended essays in the genre were both French. Louis-Napoléon Geoffroy's *The Apocryphal Napoleon* imagined what would have happened if the emperor had conquered Russia in 1812 instead of being defeated at Moscow; he would, in Geoffroy's alternative version, have gone on to conquer the known world eventually being crowned by the pope with the hereditary title "The All-Powerful". Later in the 19th century, Charles Renouvier coined the term "Uchronia" (in a novel of the same name) to denote "the rewriting of history not as it was, but as it could have been."

Both writers had axes to grind. Geoffroy was Napoleon's adopted son; he wrote his essay in the mid-1830s, when Bonapartism was beginning to re-emerge as a political force.

Renouvier, for his part, was prompted by Napoleon III's close alliance with the church to imagine a history of Europe based on the survival of a tolerant, multi-faith Roman empire. As these fantasies suggested,

wishful thinking, along with a clear political purpose, has been a prime constituent of counterfactual history from the outset.

At the same time, however, this kind of writing has always coexisted with a view of what-if? history as an amusing entertainment – sometimes in the same book or article. In 1931 the first collection of essays in the genre – *If It Had Happened Otherwise*, edited by Sir John Collings Squire – presented two articles that adopted a procedure opposite to wishful thinking. GM Trevelyan's piece imagined the grim fate that England would have met had Napoleon won the battle of Waterloo, while Monsignor Ronald Knox's contribution depicted a Soviet-style regime that he posited would have descended upon Britain had the General Strike of 1926 been successful. The political thrust of such dystopian fantasies was obvious enough, but they have always represented a minority strand in the literature.

The publication of those essays perhaps reflected the political uncertainties of the early 1930s. But they had no successor for nearly half a century until 1979, when Daniel Snowman edited *If I Had Been... Ten Historical Fantasies*, in which 10 historians showed how they could have done better than the personalities they discussed –for example, by preventing American independence or avoiding the First World War. These essays were a product, perhaps, of the sentiment spread by Margaret Thatcher and her government – that Britain had taken a wrong turning in 1945, with the retreat from empire and the foundation of the welfare state.

Q.2

It can be inferred that writing and studying "alternate history" will be relevant to which of the following area?

- I. Developing counter-conceptions to streamlined pedagogy.
- II. Developing multi-faceted case studies in management research.
- III. Creating programs or tools that would better speculate future economic and market trends.
- IV. Manufacturing concepts and social models in social Psychology.

1 ☐ All of the above

2 ☐ I & II

3 ☐ II only

4 ☐ II & III

Solution:

Correct Answer : 4

The correct choice is 4

Strategy management is a creative area, though measured and accountable.

Alternate hypothesis of existing situation helps create workshop modules, which fosters creative solutions to different possibilities of cases. Pedagogy is not supported by the passage. And, as in option 4, concepts can't be manufactured, they are developed, and rarely in social psychology. The passage doesn't talk about Pedagogy or Social Psychology. However, it mentions military generals and others. Hence, II and III can have some relevance to this trend.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for Questions 1 - 3: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

Starting with the pioneering and still unsurpassed *Virtual History*, a collection of scintillating essays edited by Niall Ferguson in 1997, an unceasing stream of books and essays has appeared.

Andrew Roberts, Robert Cowley, Geoffrey Parker and many others have edited further collections. The prolific Jeremy Black has, inevitably, weighed in with a short survey of the genre. Military historians have produced hundreds of essays on what might have happened had this or that general adopted different tactics in this or that battle. Dominic Sandbrook wrote a sequence of 40 counterfactual essays for the *New Statesman*. Iain Dale and his collaborators at Bite Back Publishing produced a string of collections imagining what things might have been like had Michael Portillo, or any one of a number of other politicians, become prime minister instead of the people who actually did. The cascade of books and essays seems never-ending. But how do we account for this trend?

Before the mid-1990s such speculations were few and far between. Occasional asides can be found in the works of historians going back to the ancient Greeks, but it took the end of Providentialist history, which viewed all events as part of the working-out of God's purposes, and the advent of the Romantic view of the past as a succession of epochs, each essentially different from the previous one, before writers began to speculate at greater length on what might have been.

The two earliest extended essays in the genre were both French. Louis-Napoléon Geoffroy's *The Apocryphal Napoleon* imagined what would have happened if the emperor had conquered Russia in 1812 instead of being defeated at Moscow; he would, in Geoffroy's alternative version, have gone on to conquer the known world eventually being crowned by the pope with the hereditary title "The All-Powerful". Later in the 19th century, Charles Renouvier coined the term "Uchronia" (in a novel of the same name) to denote "the rewriting of history not as it was, but as it could have been."

Both writers had axes to grind. Geoffroy was Napoleon's adopted son; he wrote his essay in the mid-1830s, when Bonapartism was beginning to re-emerge as a political force.

Renouvier, for his part, was prompted by Napoleon III's close alliance with the church to imagine a history of Europe based on the survival of a tolerant, multi-faith Roman empire. As these fantasies suggested, wishful thinking, along with a clear political purpose, has been a prime constituent of counterfactual history from the outset.

At the same time, however, this kind of writing has always coexisted with a view of what-if? history as an amusing entertainment – sometimes in the same book or article. In 1931 the first collection of essays in the genre – *If It Had Happened Otherwise*, edited by Sir John Collings Squire – presented two articles that adopted a procedure opposite to wishful thinking. GM Trevelyan's piece imagined the grim fate that England would have met had Napoleon won the battle of Waterloo, while Monsignor Ronald Knox's contribution depicted a Soviet-style regime that he posited would have descended upon Britain had the General Strike of 1926 been successful. The political thrust of such dystopian fantasies was obvious enough, but they have always represented a minority strand in the literature.

The publication of those essays perhaps reflected the political uncertainties of the early 1930s. But they had no successor for nearly half a century until 1979, when Daniel Snowman edited *If I Had Been... Ten Historical Fantasies*, in which 10 historians showed how they could have done better than the personalities they discussed – for example, by preventing American independence or avoiding the First World War. These essays were a product, perhaps, of the sentiment spread by Margaret Thatcher and her government – that Britain had taken a wrong turning in 1945, with the retreat from empire and the foundation of the welfare state.

Q.3

What is the style statement made by the passage?

1 ☐ Analysis of an abstract

2 ☐ Critique on a genre

3 ☐ Abstract of a genre

4 ☐ Appreciation of an abstract

Solution:

Correct Answer : 2

The correct choice is 2

Alternate hypothetical history, as treated in the passage, is a genre, much established, though not a fashion in practice. The passage is a critique of this trend or genre. The other options can be eliminated because the passage cannot be an abstract if it is a critique.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 4 - 6: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

For a decade or more, the Spanish economic galleon has been blessed with a following wind and full sails. It has outrun the OECD average in nine of the past ten years and the euro-area standard for all of the past dozen. A country that in 1994 had an unemployment rate of almost one in five has provided work for lots of immigrants as well as many more of its natives. Almost two-fifths of net new jobs in the euro zone since the creation of the single currency have been Spanish ones. Only a few years ago, the thought of Spanish fashion chains, banks and construction companies swashbuckling their way around the globe in search of booty would have seemed preposterous. Now, as our special report describes, they are doing precisely that. Yet in home waters at least, more difficult conditions are ahead—and Spain's weaknesses are about to be exposed.

For some time two hazards have been visible. One is a giddy rise in house prices, which have climbed by 180% in the past decade, more than doubling in real terms. The market has so far been steady—property-price inflation fell to 7.2% in the year to the first quarter—but the recent collapse of a property company's share price shows that the stock market, at least, is worried. No wonder, when the market is overvalued and oversupplied and house building accounts for 7-10% of GDP, depending on your measure.

The second is the country's current-account deficit, which in absolute terms trails only that of the United States. At more than 9% of GDP, it mainly reflects Spanish business's thirst for borrowing. Lending to companies has risen by 30% in the past year. The euro zone's central bankers are fond of repeating that its members' current accounts are no more meaningful than those of Tennessee or Texas, but Spain's deficit does tell you something: how tilted towards domestic demand—including construction—the country's economy has become.

The booms in building and borrowing have been helped along by Spain's membership of the euro zone, which has made credit much cheaper for people and businesses. In the run-up to the creation of the single currency, Spain benefited as its interest rates tumbled towards German levels. Since the euro came into being, monetary conditions have remained pretty loose. Spain's inflation rate has consistently exceeded the euro-area average by a percentage point or more, making its real interest rates correspondingly lower and giving an extra puff to an economy already going at a rate of knots.

Granted, there is more to the Spanish story than the cheapness of borrowing in Euros rather than pesetas. Like Ireland, which has also had a vertiginous housing boom, Spain has a high proportion of people of the age to buy a first home and start a family. The rise in female employment has increased families' incomes and what they are willing to pay for a home. Many foreigners as well as Spaniards have had both appetite and wherewithal for a second home in the sun and by the sea. Still, cheap money has played an important part.

Now, though, Spain may be about to see the other side of life in the euro zone: interest rates are rising and the currency is climbing, just as the economy is set to slow down. Even though economists think growth stayed strong in the first quarter (perhaps 4% in the past year), it is likely to lose strength— maybe abruptly, if the housing market is unkind.

In some ways, Spain is well placed for this test. The government has run a budget surplus for the past two years (even allowing for the economic cycle) and gross debt is only around 40% of GDP, so fiscal policy can help out should the economy slow sharply. In other ways, though, it is poorly prepared. One obvious means of rebalancing the economy, devaluing the currency, is ruled out, so Spain must find another method of bringing down its real exchange rate. It will have to look hard. Wages have been hitched to the country's higher-than-average inflation rate. Productivity growth has been woeful (even though, admittedly, to some extent this reflects high employment growth). The result has been a 12% increase in unit labour costs, relative to the euro-area average, since 2000.

Spain's —dual-labour market is no model, despite its remarkable job-creation record. That as many as a third of workers are on temporary contracts suggests some flexibility. But there are so many such contracts precisely because employers find permanent workers expensive to fire—and thus to hire. Recent reforms have done too little to close the gap in costs between the two types of contract. In product markets, too, Spain should do more to loosen its economy and let in more competition. In the past few years, Germans have found that it is possible to win competitiveness in a currency union. But they have also found that it can hurt. So might the Spanish.

Q.4

Why does the author say that devaluing the currency is ruled out?

- 1 ☐ Spain has a high inflation rate
- 2 ☐ Spanish businesses have borrowed heavily and will suffer if devaluation occurs
- 3 ☐ While Spain's current account deficit is high, overall debt is moderate at 40% of GDP
- 4 ☐ Spain has taken membership of euro zone and has replaced its currency with the Euro

Solution:

Correct Answer : 4

The correct choice is 4

As mentioned Spain has adopted the Euro in place of its old currency. Since Euro is a common currency, no individual country can go for devaluation.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 4 - 6: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

For a decade or more, the Spanish economic galleon has been blessed with a following wind and full sails. It has outrun the OECD average in nine of the past ten years and the euro-area standard for all of the past dozen. A country that in 1994 had an unemployment rate of almost one in five has provided work for lots of immigrants as well as many more of its natives. Almost two-fifths of net new jobs in the euro zone since the creation of the single currency have been Spanish ones. Only a few years ago, the thought of Spanish fashion chains, banks and construction companies swashbuckling their way around the globe in search of booty would have seemed preposterous. Now, as our special report describes, they are doing precisely that. Yet in home waters at least, more difficult conditions are ahead—and Spain's weaknesses are about to be exposed.

For some time two hazards have been visible. One is a giddy rise in house prices, which have climbed by 180% in the past decade, more than doubling in real terms. The market has so far been steady—property-price inflation fell to 7.2% in the year to the first quarter—but the recent collapse of a property company's share price shows that the stock market, at least, is worried. No wonder, when the market is overvalued and oversupplied and house building accounts for 7-10% of GDP, depending on your measure.

The second is the country's current-account deficit, which in absolute terms trails only that of the United States. At more than 9% of GDP, it mainly reflects Spanish business's thirst for borrowing. Lending to companies has risen by 30% in the past year. The euro zone's central bankers are fond of repeating that its members' current accounts are no more meaningful than those of Tennessee or Texas, but Spain's deficit does tell you something: how tilted towards domestic demand—including construction—the country's economy has become.

The booms in building and borrowing have been helped along by Spain's membership of the euro zone, which has made credit much cheaper for people and businesses. In the run-up to the creation of the single currency, Spain benefited as its interest rates tumbled towards German levels. Since the euro came into being, monetary conditions have remained pretty loose. Spain's inflation rate has consistently exceeded the euro-area average by a percentage point or more, making its real interest rates correspondingly lower and giving an extra puff to an economy already going at a rate of knots.

Granted, there is more to the Spanish story than the cheapness of borrowing in Euros rather than pesetas. Like Ireland, which has also had a vertiginous housing boom, Spain has a high proportion of people of the age to buy a first home and start a family. The rise in female employment has increased families' incomes and what they are willing to pay for a home. Many foreigners as well as Spaniards have had both appetite and wherewithal for a second home in the sun and by the sea. Still, cheap money has played an important part.

Now, though, Spain may be about to see the other side of life in the euro zone: interest rates are rising and the currency is climbing, just as the economy is set to slow down. Even though economists think growth stayed strong in the first quarter (perhaps 4% in the past year), it is likely to lose strength—maybe abruptly, if the housing market is unkind.

In some ways, Spain is well placed for this test. The government has run a budget surplus for the past two years (even allowing for the economic cycle) and gross debt is only around 40% of GDP, so fiscal policy can help out should the economy slow sharply. In other ways, though, it is poorly prepared. One obvious means of rebalancing the economy, devaluing the currency, is ruled out, so Spain must find another method of bringing down its real exchange rate. It will have to look hard. Wages have been hitched to the country's higher-than-average inflation rate. Productivity growth has been woeful (even though, admittedly, to some extent this reflects high employment growth). The result has been a 12% increase in unit labour costs, relative to the euro-area average, since 2000.

Spain's —dual-labour market is no model, despite its remarkable job-creation record. That as many as a third of workers are on temporary contracts suggests some flexibility. But there are so many such contracts precisely because employers find permanent workers expensive to fire—and thus to hire. Recent reforms have done too little to close the gap in costs between the two types of contract. In product markets, too, Spain should do more to loosen its economy and let in more competition. In the past few years, Germans have found that it is possible to win competitiveness in a currency union. But they have also found that it can hurt. So might the Spanish.

Q.5

Why, according to the author have labour costs gone up in Spain?

- 1 ☐ As many as a third of workers are on temporary contracts
- 2 ☒ Wages have gone up in tandem with inflation, which has been high.
- 3 ☐ Wages for permanent workers are high and those of contract workers low
- 4 ☐ Most workers are employed in the real estate sector which is doing badly

Solution:

Correct Answer : 2

The correct choice is 2.

Look at the second largest paragraph. Wages are linked to higher than average inflation. So as inflation rises, wages also rise. Option 3 is factually true but doesn't explain why labour costs have gone up.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 4 - 6: The following passage consists of a set of three questions. Read the passage and answer the questions that follow.

For a decade or more, the Spanish economic galleon has been blessed with a following wind and full sails. It has outrun the OECD average in nine of the past ten years and the euro-area standard for all of the past dozen. A country that in 1994 had an unemployment rate of almost one in five has provided work for lots of immigrants as well as many more of its natives. Almost two-fifths of net new jobs in the euro zone since the creation of the single currency have been Spanish ones. Only a few years ago, the thought of Spanish fashion chains, banks and construction companies swashbuckling their way around the globe in search of booty would have seemed preposterous. Now, as our special report describes, they are doing precisely that. Yet in home waters at least, more difficult conditions are ahead—and Spain's weaknesses are about to be exposed.

For some time two hazards have been visible. One is a giddy rise in house prices, which have climbed by 180% in the past decade, more than doubling in real terms. The market has so far been steady—property-price inflation fell to 7.2% in the year to the first quarter—but the recent collapse of a property company's share price shows that the stock market, at least, is worried. No wonder, when the market is overvalued and oversupplied and house building accounts for 7-10% of GDP, depending on your measure.

The second is the country's current-account deficit, which in absolute terms trails only that of the United States. At more than 9% of GDP, it mainly reflects Spanish business's thirst for borrowing. Lending to companies has risen by 30% in the past year. The euro zone's central bankers are fond of repeating that its members' current accounts are no more meaningful than those of Tennessee or Texas, but Spain's deficit

does tell you something: how tilted towards domestic demand—including construction—the country's economy has become.

The booms in building and borrowing have been helped along by Spain's membership of the euro zone, which has made credit much cheaper for people and businesses. In the run-up to the creation of the single currency, Spain benefited as its interest rates tumbled towards German levels. Since the euro came into being, monetary conditions have remained pretty loose. Spain's inflation rate has consistently exceeded the euro-area average by a percentage point or more, making its real interest rates correspondingly lower and giving an extra puff to an economy already going at a rate of knots.

Granted, there is more to the Spanish story than the cheapness of borrowing in Euros rather than pesetas. Like Ireland, which has also had a vertiginous housing boom, Spain has a high proportion of people of the age to buy a first home and start a family. The rise in female employment has increased families' incomes and what they are willing to pay for a home. Many foreigners as well as Spaniards have had both appetite and wherewithal for a second home in the sun and by the sea. Still, cheap money has played an important part.

Now, though, Spain may be about to see the other side of life in the euro zone: interest rates are rising and the currency is climbing, just as the economy is set to slow down. Even though economists think growth stayed strong in the first quarter (perhaps 4% in the past year), it is likely to lose strength—maybe abruptly, if the housing market is unkind.

In some ways, Spain is well placed for this test. The government has run a budget surplus for the past two years (even allowing for the economic cycle) and gross debt is only around 40% of GDP, so fiscal policy can help out should the economy slow sharply. In other ways, though, it is poorly prepared. One obvious means of rebalancing the economy, devaluing the currency, is ruled out, so Spain must find another method of bringing down its real exchange rate. It will have to look hard. Wages have been hitched to the country's higher-than-average inflation rate. Productivity growth has been woeful (even though, admittedly, to some extent this reflects high employment growth). The result has been a 12% increase in unit labour costs, relative to the euro-area average, since 2000.

Spain's —dual-labour market is no model, despite its remarkable job-creation record. That as many as a third of workers are on temporary contracts suggests some flexibility. But there are so many such contracts precisely because employers find permanent workers expensive to fire—and thus to hire. Recent reforms have done too little to close the gap in costs between the two types of contract. In product markets, too, Spain should do more to loosen its economy and let in more competition. In the past few years, Germans have found that it is possible to win competitiveness in a currency union. But they have also found that it can hurt. So might the Spanish.

Q.6

The author is most likely to agree with which of the following regarding Spain's future?

-
- 1 ☐ Unless Spain does something about its current account deficit and the rise in housing prices, it will not be able to carry forward its economic boom.
-
- 2 ☐ Spain is bound to meet Germany's fate.
-
- 3 ☐ Spain is well placed to face the test if things go wrong.
-
- 4 ☐ There is more to the Spanish story than the cheapness of borrowing in Euros than Pesetas.
-

Solution:

Correct Answer : 1

The correct choice is 1.

The last line of the 1st Para states that —Spain's weaknesses are about to be exposed, and the 1st line of the 2nd Para states —For some time two hazards have been visiblell. These two are: rise in house prices and current-account deficit. So obviously if Spain is to take care of its weaknesses then it needs to do something about these _hazards'.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtleform of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy

proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.7

What is the purpose of the passage?

- 1 ☐ To highlight the extent of corruption in the economy today
- 2 ☐ To understand the role of government in corruption
- 3 ☐ Understanding the origin and the nature of corruption prevalent in the economy today
- 4 ☐ To highlight the faults in the system which corruption exploits

Solution:

Correct Answer : 3

The passage mainly talks about the source of corruption while identifying the way in which it is related to the government and private organizations and other activities.

- 1) This is a part of the passage and the passage also deals with systematic corruption.
- b) Other facets contributing to corruption are also discussed.
- 4) This is the purpose with which the passage is written. The faults in the system which corruption exploits are not mentioned as the primary objective

FeedBack

Bookmark

Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the

civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtle form of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.8

What is an observation of private enterprises identified to be incorrect?

1 ☐ They are governed by markets and hence less efficient thus having a lion's share in corruption

2 ☐ Private enterprises are supposed to play a dominant role in corruption at the interface between the government and the private enterprises

3 ☐ Third world governments have been alleged to have taken bribes from large companies

4 ☐ The private sector is better in terms of compensation as compared to government sector

Solution:

Correct Answer : 1

The passage states —The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around.

2) is stated in the last paragraph.

3) This is mentioned in the second paragraph.

4) is mentioned at the start of the second paragraph

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtle form of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.9

What is an assumption made in the discussion of corruption?

- 1 ☐ Private companies are held to account in places where there is a more left wing party in power
- 2 ☐ Giving mortgages to people who were known to be unable to pay back is a practice followed
- 3 ☐ Corruption occurs at the intersection of government and private agencies
- 4 ☐ Corruption is specific to each occurrence in terms of the reason behind it

Solution:

Correct Answer : 4

This is stated in the start of the first paragraph to be an incorrect assumption. 1), 2), 3) are all facts stated in the passage in the last, third and second paragraph respectively.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the

civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtle form of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.10

Which of the following statements about finance capital are true according to the passage?

- I. It is now associated with illegal activities like smuggling.
- II. It shows a lack of transparency with regards to its derivatives.
- III. It is facing a decline in the current global situation

2 ☐ Only II

3 ☐ I and III

4 ☐ All of the above

Solution:

Correct Answer : 4

I is mentioned in the fourth paragraph.

II is mentioned in third paragraph.

III is mentioned in fourth paragraph

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtle form of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be

frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.11

Why does the author believe that the sale of CDS was immoral?

- 1 ☐ The mortgage loans were made to people who were known to be financially incapable of repaying those loans
- 2 ☐ CDS were basically a form of gambling rather than financial investments
- 3 ☐ The financial risk involved in CDS was too high and ended up bankrupting financial corporations
- 4 ☐ CDS were sold to people who were not aware of the risk that they were taking on

Solution:

Correct Answer : 4

We are taking about CDS and not about sub-prime loans. So option 1 is out. The objection that the author has that buyer was not aware of the real risk involved. Option 4.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 7 – 12: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

A number of frauds have come to light. Many more may be expected. The usual statement that scams are found out during difficult times is true but banal. The question is the extent of the corruption and whether it is systemic. There has never been any systematic discussion of the importance of corruption for the functioning of the capitalist economy. It is assumed that it is not systemic and only occurs in particular countries and at particular times for special reasons. At the same time, it is hard to avoid a different conclusion when looking at the evolution of finance capital.

Corruption is inevitable at the interface between government and private enterprise. Within capitalism, the civil service or bureaucracies are worse paid and more constrained than their peers in the private sector. It

is inevitable that private enterprise will find a way of using its advantages to sway opinion within the governmental institutions. The right attempts to argue that government is necessarily inefficient and/or corrupt as compared with the private sector, because the latter is controlled by the market. In reality, it is the other way around. Even if we assume that bribery only occurs on the margins, there are more powerful ways of ensuring a contract is delivered. The fact that government officials and politicians move into highly paid positions within powerful companies is not because such people are either knowledgeable or intelligent, but, in part, because they have the right contacts. Furthermore, many civil servants/bureaucrats and businessmen live within a similar ambience so that the result is a more subtle form of influence, which can only be called corruption in a very broad sense. The fact that a number of large companies have been accused of bribing third world governments is not an accident.

In addition, the present denouement has much to do with the nature of finance capital itself and the way it has evolved. The so-called lack of transparency of the \$596 trillion of over the counter financial derivatives was itself an open invitation to fraud. Indeed one may conclude that many of them were an inducement to fraud even if technically legal. Giving mortgages to people who were known to be unable to pay back is one example. Another is the packaging off such mortgage with other more salubrious loans. The credit default swaps (CDS) were the form of financial derivatives Warren Buffet called weapons of financial mass destruction. The selling on of what amounted to a form of financial betting, without the buyer often being aware of the real risk, was morally dubious. One may perhaps ask whether the evolution of finance capital from investment in imperialism and its wars of conquest to investment in itself was not progress. At least more of the capitalist class itself lost out.

One cannot but conclude that finance capital, which itself is an aspect of the decline of the system, having entered its own decline, has shot its bolt. In conditions of decline, it is to be expected that there will be frantic efforts to raise profits by whatever means possible. Illegal sectors such as drug production, smuggling and selling had already become absorbed into financial capital. The attempts to prevent the laundering of money, particularly important since 9/11, cannot succeed against determined and wealthy proponents. While there is now a campaign against the tax havens, where money can be wiped clean of its origins, it is unlikely to be able to go very far, given the power of the wealthy and the integration of those havens in the normal operation of big business. The inspection of business accounts by auditors paid by those who are audited is, in itself, dubious but governments are loathe to change the system. Indeed, a government inspection service would open itself up to the possibility of bribery or influence, given the relatively poorer pay and long-term prospects of such government auditors.

The government/private sector interface involves the payment of taxes, the issuing of contracts by government to private enterprise, the use of consultants etc. and it is inevitable that private enterprise will play the dominant role. The examples of exorbitant charges to the military sector in the United States are part of the interrelation between the public and private sectors. The huge overruns in construction contracts have become normal. Only in particular instances are the private companies held to account, as where there is a more left wing or incorruptible party in power. The payment of taxes is more of a game for the seriously wealthy, who are able to employ prestigious accounting firms and, where necessary, tax havens.

Q.12

What is the problem identified by the author with respect to auditors?

-
- 1 ☐ Government auditing may give rise to more corruption as they are likely to be underpaid
 - 2 ☐ Auditors help the wealthy avoid taxes through various methods including tax havens
 - 3 ☐ The Auditors are paid by the very businesses that they audit, hence are amenable to influence
-

4 ● Corruption is endemic to any government private relationship including taxes and government contracts

Solution:

Correct Answer : 3

The question refers to the problem with the current system of auditors, which is that auditors are hired and paid by the very businesses that they audit.

Government auditing is an alternative which according to the author is also susceptible to bribery and influence. Hence option 3 is better than option 1.

Option 2 is wrong as it is accounting firms and not auditors that help the wealthy avoid taxes. Option 4 is outside the scope of the question. Option 3.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of

pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy.

Good luck.

Q.13

Why is that retired people require less money than active workers (estimated 65-85% of previous income)?

- 1 ☐ Retired people are living longer lives and hence face greater financial challenges
- 2 ☐ Retired people have income generating assets including own homes and don't need to set aside money for savings
- 3 ☐ Retired people tend to have lower expenses especially as children would have grown up and left home
- 4 ☐ Most retired people have Defined Benefit pension plans

Solution:

Correct Answer : 2

Option 2. The answer lies in the 2nd paragraph. Two reasons are given for the retired needing lesser income. One not needing to save money for retirement and second, that they have acquired assets which generate income, especially home equity.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy. Good luck.

Q.14

Why, according to Mr. Schieber will Social Security fail to address retirement needs of the poorest of the retired Americans?

1 ● Social security payments are based on average income for 35 years of earnings and for the poorest of those whose working life has been much lower

2 ☐ Social security payments cannot be covered by payroll taxes of working people and hence a cut in payments will have to be done

3 ☐ The savings made by the poor generates an income far lower than required

4 ☐ Most of the poor are not covered under defined benefit pension plans

Solution:

Correct Answer : 1

Option 1. Schieber explains how social security payments are calculated. The calculation is based on average of last 35 years of income. Now for people who did not earn during a part of that period, the value of income will be taken as zero and the average will fall. Option 1. Option 2 is correct to the extent that there is shortfall of funds in social security but there is no guarantee that benefits will be cut, especially for the poorest. Option 3 and 4 talk about savings and pension plans not social security.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are

holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy.

Good luck.

Q.15

What is the primary difference between Defined Benefit and Defined Contribution pension plans?

- 1 ☐ DB plans offer more income than DC plans
- 2 ☐ Under DB plans, 80% of people are adequately protected unlike DC plans where 53% are not adequately covered
- 3 ☐ DC plans require very high contributions to generate inflation adjusted income
- 4 ☐ Under DB plans, pension is linked to salary while under DC plans, pension is linked to the contribution made by person while working

Solution:

Correct Answer : 4

Option 4. The answer lies in the names itself. For DB plans the pension benefit is defined (salary linked) while in DC plans, the contribution to be made is defined and the benefit is based on the contribution made.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at

Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy.

Good luck.

Q.16

Which of the following has NOT been cited in the passage as a reason for the shortfall in income for retired Americans?

-
- 1 ☐ Loopholes in social security plans, pension is based on 35-year average income
-
- 2 ☐ Savings and contributions to DC pension plans are too low to generate adequate income
-
- 3 ☐ Longer life expectancy and higher medical expenses
-
- 4 ☐ Gap between social security payouts and payroll taxes which finance the former
-

Solution:

Correct Answer : 3

Option 3. While longer life expectancy has been mentioned in the article, medical expenses have not been cited. All other options have been cited in the passage.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to

find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy.

Good luck.

Q.17

Why does the author suggest that increasing savings be done moderately?

-
- 1 ☐ Increasing savings too fast will lead to a demand shortfall that will affect the economy negatively
-
- 2 ☐ There is strong likelihood that social security benefits might need to be cut
-
- 3 ☐ The contribution to DC plans needs to be higher to generate adequate income
-
- 4 ☐ More and more people should be brought under DB plans as opposed to DC plans
-

Solution:

Correct Answer : 1

Option 1. Refer to the last line of the passage. While increasing savings will help Americans post retirement, a drastic increase in savings will reduce demand (demand for goods/services is based on consumer spending) hence affecting the economy.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Direction for the questions 13 – 18: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Everyone knows that the baby-boomer generation is in the process of retiring, and that all those ex-hippies and punks can expect to live longer than the Americans who retired before them. But the financial challenge this poses is less well understood. Any lingering complacency ought to be exploded by two papers in the latest Journal of Retirement. The first, from the Centre for Retirement Research (CRR) at Boston College, estimates the proportion of 65-year-olds who will be able to retire without a big hit to their disposable income. Pensioners do not usually need as much money coming in as workers: for a start, they no longer need to save for retirement. The CRR estimates that 65-85% of their previous income is a

reasonable —replacement rate, depending on the type of household.

As well as private pensions, elderly Americans receive income from the federal government (in the form of Social Security, the public pension) and many earn money from their accumulated wealth, particularly by taking equity out of their houses. Even allowing for these sources of income, the CRR estimates that 52% of Americans may not be able to maintain their standard of living (which it defines as having an income that falls no more than 10% below the replacement rate).

Unsurprisingly, the biggest problems face those with no private pension at all: 68% of these Americans are expected to fall short. Those lucky enough to be covered by defined-benefit plans—in which pensions are linked to a worker's salary—have the least difficulty: only 20% are deemed at risk. Of those in defined-contribution (DC) plans—in which workers receive whatever pension pot they have accumulated by retirement—53% probably will not reach the replacement rate. The problem is that many people simply do not save enough in a DC pension. The combined contributions of employers and employees average just 11.3% of salary. This will not generate the same level of pension as a typical defined-benefit plan. The CRR found that the average retirement assets of those aged 50-59 were just \$110,000 in 2013, slightly lower than in 2010. This balance will improve over time, since DC plans are relatively new, but there is a long way to go. If pensioners take an (inflation-adjusted) 4% a year from their pot, they will need \$250,000 just to generate an income of \$10,000.

At least, you might think, Social Security will provide a basic income for the elderly. But the second paper, by Sylvester Schieber, a former chairman of the Social Security Advisory Board, points out that there are holes in the safety net. Retirement income is based on an average of every worker's highest 35 years of earnings. But if a worker was not in employment for the full 35 years—because of sickness, an inability to find work or time spent caring for children or other relatives—the missing years count as zeroes for the calculation. Mr. Schieber finds that people whose total careers lasted just 10-19 years comprise 8% of pensioners, but just over half of the poorest tenth of the elderly. Such workers could hardly have saved more for their retirement; they had barely adequate income in the first place.

That could be a looming problem, given Social Security's finances. Payroll taxes on current workers no longer exceed the benefits paid out, prompting the government to tap the surplus of past years. On current projections, this will run out in 2034. After that, the cost of pensions could still be met mainly by contributions from workers. But the politicians of the day may be forced to consider benefit cuts. Mr. Schieber thinks the Social Security system is underfunded by around 25%. If an across-the-board benefit cut of that magnitude was applied, it would hit the poorest workers hardest, since they have few alternative sources of income. At present, a 25% benefit cut would reduce the income of the median pensioner by 12.3%. But the poorest tenth would lose 18.9% of their aggregate income.

So budding pension reformers will have to solve several problems simultaneously. First, they need to stabilize Social Security while protecting (and indeed enhancing) the incomes of the poorest. That should involve some combination of higher taxes, benefit cuts for the best-paid and greater saving in the middle rungs of the income ladder—at the same time as ensuring that people do not save too much too quickly, in case the impact on demand crashes the economy. Good luck.

Q.18

Which of the following is NOT a source of Income for elderly Americans?

1 ☐ Social security payments

2 ☐ Private pension plans, either DB or DC

3 ☐ Income from acquired assets including home equity

4 ☐ Money remittances from children

Solution:

Correct Answer : 4

Option 4. All options except option 4 have been mentioned in the passage.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by

their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.19

In the context of the passage, the author would agree with the statement:

- 1 ☐ the protection of democratic institutions is a must in order to maintain individual liberty in society
- 2 ☐ individual opinions, with no impact on the larger world, can be discarded
- 3 ☐ individual opinions, at all costs, need to be protected as they can act as the pathway to truth
- 4 ☐ the role of the press, though sacrosanct, is controlled by law at all times

Solution:

Correct Answer : 3

Refer to the following lines: *If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.*

🔖 Bookmark

🔍 Answer key/Solution

These lines are in perfect resonance with option (3). The central theme of the passage revolves around individual liberty and that is the central concern of the author of the passage.

Option (1) is not mentioned in the passage.

Option (2) goes against the passage.

Option (4) is contradictory in nature. In one part, it states that the press is sacred and in the second part of the option, it counters the same sentiment

Feedback

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings

incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.20

The author gives primacy to which out of the following?

1 ☐ the rights of the individual

2 ☐ the rights of the state

3 ☐ the rights of the press

Solution:**Correct Answer : 1**

The important thing here is to understand the meaning of the word 'primacy'. It means 'the state of being first in importance'. The author regards the rights of the individual as the most important. The rights of the press are important but they are not primary. This is why the answer is option (1) and not option (4)

[FeedBack](#)[Bookmark](#)[Answer key/Solution](#)

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives

to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.21

According to the author of the passage, the liberty of the press does not need to be defended any longer because:

- 1 ☐ the need of the press enjoying liberty has been discussed in detail and it has been successfully enforced by the writers and thinkers of the time
- 2 ☐ the danger of the law being used against the press is non-existent in the present day world
- 3 ☐ No argument is needed for permitting the legislature or an executive to prescribe opinions to the press
- 4 ☐ both (1) and (2)

Solution:

Correct Answer : 4

Refer to the highlighted portions: *The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public.*

🔖 Bookmark

🔍 Answer key/Solution

The two portions in bold highlight the reasons why the press no longer needs to be worried. Option (3) simply picks a line from paragraph. This line simply re-states that the press is free but it does not provide reasons for the same.

FeedBack

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the

passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.22

According to the author of the passage, if the opinion of the government is in agreement with the voice of the people:

- 1 ☐ then the government is justified to use coercion, though it should place some checks and balances
- 2 ☐ even then the government is not justified for it to use coercion
- 3 ☐ then the government should identify individual opinions which are discordant in nature
- 4 ☐ then the government should make sure that no individual opinions are there that go against it

Solution:

Correct Answer : 2

Refer to the lines: *Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.*

🔖 Bookmark

🔍 Answer key/Solution

These clearly point to option (2) as the correct answer.

Option (1) goes against these lines and options (3) and (4) are not mentioned in the passage.

FeedBack

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.23

To what does the author refer to by the usage of the word the mischief?

- 1 ☐ The virtues and the vices inherent to human nature
- 2 ☐ The inherent predilection of humans to force upon others their own views
- 3 ☐ The inherent tendency of man to hunger unrestrainedly after power
- 4 ☐ The inherent tendency of mankind to reduce the power of the individual

Solution:

Correct Answer : 2

Refer to the first paragraph's —The disposition of mankind, whether as rulers or as fellow- citizens, to impose their own opinions and inclinations as a rule of conduct on others. The author talks about how this tendency is growing

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Directions for Questions 19- 24: The following passage consists of a set of six questions. Read the passage and answer the questions that follow.

Apart from the peculiar tenets of individual thinkers, there is also in the world at large an increasing

inclination to stretch unduly the powers of society over the individual, both by the force of opinion and even by that of legislation: and as the tendency of all the changes taking place in the world is to strengthen society, and diminish the power of the individual, this encroachment is not one of the evils which tend spontaneously to disappear, but, on the contrary, to grow more and more formidable. The disposition of mankind, whether as rulers or as fellow-citizens, to impose their own opinions and inclinations as a rule of conduct on others, is so energetically supported by some of the best and by some of the worst feelings incident to human nature, that it is hardly ever kept under restraint by anything but want of power; and as the power is not declining, but growing, unless a strong barrier of moral conviction can be raised against the mischief, we must expect, in the present circumstances of the world, to see it increase.

It will be convenient for the argument, if, instead of at once entering upon the general thesis, we confine ourselves in the first instance to a single branch of it, on which the principle here stated is, if not fully, yet to a certain point, recognised by the current opinions. This one branch is the Liberty of Thought: from which it is impossible to separate the cognate liberty of speaking and of writing. Although these liberties, to some considerable amount, form part of the political morality of all countries which profess religious toleration and free institutions, the grounds, both philosophical and practical, on which they rest, are perhaps not so familiar to the general mind, nor so thoroughly appreciated by many even of the leaders of opinion, as might have been expected. Those grounds, when rightly understood, are of much wider application than to only one division of the subject, and a thorough consideration of this part of the question will be found the best introduction to the remainder.

The time, it is to be hoped, is gone by, when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed, against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers, that it needs not be specially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety; and, speaking generally, it is not, in constitutional countries, to be apprehended, that the government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their government. The power itself is illegitimate.

The best government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion, than when in opposition to it. If all mankind minus one, were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

Q.24

The peculiar evil of silencing the expression of an opinion is that it is robbing the human race.

Why does the author call it the peculiar evil?

I) It is peculiar because it robs not only the existing generation but also the ones to come.

II) It is peculiar because it harms the one silencing the expression of opinion more than it does the one expressing it.

III) It is peculiar because if the opinion has merit then it is lost to an error of judgment.

IV) It is peculiar because if the opinion lacks credibility then the opportunity to strengthen the opposing argument is lost

1 ☐ I and II

2 ☐ II and III

3 ☐ III and IV

4 ☐ All of the above

Solution:

Correct Answer : 3

Refer to the last part of the last paragraph...it clearly explains the peculiar evil of silencing the right to freedom of expressing opinion...If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.25

The following question consists of a set of five sentences. These sentences need to be arranged in a coherent manner to create a meaningful paragraph. Type in the correct order of the sentences in the space provided below the question.

1. Another three planes were still in the area trying to help solve the nearly 2-week- old aviation mystery, and another was on the way to look for two large objects a satellite detected floating off the southwest coast of Australia about halfway to the desolate islands of the Antarctic.

2. Two more Orions and an ultra-long-range Bombardier Global Express were still scouring the area 2,300 kilometers (1,400 miles) from Western Australia, according to the Australian Maritime Safety Authority.

3. A search on Thursday with four planes in cloud and rain found nothing, and so far efforts on Friday were the same, with a Royal Australian Air Force P3 Orion plane flying back to Australia.

4. The area in the southern Indian Ocean is so remote it takes aircraft four hours to fly there and four hours back, and leaves them only about two hours to search.

5. The satellite discovery raised new hope of finding the vanished jet and sent another emotional jolt to the families of the 239 people aboard.

Solution:

Correct Answer : 14532

Although 1 as a starter seems improbable we must remember this paragraph is a part of a larger passage. Off the southwest coast of Australia refers to the Indian Ocean which is linked to 4. Next 53 are linked by the idea of raising hopes and then finding nothing. 2 comes after 3 as it talks about two more.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.26

The following question consists of a set of five sentences. These sentences need to be arranged in a coherent manner to create a meaningful paragraph. Type in the correct order of the sentences in the space provided below the question.

1. Nadella, who was appointed CEO of the \$78-billion company in February, talked about the enormous opportunities in cloud computing.
2. "It is amazing though, to think of the advancements in technology over the past few years and the opportunity for developers in India today."
3. "Having grown up in India, the idea that I would have the opportunity to talk to all of you as CEO of Microsoft was beyond my wildest dreams. Admittedly, my interests at that time were a bit more focused on cricket than on technology," Nadella said, and went on to add.
4. "We are at a pivotal time in our industry - living in and developing for a mobile- first, cloud-first world," he said.
5. He believes India is a cloud-first and mobile-first country, with cloud emerging as a potential game-changer to deliver applications on smart devices at a fraction of the cost of traditional computing.

Solution:

Correct Answer : 32154

3 acts as an introduction of who Nadella is. Next comes 2 where we he talks about advancements in India, which is broad based about technology opportunities in general. Next is 1 which starts off the discussion on cloud-computing. 5 explains what Nadella thinks about India. 4 supports 5.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.27

The following question consists of a set of five sentences. These sentences need to be arranged in a coherent manner to create a meaningful paragraph. Type in the correct order of the sentences in the space provided below the question.

1. According to the findings of a study by Gaadi.com, Maruti 800 enjoys a high demand in the used car segment with more and more Chennai consumers buying and selling this classic model.
2. Amongst the cars from Maruti, Maruti 800 emerged as a clear winner followed by Swift, Alto and Wagon R.
3. Amongst the other hatchbacks, Indica led the way followed closely Hyundai's Santro Xing and i20.
4. Namma Chennai loves its old world charm. Nothing else can explain its continuing love affair with the Maruti 800 in the city's car market where this trusted car continues to enjoy top billing.
5. Conducted across eight cities, the study looked at the supply trends of used cars and the corresponding demand for the same, highlighting the buying trends of the used car consumers.
6. Discussions in Chennai revealed that Maruti and Tata from the hatchback segment topped the charts as the most preferred used car brands with equally high demand and supply.

Solution:

Correct Answer : 31452

3 introduces Chennai's love for Maruti cars. 1 starts the talk about the study conducted and 4 talks about where the study was conducted. 5 talks of preferences in Chennai for Maruti and Tata and 2 follows with details of car models from the above brands.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.28

The following question consists of a set of four sentences. These sentences need to be arranged in a coherent manner to create a meaningful paragraph. Type in the correct order of the sentences in the space provided below the question.

1. This coolness arises partly from opponents who have the law on their side and partly from the incredulity of men.
2. The best way to fully appreciate the scope of challenge we face in shifting to a Clean Energy System is to read Machiavelli's The Prince.
3. The innovator has for enemies all those who have done well under the old conditions and lukewarm defenders in those who may do well under the new.
4. It ought to be remembered that there is nothing more perilous than to take a lead in introducing a new order of things.

Solution:

Correct Answer : 2431

2-4 is a strong link because the quoted statement follows from what he has read. The 3-1 link is brought about the coolness of those who oppose the innovator.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.29

The following question consists of a paragraph from which the last sentence has been deleted. From the given options, choose the one which completes the paragraph in a logical and coherent manner. Type the number of that option in the space provided below the question.

The truth is that India's economy tends to rise or fall with the global economy, not with the party in power. For virtually every five-year period since 1980, Indian GDP has grown at a rate about 1.5 percentage points faster than the emerging world average. This somewhat faster growth has mainly come about because India is a low-income economy and it is easier to grow fast from a low base. Over the course of the last three governments, India's average GDP growth rate has ranked somewhere between 40th and 50th place out of the 150 nations in the emerging world, whether Congress or BJP was in charge. The last BJP-led government took power in 1999 and presided over a five-year period of rather standard Indian performance. India posted average annual GDP growth of 5.8% — ranking 50th in the emerging world — with inflation of 3.9% — ranking 70th in the emerging world. This record represented little change from the previous 20 years.

1. So it is hard to see why BJP should provoke much criticism, or bragging.
2. So it is clear why the BJP government is still basking in the glory of the yester-years.
3. So it is clear that the Indian public are impressed with the BJP government.
4. So it is clear that whichever government you choose, there will hardly be any further growth.

Solution:

Correct Answer : 1

The first sentence is actually the conclusion of the paragraph which gives us data on the growth of GDP —whether Congress or BJP was in charge. Hence neither government can claim to be responsible for the growth. So neither criticism nor accolade can be laid at either of the governments' doors. Option 4 tries to predict that the future will also follow the same trend, irrespective of government, which is far fetched.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.30

The following question consists of a paragraph from which the last sentence has been deleted. From the given options, choose the one which completes the paragraph in a logical and coherent manner. Type the number of that option in the space provided below the question.

In Ukraine, the West is reaping the whirlwind it has sowed in Russia in the past two decades. Flush with its triumph in the Cold War, the West treated Russia as a fallen enemy who would never rise again and whose interests and sensitivities could be safely ignored. They cheated Mikhail Gorbachev when they solemnly promised him not to move NATO borders to the East if he agreed to the unification of Germany.

1. Putin could not allow Ukraine to slip out of his control because it is the birthplace of Russian civilization.
 2. Putin had a far stronger geo-political compulsion to interfere, the all- to-real prospect of Ukraine joining the NATO.
 3. Along with pursuing military encirclement of Russia and the line of deceptions, the West has sought to disrupt Russia's efforts for the economic re-integration of ex- Soviet states.
 4. The stakes for Putin are very high. If Ukraine slides into his control his popularity graph will shoot up but if not there will be a surge of discontent on the home front.
-

Solution:

Correct Answer : 3

The entire paragraph focuses on the role played by the West. Thus 3 is a natural continuation. The Putin thread line takes the argument on a different plane altogether

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.31

The following question consists of a paragraph from which the last sentence has been deleted. From the given options, choose the one which completes the paragraph in a logical and coherent manner. Type the number of that option in the space provided below the question.

According to her memoirs, her most vivid childhood memories were not of London but of Cornwall, where the family spent every summer. These family holidays and impressions of the landscape informed the fiction she wrote in later years. The sudden loss of her parents led to the first of her several nervous breakdowns; she was even briefly institutionalized. Although she was able to take courses of study, some even at degree level, throughout her life, Woolf was plagued by periodic mood swings and associated illnesses.

1. Unlike the limited educational resources available to the girls in her family, her brothers were sent on to Cambridge, a difference she would resent for the rest of her life.
2. Though such chronic instability often affected her social life, her literary productivity continued unabated, with few breaks.
3. She married writer Leonard Woolf, and despite their low material status, the couple shared a close bond throughout their marriage.
4. Woolf is considered a major innovator in the English language.

Solution:

Correct Answer : 2

The passage talks about writer Virginia Woolf, painting a picture of her childhood followed by her personal losses and the toll they took on her health, including progressive mental instabilities. Option 2 offers a befitting conclusion, as it continues on the note of her instability and its ill effects, and how despite severe health problems, her writing/literary accomplishments sustained and grew. Option 1 opens up a completely different/fresh subject and does nothing to conclude the passage: it talks about the gender discrimination shown in her family that left her with a lifelong grudge. Option 3 talks about whom she married and how their marriage was happy: this could be a somewhat irrelevant but happy conclusion, but it is not as good as option 2 which rounds off the main themes covered in the passage. Option 4 is not appropriate; it sounds more like an opening sentence for a discussion of Woolf's literary abilities and accomplishments, and does not touch upon the theme of the passage at all.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.32

The following question consists of a paragraph from which the last sentence has been deleted. From the given options, choose the one which completes the paragraph in a logical and coherent manner. Type the number of that option in the space provided below the question.

By propounding —Darwinism, even scientists and science writers perpetuate an impression that evolution is about unique man, unique book, and unique —theory. The ninth-century Buddhist master Lin Chi said, —If you meet the Buddha on the road, kill him. The point is that making a master teacher into a sacred fetish misses the essence of his teaching. So let us now kill Darwin. That all life is related by common ancestry, and that populations change form over time, are the broad strokes and fine brushwork of evolution. But Darwin was late to the party.

1. All Darwin perceived was that selection must work in nature, too.
2. Scientists often attribute the success of a phenomenon to an individual, thus mitigating the magnitude of that particular discovery or innovation.
3. That's why Darwin must go.
4. His grandfather, and others, believed new species evolved.

Solution:

Correct Answer : 4

The paragraph talks about how a philosophy is attributed to an individual. It further gives the author's point of view that by indulging in such a practice often the essence of the teaching propounded by that larger than life' figure is missed. Option (4) aptly carries forward the theme of the paragraph by giving a suitable example that evolution' existed even before Darwin . Note the last line Darwin was late to the party'.

 **Bookmark**

 **Answer key/Solution**

FeedBack

Q.33

In this question, five sentences are given. Of these, four sentences can be logically sequenced to make a coherent paragraph. One of the sentences does not belong to the paragraph. Type in the sentence number that doesn't fit into the paragraph.

1. Property prices have cooled down significantly in the last one year.
 2. So has this led to a lower rental bill for tenants?
 3. Sukhinder, a broker in the NCR region says that once the buildings in the construction phase hit the market, a reverse swing is predictable.
 4. Many existing homes also remain unavailable to tenants as procedures involved in sewing up a contract get stuck in bureaucratic quagmires.
 5. Commonfloor.com, a real estate portal show that rents are up by over 10% in Delhi and Mumbai.
-

Solution:

Correct Answer : 4

Rentals is focus, 1 and 2 and 5 show that cooling property prices have not resulted in lower rentals, but 4 suggests that as additional houses come into the market, the trend will reverse. The hassles in getting a rent contract made is irrelevant. (nothing about this explains the changes in last 1 year)

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.34

In this question, four sentences are given. Of these, three sentences can be logically sequenced to make a coherent paragraph. One of the sentences does not belong to the paragraph. Type in the sentence number that doesn't fit into the paragraph.

1. As one agent puts it, "Anyone can sell a Patterson or a Rowling".
2. They are a breed unto their own, having come of age only over the last decade or so, but on their way to becoming indispensable to some of the big players.
3. Essentially acting as agents for agents, sub-agents provide a measure of how an agent's books might work in various markets.
4. 2013 was a good year, given the sales figures recorded for digitalized copies of many of the classics we've all grown up reading.

Solution:

Correct Answer : 4

All sentences except 4 talk about the growing breed of sub-agents in the publishing industry. Sentence 1 contains two author names, which if recognized will give away that the context is book publishing/selling. Sentence 2 talks about sub-agents being a newly formed breed whose popularity is on the rise. Sentence 3 defines sub-agents'. Sentence 4 is the odd one out because it only talks about a year that saw good sales figures for e- books (of one kind of books). Although broadly, the subject in 4 is still publishing/books, it is not touching upon the topic of agents or sub-agents, which features directly in all the other three sentences.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Sec 2

Directions for questions 35 to 38: Answer the questions on the basis of the information given below.

The table given below shows the per capita CO₂ emission and populations of six countries during the period 2013-2016. The total CO₂ emission (in million tonnes) of the world in 2013, 2014, 2015 and 2016 was 30700, 31433, 32155 and 32042 respectively.

Country	Per Capita CO ₂ emission (in tonnes)				Population (in millions)			
	2013	2014	2015	2016	2013	2014	2015	2016
China	4.4	4.4	4.9	5.2	1314	1321	1326	1350.8
Germany	9.8	9.8	-	9.6	81.6	82.4	80.5	81.4
India	0.3	0.3	0.4	0.4	1095	1129	1140	1166
Japan	1.1	1.1	1	1.3	124.6	126.1	127.2	127.6
Russia	0.9	0.9	0.9	1	138.8	140.2	141.2	142.6
USA	0.2	0.2	0.2	0.2	298.4	301.4	304	306.5

Q.35

The CO₂ emission of China was approximately what percent of the total CO₂ emission of the world during the given period?

1 ☐ 10

2 ☐ 20

3 ☐ 12

4 ☐ 28

Solution:

Correct Answer : 2

The total CO₂ emission (in million tonnes) of the world during the given period

$$= 30700 + 31433 + 32155 + 32042 = 126330$$

The total CO₂ emission (in million tonnes) of China during the give period

$$= 4.4 \times (1314 + 1321) + 4.9 \times 1326 + 5.2 \times 1350.8$$

$$= 25115.56$$

Hence, the required percentage

$$= \frac{25115.56}{126330} \times 100 \approx 20.$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 35 to 38: Answer the questions on the basis of the information given below.

The table given below shows the per capita CO₂ emission and populations of six countries during the period 2013-2016. The total CO₂ emission (in million tonnes) of the world in 2013, 2014, 2015 and 2016 was 30700, 31433, 32155 and 32042 respectively.

Country	Per Capita CO ₂ emission (in tonnes)				Population (in millions)			
	2013	2014	2015	2016	2013	2014	2015	2016
China	4.4	4.4	4.9	5.2	1314	1321	1326	1350.8
Germany	9.8	9.8	-	9.6	81.6	82.4	80.5	81.4
India	0.3	0.3	0.4	0.4	1095	1129	1140	1166
Japan	1.1	1.1	1	1.3	124.6	126.1	127.2	127.6
Russia	0.9	0.9	0.9	1	138.8	140.2	141.2	142.6
USA	0.2	0.2	0.2	0.2	298.4	301.4	304	306.5

Q.36

The CO₂ emission of Russia and Japan put together was approximately what percent of that of India and USA put together during the given period?

1 ☐ 60

2 ☐ 45

3 ☐ 75

4 ☐ 70

Solution:

Correct Answer : 1

The total CO₂ emission (in million tonnes) of Russia and Japan put together

$$= [0.9 \times (138.8 + 140.2 + 141.2) + 1 \times 142.6] + [1.1 \times (124.6 + 126.1) + 1 \times 127.2 + 1.3 \times 127.6] = 1089.3$$

The total CO₂ emission (in million tonnes) of India and USA put together

$$= [0.3 \times (1095 + 1129) + 0.4 \times (1140 + 1166)] + [0.2 \times (298.4 + 301.4 + 304 + 306.5)] = 1831.66$$

Hence, the required percentage

$$= \frac{1089.3}{1831.66} \times 100 \approx 60.$$

Feedback

 **Bookmark**

 **Answer key/Solution**

Directions for questions 35 to 38: Answer the questions on the basis of the information given below.

The table given below shows the per capita CO₂ emission and populations of six countries during the period 2013-2016. The total CO₂ emission (in million tonnes) of the world in 2013, 2014, 2015 and 2016 was 30700, 31433, 32155 and 32042 respectively.

Country	Per Capita CO ₂ emission (in tonnes)				Population (in millions)			
	2013	2014	2015	2016	2013	2014	2015	2016
China	4.4	4.4	4.9	5.2	1314	1321	1326	1350.8
Germany	9.8	9.8	-	9.6	81.6	82.4	80.5	81.4
India	0.3	0.3	0.4	0.4	1095	1129	1140	1166
Japan	1.1	1.1	1	1.3	124.6	126.1	127.2	127.6
Russia	0.9	0.9	0.9	1	138.8	140.2	141.2	142.6
USA	0.2	0.2	0.2	0.2	298.4	301.4	304	306.5

Q.37

If the CO₂ emission of Germany was 2.4% of the total CO₂ emission of the world during the given period, then what was the per capita CO₂ emission (in tonnes) of Germany in 2015?

1 ☐ 7

2 ☐ 10

3 ☐ 9

4 ☐ 8

Solution:

Correct Answer : 4

Let the per capita CO₂ emission (in tonnes) of Germany in 2015 be 'x'.

$$\therefore 9.8 \times (81.6 + 82.4) + 80.5 \times x + 9.6 \times 81.4$$

$$= \frac{2.4}{100} \times 126330 \Rightarrow x \approx 8.$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 35 to 38: Answer the questions on the basis of the information given below.

The table given below shows the per capita CO₂ emission and populations of six countries during the period 2013-2016. The total CO₂ emission (in million tonnes) of the world in 2013, 2014, 2015 and 2016 was 30700, 31433, 32155 and 32042 respectively.

Country	Per Capita CO ₂ emission (in tonnes)				Population (in millions)			
	2013	2014	2015	2016	2013	2014	2015	2016
China	4.4	4.4	4.9	5.2	1314	1321	1326	1350.8
Germany	9.8	9.8	-	9.6	81.6	82.4	80.5	81.4
India	0.3	0.3	0.4	0.4	1095	1129	1140	1166
Japan	1.1	1.1	1	1.3	124.6	126.1	127.2	127.6
Russia	0.9	0.9	0.9	1	138.8	140.2	141.2	142.6
USA	0.2	0.2	0.2	0.2	298.4	301.4	304	306.5

Q.38

During the year 2014, which country was responsible for the second highest CO₂ emission?

1 ☐ USA

2 ☐ Germany

3 ☐ Russia

4 ☐ China

Solution:

Correct Answer : 2

CO₂ emission during 2014

China = 5812.4

Germany = 807.52

India = 338.7

Japan = 138.71

Russia = 126.18

USA = 60.28

Feedback

🔖 Bookmark

🔑 Answer key/Solution

Directions for questions 39 to 42: Answer the questions on the basis of the information given below.

Five persons namely Sachin, Rahul, Sourav, Yuvi and Virat competed in an adventure sport event comprising five task – Rafting, Swimming, Running, Point ball and High jump. Each person had to perform each of the five tasks in the event. To complete each of the five tasks, a person is given 60 minutes. There were two parameters – position secure and time taken to complete the task – based on which points were awarded. For each task, the points awarded for securing first, second, third, fourth and fifth position were 50, 40, 30, 20 and 10 respectively. In no task, two or more person secure the same position. The person who completed a given task in least time secured the first position and the person who completed the same task in maximum time secure the fifth position. If a person completed a task in $(60 - n)$ minutes, where 'n' is a whole number, he was awarded 'n' additional points apart from the points he was awarded for securing a particular position. After completion of the five tasks, the person who got the maximum number of points i.e., the sum of the points scored in the five tasks, was declared the winner of the event. The time taken by the persons to finish the tasks is given in the table provided below, with some numbers missing.

Task Person	Rafting	Swimming	Running	Point Ball	High Jump
Sachin	30	52	58		46
Rahul	45		57	56	58
Sourav		45	42	39	52
Yuvi	28	35	48	42	
Virat	52	31		57	33

- Yuvi, who got a total of 286 points in the five tasks put together, won the event.
- Rahul, who got a total of 178 points in the five tasks put together, came last in the event.
- In Rafting, the sum of the points awarded to the five persons was 254.
- In Running, the sum of the points awarded to the five persons was 193.
- The sum of the total points across the five tasks put together by the five persons was 1126.

Q.39

How much time (in minutes) did Rahul take to complete Swimming?

Solution:

Correct Answer : 26

Bookmark

Answer key/Solution

It can be noted that in each task 150 points came from different positions secured by the five friends. Therefore, for each task total points is $50 + 40 + 30 + 20 + 10 = 150$.

Let the time saved by Sourav in completing Rafting be 'a'. In Rafting number of minutes saved is $(30 + 15 + 32 + 8 + a)$ mins. This whole quantity will be $85 + a + 150 = 254 \Rightarrow a = 19$. So, Sourav took 41 mins to completing Rafting. Similarly, it can be computed that Virat took 52 mins to complete Running.

Now it can be concluded that Rahul secured 4th position in Rafting as well as Running. In "Point ball", Rahul secured either 3rd or 4th position and Sourav & Yuvi secured 1st and 2nd position respectively. Similarly, in High jump, Rahul secured either 4th or 5th position. On the basis of position Rahul would have got 70, 80 or 90 points from these four games and on the basis of minutes saved he would have got 24 points. In total Rahul would have got 94, 104 or 114 points from these four games and thus he would have got 84, 74 or 64 points from Swimming (as his total point is 178). In Swimming the last digit of points that Rahul got was '4' and thus he must have taken 6, 16, 26, 36, 46 or 56 mins to complete Swimming. If Rahul finished Swimming in 6, 16 or 26 mins, he must have secured 1st position. If he finished Swimming in 36 minutes he must have secured 3rd position. In case of 46 & 56 mins he must have secured 4th & 5th position respectively. By going through the outline he have 84 was a possible point that Rahul got in Swimming. Therefore, he took 26 minutes to complete Swimming. Similarly, it can be concluded that Yuvi took 51 minutes to finish High jump.

Let the time saved in Point ball by Sachin be 'x'. Now the total time saved in Rafting, Swimming, Running, Point ball and High jump = $94 + 111 + 53 + 60 + 46 + x = 364 + x$.

$$\therefore 364 + x = 1126 - 150 \times 5$$

$$\Rightarrow x = 12$$

Therefore, Time taken by Sachin to finish Point ball = 48.

The drawn conclusion can be seen in this table given below:

Tasks	Rafting	Swimming	Running	Point Ball	High Jump	Total Points
Sachin	30	52	58	48	46	178
Rahul	45	26	57	56	58	
Sourav	41	45	42	39	52	
Yuvi	28	35	48	42	51	286
Virat	52	31	52	57	33	1126
Total	254	261	193	208	210	

Rahul takes 26 minutes for swimming.

Feedback

Directions for questions 39 to 42: Answer the questions on the basis of the information given below.

Five persons namely Sachin, Rahul, Sourav, Yuvi and Virat competed in an adventure sport event comprising five task – Rafting, Swimming, Running, Point ball and High jump. Each person had to perform each of the five tasks in the event. To complete each of the five tasks, a person is given 60 minutes. There were two parameters – position secure and time taken to complete the task – based on which points were awarded. For each task, the points awarded for securing first, second, third, fourth and fifth position were 50, 40, 30, 20 and 10 respectively. In no task, two or more person secure the same position. The person who completed a given task in least time secured the first position and the person who completed the same task in maximum time secure the fifth position. If a person completed a task in $(60 - n)$ minutes, where 'n' is a whole number, he was awarded 'n' additional points apart from the points he was awarded for securing a particular position. After completion of the five tasks, the person who got the maximum number of points i.e., the sum of the points scored in the five tasks, was declared the winner of the event. The time taken by the persons to finish the tasks is given in the table provided below, with some numbers missing.

Task Person	Rafting	Swimming	Running	Point Ball	High Jump
Sachin	30	52	58		46
Rahul	45		57	56	58
Sourav		45	42	39	52
Yuvi	28	35	48	42	
Virat	52	31		57	33

- Yuvi, who got a total of 286 points in the five tasks put together, won the event.
- Rahul, who got a total of 178 points in the five tasks put together, came last in the event.
- In Rafting, the sum of the points awarded to the five persons was 254.
- In Running, the sum of the points awarded to the five persons was 193.
- The sum of the total points across the five tasks put together by the five persons was 1126.

Q.40

How much time (in minutes) did Sachin take to complete Point ball?

Solution:

Correct Answer : 48

Bookmark

Answer key/Solution

It can be noted that in each task 150 points came from different positions secured by the five friends. Therefore, for each task total points is $50 + 40 + 30 + 20 + 10 = 150$.

Let the time saved by Sourav in completing Rafting be 'a'. In Rafting number of minutes saved is $(30 + 15 + 32 + 8 + a)$ mins. This whole quantity will be $85 + a + 150 = 254 \Rightarrow a = 19$. So, Sourav took 41 mins to completing Rafting. Similarly, it can be computed that Virat took 52 mins to complete Running.

Now it can be concluded that Rahul secured 4th position in Rafting as well as Running. In "Point ball", Rahul secured either 3rd or 4th position and Sourav & Yuvi secured 1st and 2nd position respectively. Similarly, in High jump, Rahul secured either 4th or 5th position. On the basis of position Rahul would have got 70, 80 or 90 points from these four games and on the basis of minutes saved he would have got 24 points. In total Rahul would have got 94, 104 or 114 points from these four games and thus he would have got 84, 74 or 64 points from Swimming (as his total point is 178). In Swimming the last digit of points that Rahul got was '4' and thus he must have taken 6, 16, 26, 36, 46 or 56 mins to complete Swimming. If Rahul finished Swimming in 6, 16 or 26 mins, he must have secured 1st position. If he finished Swimming in 36 minutes he must have secured 3rd position. In case of 46 & 56 mins he must have secured 4th & 5th position respectively. By going through the outline he have 84 was a possible point that Rahul got in Swimming. Therefore, he took 26 minutes to complete Swimming. Similarly, it can be concluded that Yuvi took 51 minutes to finish High jump.

Let the time saved in Point ball by Sachin be 'x'. Now the total time saved in Rafting, Swimming, Running, Point ball and High jump = $94 + 111 + 53 + 60 + 46 + x = 364 + x$.

$$\therefore 364 + x = 1126 - 150 \times 5$$

$$\Rightarrow x = 12$$

Therefore, Time taken by Sachin to finish Point ball = 48.

The drawn conclusion can be seen in this table given below:

Tasks	Rafting	Swimming	Running	Point Ball	High Jump	Total Points
Sachin	30	52	58	48	46	178
Rahul	45	26	57	56	58	
Sourav	41	45	42	39	52	
Yuvi	28	35	48	42	51	286
Virat	52	31	52	57	33	1126
Total	254	261	193	208	210	

Sachin takes 48 minutes for Point ball.

Feedback

Directions for questions 39 to 42: Answer the questions on the basis of the information given below.

Five persons namely Sachin, Rahul, Sourav, Yuvi and Virat competed in an adventure sport event comprising five task – Rafting, Swimming, Running, Point ball and High jump. Each person had to perform each of the five tasks in the event. To complete each of the five tasks, a person is given 60 minutes. There were two parameters – position secure and time taken to complete the task – based on which points were awarded. For each task, the points awarded for securing first, second, third, fourth and fifth position were 50, 40, 30, 20 and 10 respectively. In no task, two or more person secure the same position. The person who completed a given task in least time secured the first position and the person who completed the same task in maximum time secure the fifth position. If a person completed a task in $(60 - n)$ minutes, where 'n' is a whole number, he was awarded 'n' additional points apart from the points he was awarded for securing a particular position. After completion of the five tasks, the person who got the maximum number of points i.e., the sum of the points scored in the five tasks, was declared the winner of the event. The time taken by the persons to finish the tasks is given in the table provided below, with some numbers missing.

Task Person	Rafting	Swimming	Running	Point Ball	High Jump
Sachin	30	52	58		46
Rahul	45		57	56	58
Sourav		45	42	39	52
Yuvi	28	35	48	42	
Virat	52	31		57	33

- Yuvi, who got a total of 286 points in the five tasks put together, won the event.
- Rahul, who got a total of 178 points in the five tasks put together, came last in the event.
- In Rafting, the sum of the points awarded to the five persons was 254.
- In Running, the sum of the points awarded to the five persons was 193.
- The sum of the total points across the five tasks put together by the five persons was 1126.

Q.41

How much time (in minutes) did Yuvi take to complete High jump?

Solution:

Correct Answer : 51

Bookmark

Answer key/Solution

It can be noted that in each task 150 points came from different positions secured by the five friends. Therefore, for each task total points is $50 + 40 + 30 + 20 + 10 = 150$.

Let the time saved by Sourav in completing Rafting be 'a'. In Rafting number of minutes saved is $(30 + 15 + 32 + 8 + a)$ mins. This whole quantity will be $85 + a + 150 = 254 \Rightarrow a = 19$. So, Sourav took 41 mins to completing Rafting. Similarly, it can be computed that Virat took 52 mins to complete Running.

Now it can be concluded that Rahul secured 4th position in Rafting as well as Running. In "Point ball", Rahul secured either 3rd or 4th position and Sourav & Yuvi secured 1st and 2nd position respectively. Similarly, in High jump, Rahul secured either 4th or 5th position. On the basis of position Rahul would have got 70, 80 or 90 points from these four games and on the basis of minutes saved he would have got 24 points. In total Rahul would have got 94, 104 or 114 points from these four games and thus he would have got 84, 74 or 64 points from Swimming (as his total point is 178). In Swimming the last digit of points that Rahul got was '4' and thus he must have taken 6, 16, 26, 36, 46 or 56 mins to complete Swimming. If Rahul finished Swimming in 6, 16 or 26 mins, he must have secured 1st position. If he finished Swimming in 36 minutes he must have secured 3rd position. In case of 46 & 56 mins he must have secured 4th & 5th position respectively. By going through the outline he have 84 was a possible point that Rahul got in Swimming. Therefore, he took 26 minutes to complete Swimming. Similarly, it can be concluded that Yuvi took 51 minutes to finish High jump.

Let the time saved in Point ball by Sachin be 'x'. Now the total time saved in Rafting, Swimming, Running, Point ball and High jump = $94 + 111 + 53 + 60 + 46 + x = 364 + x$.

$$\therefore 364 + x = 1126 - 150 \times 5$$

$$\Rightarrow x = 12$$

Therefore, Time taken by Sachin to finish Point ball = 48.

The drawn conclusion can be seen in this table given below:

Tasks	Rafting	Swimming	Running	Point Ball	High Jump	Total Points
Sachin	30	52	58	48	46	178
Rahul	45	26	57	56	58	
Sourav	41	45	42	39	52	
Yuvi	28	35	48	42	51	286
Virat	52	31	52	57	33	1126
Total	254	261	193	208	210	

Yuvi takes 51 minutes for High Jump.

Feedback

Directions for questions 39 to 42: Answer the questions on the basis of the information given below.

Five persons namely Sachin, Rahul, Sourav, Yuvi and Virat competed in an adventure sport event comprising five task – Rafting, Swimming, Running, Point ball and High jump. Each person had to perform each of the five tasks in the event. To complete each of the five tasks, a person is given 60 minutes. There were two parameters – position secure and time taken to complete the task – based on which points were awarded. For each task, the points awarded for securing first, second, third, fourth and fifth position were 50, 40, 30, 20 and 10 respectively. In no task, two or more person secure the same position. The person who completed a given task in least time secured the first position and the person who completed the same task in maximum time secure the fifth position. If a person completed a task in $(60 - n)$ minutes, where 'n' is a whole number, he was awarded 'n' additional points apart from the points he was awarded for securing a particular position. After completion of the five tasks, the person who got the maximum number of points i.e., the sum of the points scored in the five tasks, was declared the winner of the event. The time taken by the persons to finish the tasks is given in the table provided below, with some numbers missing.

Task Person	Rafting	Swimming	Running	Point Ball	High Jump
Sachin	30	52	58		46
Rahul	45		57	56	58
Sourav		45	42	39	52
Yuvi	28	35	48	42	
Virat	52	31		57	33

- Yuvi, who got a total of 286 points in the five tasks put together, won the event.
- Rahul, who got a total of 178 points in the five tasks put together, came last in the event.
- In Rafting, the sum of the points awarded to the five persons was 254.
- In Running, the sum of the points awarded to the five persons was 193.
- The sum of the total points across the five tasks put together by the five persons was 1126.

Q.42

What was the total number of points scored by Sachin in the five tasks put together?

Solution:

Correct Answer : 196

Bookmark

Answer key/Solution

It can be noted that in each task 150 points came from different positions secured by the five friends. Therefore, for each task total points is $50 + 40 + 30 + 20 + 10 = 150$.

Let the time saved by Sourav in completing Rafting be 'a'. In Rafting number of minutes saved is $(30 + 15 + 32 + 8 + a)$ mins. This whole quantity will be $85 + a + 150 = 254 \Rightarrow a = 19$. So, Sourav took 41 mins to completing Rafting. Similarly, it can be computed that Virat took 52 mins to complete Running.

Now it can be concluded that Rahul secured 4th position in Rafting as well as Running. In "Point ball", Rahul secured either 3rd or 4th position and Sourav & Yuvi secured 1st and 2nd position respectively. Similarly, in High jump, Rahul secured either 4th or 5th position. On the basis of position Rahul would have got 70, 80 or 90 points from these four games and on the basis of minutes saved he would have got 24 points. In total Rahul would have got 94, 104 or 114 points from these four games and thus he would have got 84, 74 or 64 points from Swimming (as his total point is 178). In Swimming the last digit of points that Rahul got was '4' and thus he must have taken 6, 16, 26, 36, 46 or 56 mins to complete Swimming. If Rahul finished Swimming in 6, 16 or 26 mins, he must have secured 1st position. If he finished Swimming in 36 minutes he must have secured 3rd position. In case of 46 & 56 mins he must have secured 4th & 5th position respectively. By going through the outline he have 84 was a possible point that Rahul got in Swimming. Therefore, he took 26 minutes to complete Swimming. Similarly, it can be concluded that Yuvi took 51 minutes to finish High jump.

Let the time saved in Point ball by Sachin be 'x'. Now the total time saved in Rafting, Swimming, Running, Point ball and High jump = $94 + 111 + 53 + 60 + 46 + x = 364 + x$.

$$\therefore 364 + x = 1126 - 150 \times 5$$

$$\Rightarrow x = 12$$

Therefore, Time taken by Sachin to finish Point ball = 48.

The drawn conclusion can be seen in this table given below:

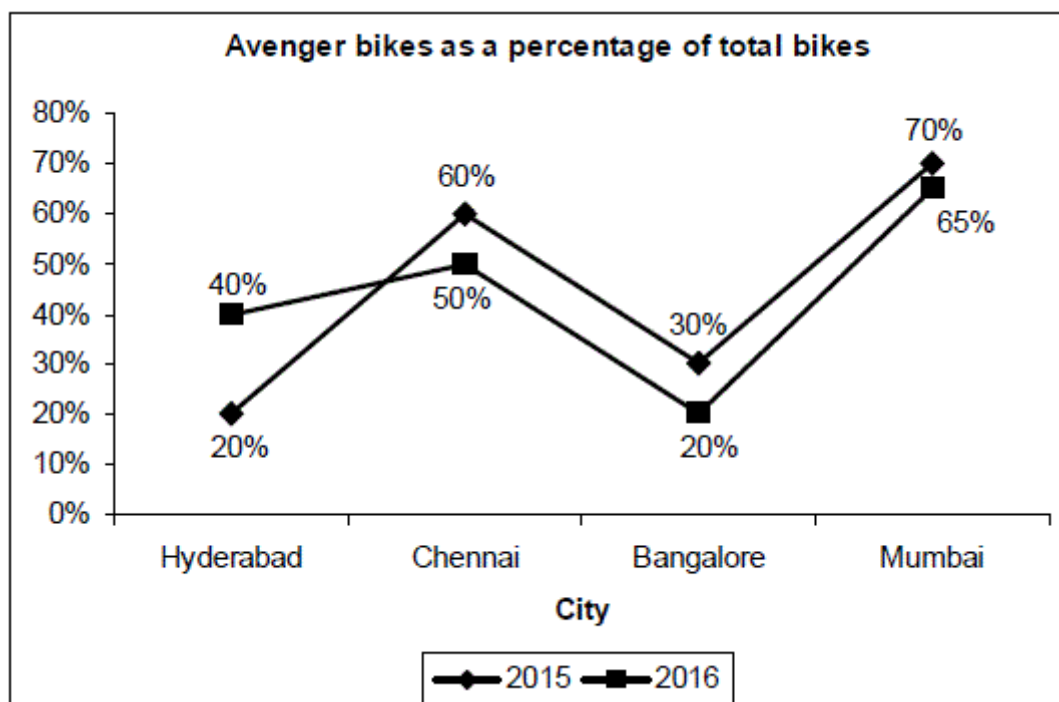
Tasks	Rafting	Swimming	Running	Point Ball	High Jump	Total Points
Sachin	30	52	58	48	46	178
Rahul	45	26	57	56	58	
Sourav	41	45	42	39	52	
Yuvi	28	35	48	42	51	286
Virat	52	31	52	57	33	1126
Total	254	261	193	208	210	

Sachin scored a total of 196 points.

Feedback

Directions for questions 43 to 46: Answer the questions on the basis of the information given below.

Bajaj has four showrooms one each in Hyderabad, Bangalore, Mumbai and Chennai. Each showroom displays two types of bikes – Avenger and Pulsar. The following line graph gives the number of Avenger bikes in each of the four showrooms as a percentage of total number of two types of bikes in that showrooms for 2 consecutive years – 2015 and 2016.



It is also known that:

- In 2016, the number of Pulsar bikes in each of the four showrooms was the same as it was in 2015 in that showroom.
- In 2016, the number of two types of bikes put together in each of the 4 showrooms was one out of 210, 420 and 840.
- In 2016, at least one of the showrooms had 840 bikes, at least one had 420 bikes and at least one had 210 bikes.
- In 2015, the number of two types of bikes put together in one of the showrooms were 630.

Q.43

Which of the following showrooms could have 210 bikes in 2016?

- 1 ☐ Hyderabad
- 2 ☐ Bangalore
- 3 ☐ Chennai
- 4 ☐ Mumbai

Solution:

Correct Answer : 2

Bookmark

Answer key/Solution

It is given that number of Pulsar bikes was the same in 2015 & 2016.

Let the total number of bikes in Hyderabad showroom in 2015 be $100x$.

\therefore No. of Avenger bikes in Hyderabad showroom in 2015 = $20x$

and No. of Pulsar bikes in Hyderabad showroom in 2015 = $80x$

\therefore No. of Pulsar bikes in Hyderabad showroom in 2016 = $80x$
(which is 60% of total number of bikes in 2016)

Hence, total number of bikes in Hyderabad showroom in 2016 = $133.33x$.

This indicates there was an increase of 33.33% in the number of bikes in Hyderabad showroom in 2016 over that in 2015.

Hence, the ratio of total number of bikes in Hyderabad showroom in 2015 and 2016 is 3 : 4.

Let the total number of bikes in Hyderabad showroom in 2015 be $3x$.

Then, total number of bikes in Hyderabad showroom in 2016 = $4x$.

Similarly, we can find these numbers for other cities and the same can be tabulated as below:

Showroom	Total bikes in 2015	Total bikes in 2016
(1) Hyderabad	$3x$	$4x$
(2) Chennai	$5y$	$4y$
(3) Bangalore	$8z$	$7z$
(4) Mumbai	$7w$	$6w$

Now, we have to find which showroom had 630 bikes in 2015. If Hyderabad showroom had 630 bikes, then total number of

bikes in 2016 in the same city = $630 \times \frac{4x}{3x} = 840$ (Possible)

If Chennai showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{4y}{5y}$ (Not possible since not among 840, 420, 210)

If Bangalore showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{7z}{8z}$ (Not possible for same above reason).

If Mumbai showroom had 630 bikes, then total number of bikes

in 2016 = $630 \times \frac{6w}{7w}$ (Not possible)

\therefore Hyderabad showroom had 630 bikes in 2015 and 840 bikes in 2016.

Going by the options,

For Chennai, number of bikes in 2015 = $210 \times \frac{5}{4}$ (Not possible)

For Bangalore, number of bikes in 2015 = $210 \times \frac{8}{7}$
= 240 (Possible)

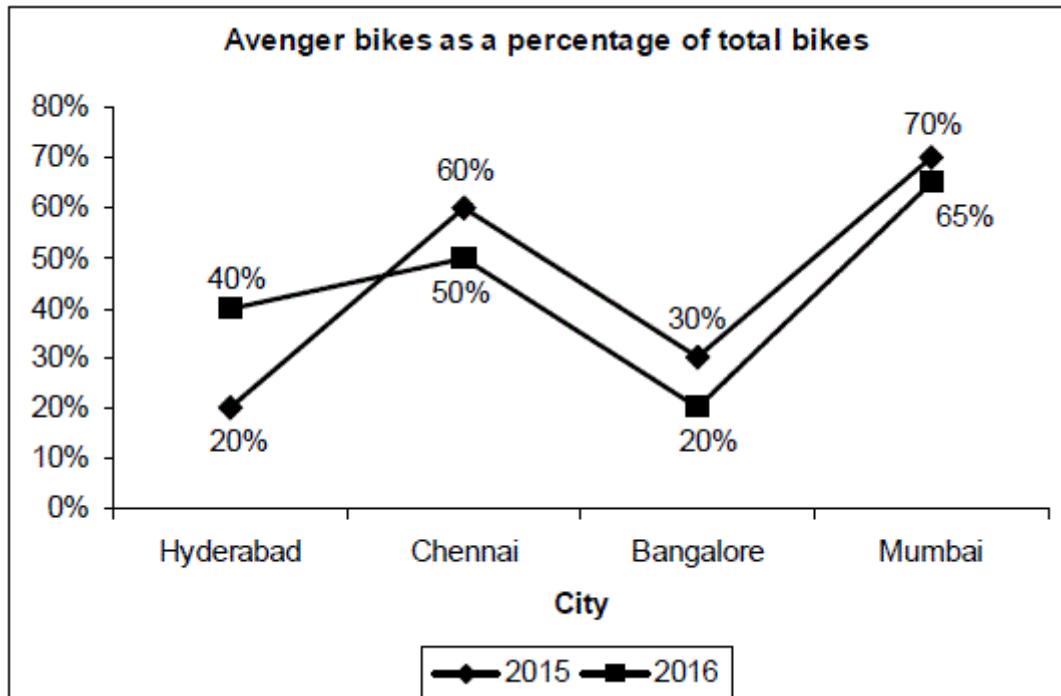
For Mumbai, number of bikes in 2015 = $210 \times \frac{7}{6} = 245$
(Not possible)

So, only Bangalore could have 210 bikes in 2016.

FeedBack

Directions for questions 43 to 46: Answer the questions on the basis of the information given below.

Bajaj has four showrooms one each in Hyderabad, Bangalore, Mumbai and Chennai. Each showroom displays two types of bikes – Avenger and Pulsar. The following line graph gives the number of Avenger bikes in each of the four showrooms as a percentage of total number of two types of bikes in that showrooms for 2 consecutive years – 2015 and 2016.



It is also known that:

- In 2016, the number of Pulsar bikes in each of the four showrooms was the same as it was in 2015 in that showroom.
- In 2016, the number of two types of bikes put together in each of the 4 showrooms was one out of 210, 420 and 840.
- In 2016, at least one of the showrooms had 840 bikes, at least one had 420 bikes and at least one had 210 bikes.
- In 2015, the number of two types of bikes put together in one of the showrooms were 630.

Q.44

It is known that showrooms of Hyderabad and Mumbai had the same number of bikes in the year 2016, then which of the following must have been the number of two types of bikes put together in Chennai showroom in 2016?

1 ☐ 840

2 ☐ 420

3 ☐ 210

4 ☐ Cannot be determined.

Solution:

Correct Answer : 2

It is given that number of Pulsar bikes was the same in 2015 & 2016.

Let the total number of bikes in Hyderabad showroom in 2015 be $100x$.

\therefore No. of Avenger bikes in Hyderabad showroom in 2015 = $20x$
and No. of Pulsar bikes in Hyderabad showroom in 2015 = $80x$

\therefore No. of Pulsar bikes in Hyderabad showroom in 2016 = $80x$
(which is 60% of total number of bikes in 2016)

Hence, total number of bikes in Hyderabad showroom in 2016 = $133.33x$.

This indicates there was an increase of 33.33% in the number of bikes in Hyderabad showroom in 2016 over that in 2015.

Hence, the ratio of total number of bikes in Hyderabad showroom in 2015 and 2016 is 3 : 4.

Let the total number of bikes in Hyderabad showroom in 2015 be $3x$.

Then, total number of bikes in Hyderabad showroom in 2016 = $4x$.

Similarly, we can find these numbers for other cities and the same can be tabulated as below:

Showroom	Total bikes in 2015	Total bikes in 2016
(1) Hyderabad	$3x$	$4x$
(2) Chennai	$5y$	$4y$
(3) Bangalore	$8z$	$7z$
(4) Mumbai	$7w$	$6w$

Now, we have to find which showroom had 630 bikes in 2015. If Hyderabad showroom had 630 bikes, then total number of

bikes in 2016 in the same city = $630 \times \frac{4x}{3x} = 840$ (Possible)

If Chennai showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{4y}{5y}$ (Not possible since not among 840, 420, 210)

If Bangalore showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{7z}{8z}$ (Not possible for same above reason).

If Mumbai showroom had 630 bikes, then total number of bikes

in 2016 = $630 \times \frac{6w}{7w}$ (Not possible)

\therefore Hyderabad showroom had 630 bikes in 2015 and 840 bikes in 2016.

We saw above, Hyderabad had 840 bikes in 2016.

\therefore Mumbai also had 840 bikes in 2016.

Now, Chennai had either 210 or 420 bikes in 2016.

If Chennai had 210 bikes, in 2016.

Therefore in 2015, Chennai had $210 \times \frac{5}{4}$ bikes, which is not possible.

Thus, required number of bikes = 420.

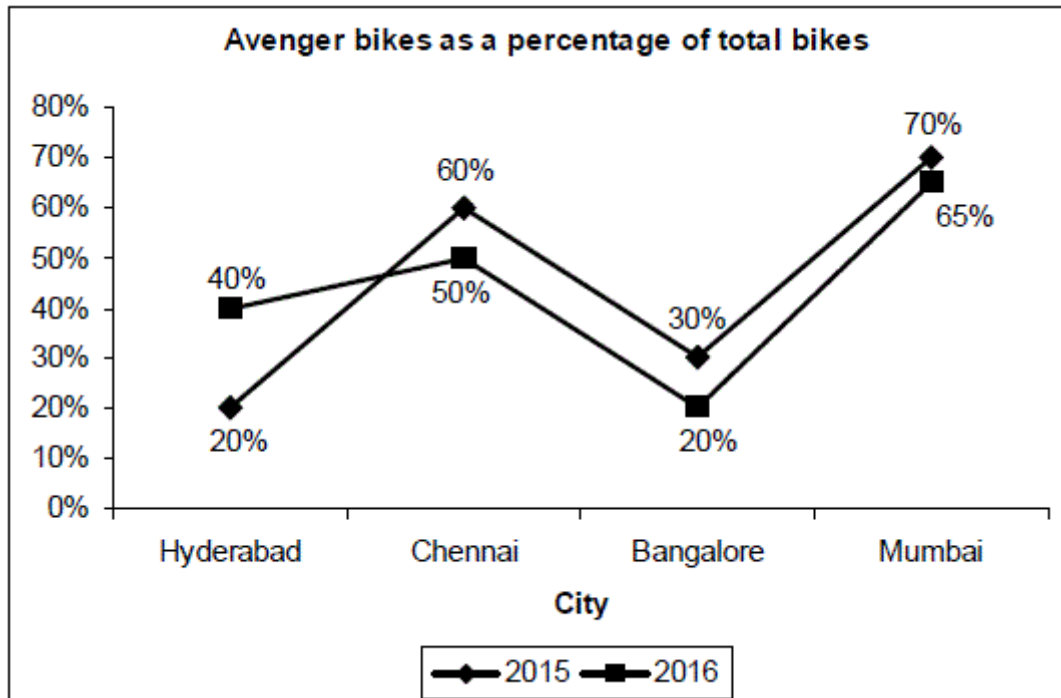
 **Bookmark**

 **Answer key/Solution**

FeedBack

Directions for questions 43 to 46: Answer the questions on the basis of the information given below.

Bajaj has four showrooms one each in Hyderabad, Bangalore, Mumbai and Chennai. Each showroom displays two types of bikes – Avenger and Pulsar. The following line graph gives the number of Avenger bikes in each of the four showrooms as a percentage of total number of two types of bikes in that showrooms for 2 consecutive years – 2015 and 2016.



It is also known that:

- In 2016, the number of Pulsar bikes in each of the four showrooms was the same as it was in 2015 in that showroom.
- In 2016, the number of two types of bikes put together in each of the 4 showrooms was one out of 210, 420 and 840.
- In 2016, at least one of the showrooms had 840 bikes, at least one had 420 bikes and at least one had 210 bikes.
- In 2015, the number of two types of bikes put together in one of the showrooms were 630.

Q.45

If showrooms of Hyderabad and Chennai had the same number of bikes in 2016, then which of the following must have been the total number of two types of bikes put together in Mumbai showroom in 2015?

1 ☐ 490

2 ☐ 245

3 ☐ 980

4 ☐ 540

Solution:**Correct Answer : 1**

It is given that number of Pulsar bikes was the same in 2015 & 2016.

Let the total number of bikes in Hyderabad showroom in 2015 be $100x$.

\therefore No. of Avenger bikes in Hyderabad showroom in 2015 = $20x$
and No. of Pulsar bikes in Hyderabad showroom in 2015 = $80x$

\therefore No. of Pulsar bikes in Hyderabad showroom in 2016 = $80x$
(which is 60% of total number of bikes in 2016)

Hence, total number of bikes in Hyderabad showroom in 2016 = $133.33x$.

This indicates there was an increase of 33.33% in the number of bikes in Hyderabad showroom in 2016 over that in 2015.

Hence, the ratio of total number of bikes in Hyderabad showroom in 2015 and 2016 is 3 : 4.

Let the total number of bikes in Hyderabad showroom in 2015 be $3x$.

Then, total number of bikes in Hyderabad showroom in 2016 = $4x$.

Similarly, we can find these numbers for other cities and the same can be tabulated as below:

Showroom	Total bikes in 2015	Total bikes in 2016
(1) Hyderabad	$3x$	$4x$
(2) Chennai	$5y$	$4y$
(3) Bangalore	$8z$	$7z$
(4) Mumbai	$7w$	$6w$

Now, we have to find which showroom had 630 bikes in 2015. If Hyderabad showroom had 630 bikes, then total number of

bikes in 2016 in the same city = $630 \times \frac{4x}{3x} = 840$ (Possible)

If Chennai showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{4y}{5y}$ (Not possible since not among 840, 420, 210)

If Bangalore showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{7z}{8z}$ (Not possible for same above reason).

If Mumbai showroom had 630 bikes, then total number of bikes

in 2016 = $630 \times \frac{6w}{7w}$ (Not possible)

\therefore Hyderabad showroom had 630 bikes in 2015 and 840 bikes in 2016.

Hyderabad & Chennai had 840 bikes each in 2016.

Mumbai cannot had 210 bikes in 2016 as explained earlier.

\therefore Mumbai must have had 420 bikes in 2016.

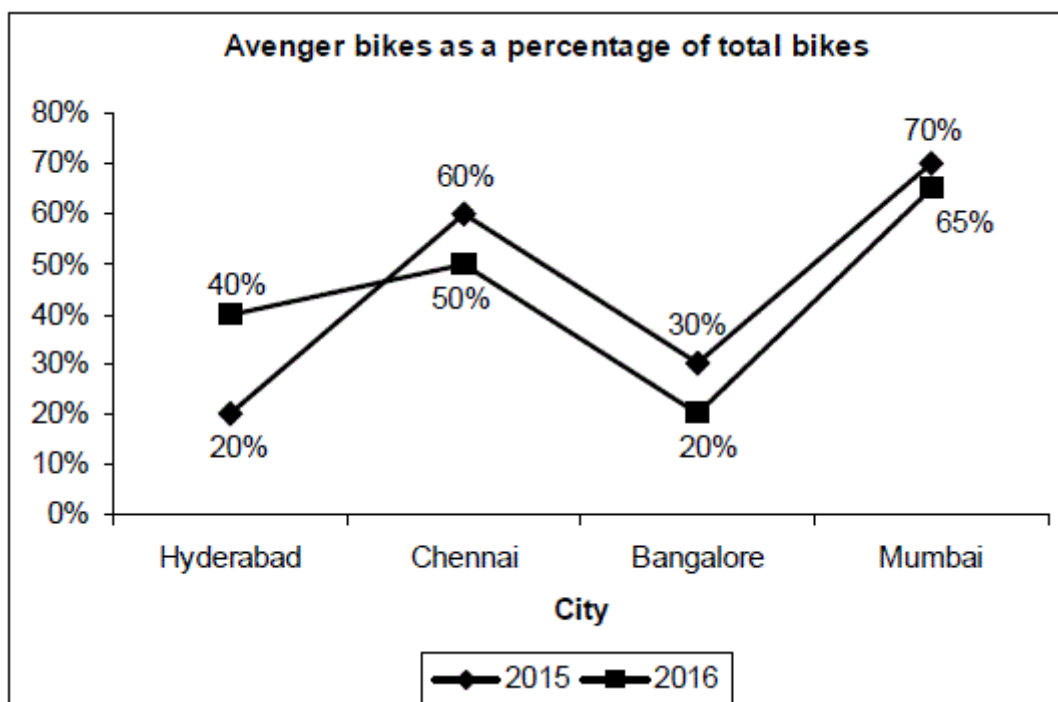
The number of bikes in Mumbai showroom in 2015

= $420 \times \frac{7}{6} = 490$ bikes.

[Bookmark](#)[Answer key/Solution](#)[FeedBack](#)

Directions for questions 43 to 46: Answer the questions on the basis of the information given below.

Bajaj has four showrooms one each in Hyderabad, Bangalore, Mumbai and Chennai. Each showroom displays two types of bikes – Avenger and Pulsar. The following line graph gives the number of Avenger bikes in each of the four showrooms as a percentage of total number of two types of bikes in that showrooms for 2 consecutive years – 2015 and 2016.



It is also known that:

- In 2016, the number of Pulsar bikes in each of the four showrooms was the same as it was in 2015 in that showroom.
- In 2016, the number of two types of bikes put together in each of the 4 showrooms was one out of 210, 420 and 840.
- In 2016, at least one of the showrooms had 840 bikes, at least one had 420 bikes and at least one had 210 bikes.
- In 2015, the number of two types of bikes put together in one of the showrooms were 630.

Q.46

Which of the following could be a total number of Avenger bikes in the four showrooms put together in 2015?

1 ☐ 1345

2 ☐ 1768

3 ☐ 1199

4 ☐ 1271

Solution:

Correct Answer : 3

Bookmark

Answer key/Solution

It is given that number of Pulsar bikes was the same in 2015 & 2016.

Let the total number of bikes in Hyderabad showroom in 2015 be $100x$.

\therefore No. of Avenger bikes in Hyderabad showroom in 2015 = $20x$
and No. of Pulsar bikes in Hyderabad showroom in 2015 = $80x$

\therefore No. of Pulsar bikes in Hyderabad showroom in 2016 = $80x$
(which is 60% of total number of bikes in 2016)

Hence, total number of bikes in Hyderabad showroom in 2016 = $133.33x$.

This indicates there was an increase of 33.33% in the number of bikes in Hyderabad showroom in 2016 over that in 2015.

Hence, the ratio of total number of bikes in Hyderabad showroom in 2015 and 2016 is 3 : 4.

Let the total number of bikes in Hyderabad showroom in 2015 be $3x$.

Then, total number of bikes in Hyderabad showroom in 2016 = $4x$.

Similarly, we can find these numbers for other cities and the same can be tabulated as below:

Showroom	Total bikes in 2015	Total bikes in 2016
(1) Hyderabad	$3x$	$4x$
(2) Chennai	$5y$	$4y$
(3) Bangalore	$8z$	$7z$
(4) Mumbai	$7w$	$6w$

Now, we have to find which showroom had 630 bikes in 2015. If Hyderabad showroom had 630 bikes, then total number of

bikes in 2016 in the same city = $630 \times \frac{4x}{3x} = 840$ (Possible)

If Chennai showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{4y}{5y}$ (Not possible since not among 840, 420, 210)

If Bangalore showroom had 630 bikes, then total number of

bikes in 2016 = $630 \times \frac{7z}{8z}$ (Not possible for same above reason).

If Mumbai showroom had 630 bikes, then total number of bikes

in 2016 = $630 \times \frac{6w}{7w}$ (Not possible)

\therefore Hyderabad showroom had 630 bikes in 2015 and 840 bikes in 2016.

Number of Avenger bikes in Hyderabad in 2015 = 20% of 630 = 126

In 2015 number of Avenger bikes in Bangalore showroom = 30% of 240 = 72.

Mumbai either had 420 or 840 bikes in 2015. Then number of Avengers bikes in Mumbai showroom = 70% of 490 or 70% of 980 = 343 or 686.

Chennai can store only 420 or 840. In 2015 number of Avenger = 60% of 525 or 60% of 1050 = 315 or 630. Possible values of number of Avenger bikes in 2015 across the 4 showrooms is:

$$126 + 72 + 343 + 630 = 1171,$$

$$126 + 72 + 343 + 315 = 856,$$

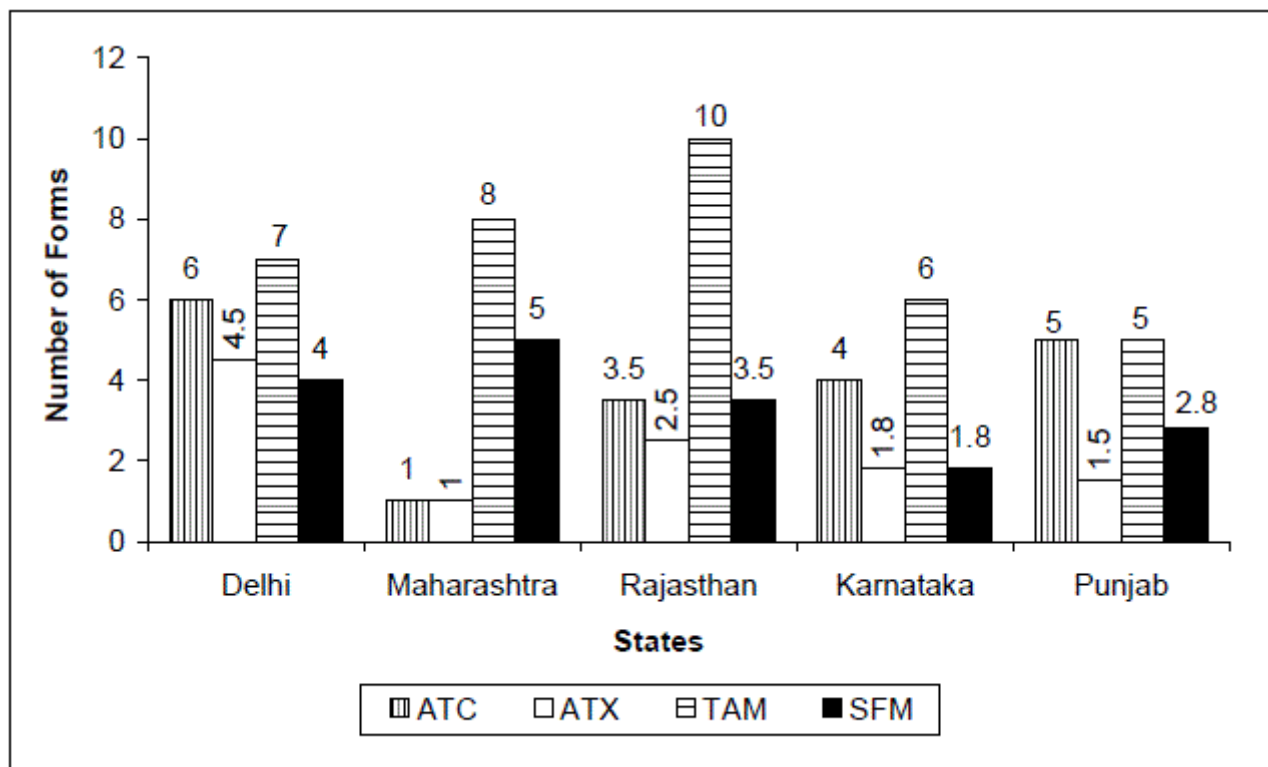
$$126 + 72 + 686 + 315 = 1199,$$

$$\text{or, } 126 + 72 + 686 + 630 = 1514.$$

FeedBack

Directions for questions 47 to 50: Answer the questions on the basis of the information given below.

The following bar graph provides information about the number of forms (in 000's) sold for four different MBA entrance tests namely ATC, ATX, TAM and SFM, in 5 different states of India, in August 2015. The price at which each form of ATC, ATX, TAM and SFM was sold was Rs. 1300, Rs. 1000, Rs. 700 and Rs. 1100 respectively. Assume that these are the only five states in India where the forms of the above mentioned MBA entrance tests were sold and no other form except the forms of the mentioned tests were sold in the given states.



Q.47

In August 2015, for which MBA entrance test was the revenue generated through the sales of forms in Rajasthan the second lowest?

1 ☐ ATC

2 ☐ ATX

3 ☐ SFM

4 ☐ TAM

Solution:**Correct Answer : 3**

Percentage contribution of Rajasthan in the revenue generated by the sale of ATC forms

$$= \left(\frac{3.5}{19.5} \right) \times 100 = 17.94\%$$

Percentage contribution of Rajasthan in the revenue generated by the sale of ATX forms

$$= \left(\frac{2.5}{11.3} \right) \times 100 = 22.12\%$$

Percentage contribution of Rajasthan in the revenue generated by the sale of TAM forms

$$= \left(\frac{10}{36} \right) \times 100 = 27.77\%$$

Percentage contribution of Rajasthan in the revenue generated by the sale of SFM forms

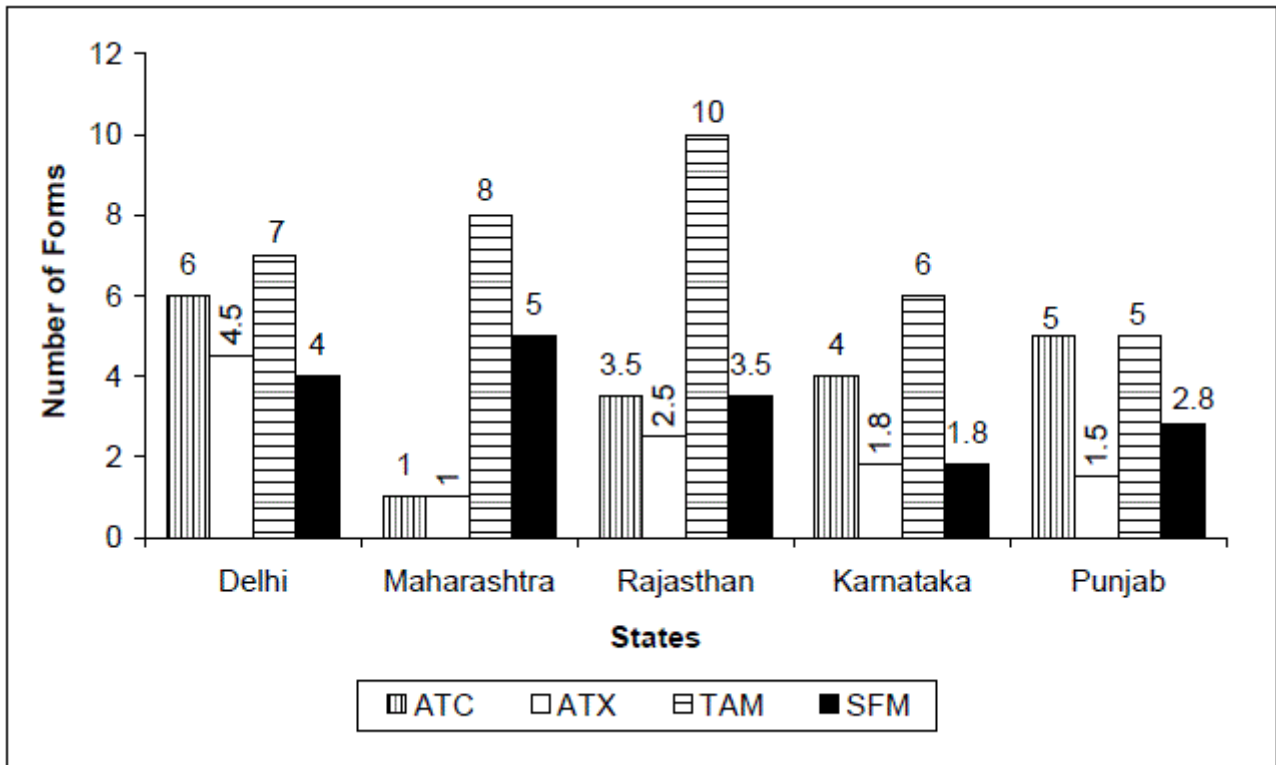
$$= \left(\frac{3.5}{17.1} \right) \times 100 = 20.46\%$$

Hence, in August 2015, the MBA entrance test for which the revenue contribution of Rajasthan is second lowest is SFM.

[FeedBack](#)[Bookmark](#)[Answer key/Solution](#)

Directions for questions 47 to 50: Answer the questions on the basis of the information given below.

The following bar graph provides information about the number of forms (in 000's) sold for four different MBA entrance tests namely ATC, ATX, TAM and SFM, in 5 different states of India, in August 2015. The price at which each form of ATC, ATX, TAM and SFM was sold was Rs. 1300, Rs. 1000, Rs. 700 and Rs. 1100 respectively. Assume that these are the only five states in India where the forms of the above mentioned MBA entrance tests were sold and no other form except the forms of the mentioned tests were sold in the given states.



Q.48

If the number of forms sold for ATX in August 2016 increased by 25% compared to that in August 2015 and the total revenue generated through the sales of forms for the four tests put together in August 2016 increased by 15% compared to that in August 2015, then what was the approximate percentage change in the price of an ATX form in August 2016 over that in August 2015? (Assume that the price and the number of forms sold for the mentioned tests other than ATX remained the same in August 2016.)

1 ☐ 66

2 ☐ 55

3 ☐ 51

4 ☐ 48

Solution:

Correct Answer : 1

Total revenue (in thousands) generated through the sale of the forms of the mentioned tests in August 2015

$$= \text{Rs.}(19.5 \times 1300 + 11.3 \times 1000 + 36 \times 700 + 17.1 \times 1100) = \text{Rs.}80660.$$

Total revenue (in thousands) generated through the sale of the forms of the mentioned tests in August 2016 = Rs.(1.15 × 80660) = Rs.92759

Revenue generated (in thousands) through the sale of ATX forms in 2015 = Rs.11300

Revenue generated (in thousands) through the sale of ATX forms in 2016 = Rs. 11300 + Rs. 12099 = Rs.23399

Total number of ATX forms sold in August 2016 = $1.25 \times 11300 = 14125$

$$\text{Price of an ATX form in August 2016} = \text{Rs.} \left(\frac{23399}{14125} \right) = \text{Rs.}1656.56$$

Required percentage change = 65.65%.

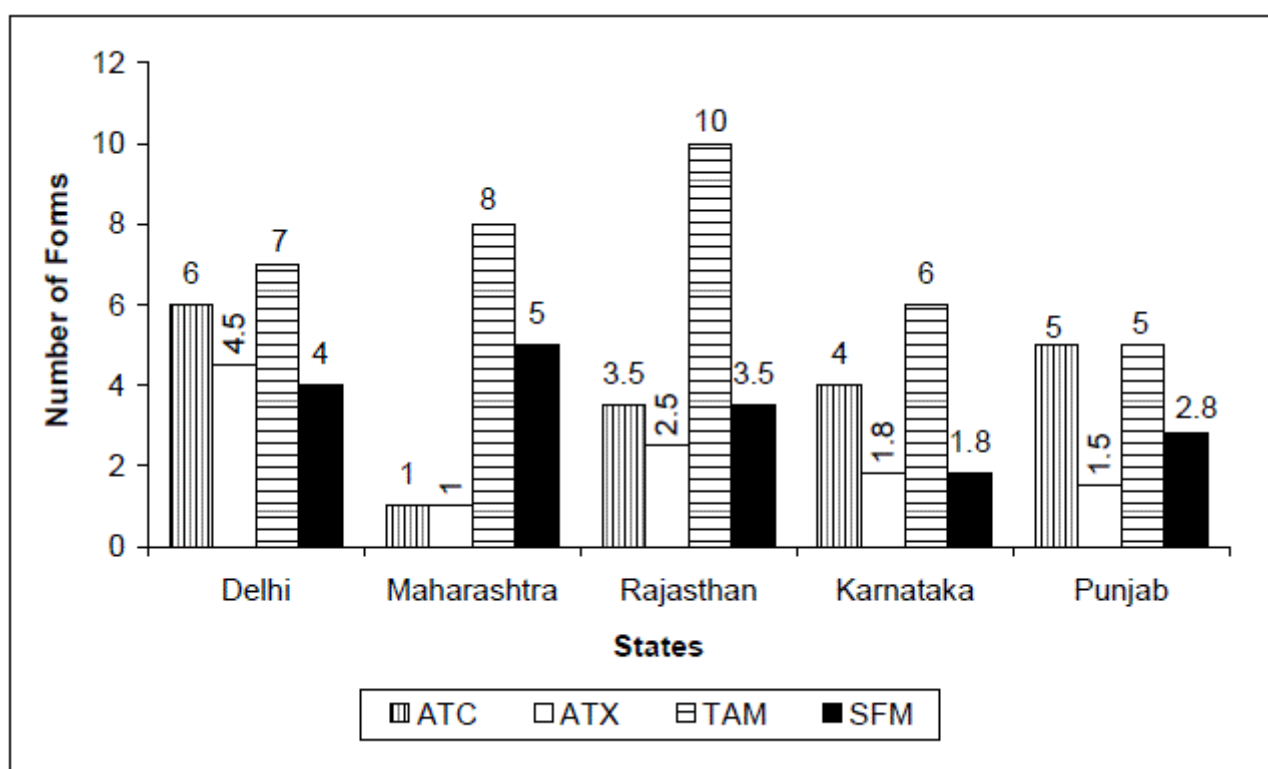
Feedback

Bookmark

Answer key/Solution

Directions for questions 47 to 50: Answer the questions on the basis of the information given below.

The following bar graph provides information about the number of forms (in 000's) sold for four different MBA entrance tests namely ATC, ATX, TAM and SFM, in 5 different states of India, in August 2015. The price at which each form of ATC, ATX, TAM and SFM was sold was Rs. 1300, Rs. 1000, Rs. 700 and Rs. 1100 respectively. Assume that these are the only five states in India where the forms of the above mentioned MBA entrance tests were sold and no other form except the forms of the mentioned tests were sold in the given states.



Q.49

In August 2015, the percentage contribution of Delhi in the total revenue generated through the sales of forms of the four tests put together was closest to

1 ☐ 29%

2 ☐ 27%

3 ☐ 41%

4 ☐ 33%

Solution:

Correct Answer : 2

$$\text{Required percentage contribution} = \left(\frac{6 \times 1300 + 4.5 \times 1000 + 7 \times 700 + 4 \times 1100}{80660} \right) \times 100 \approx 27.$$

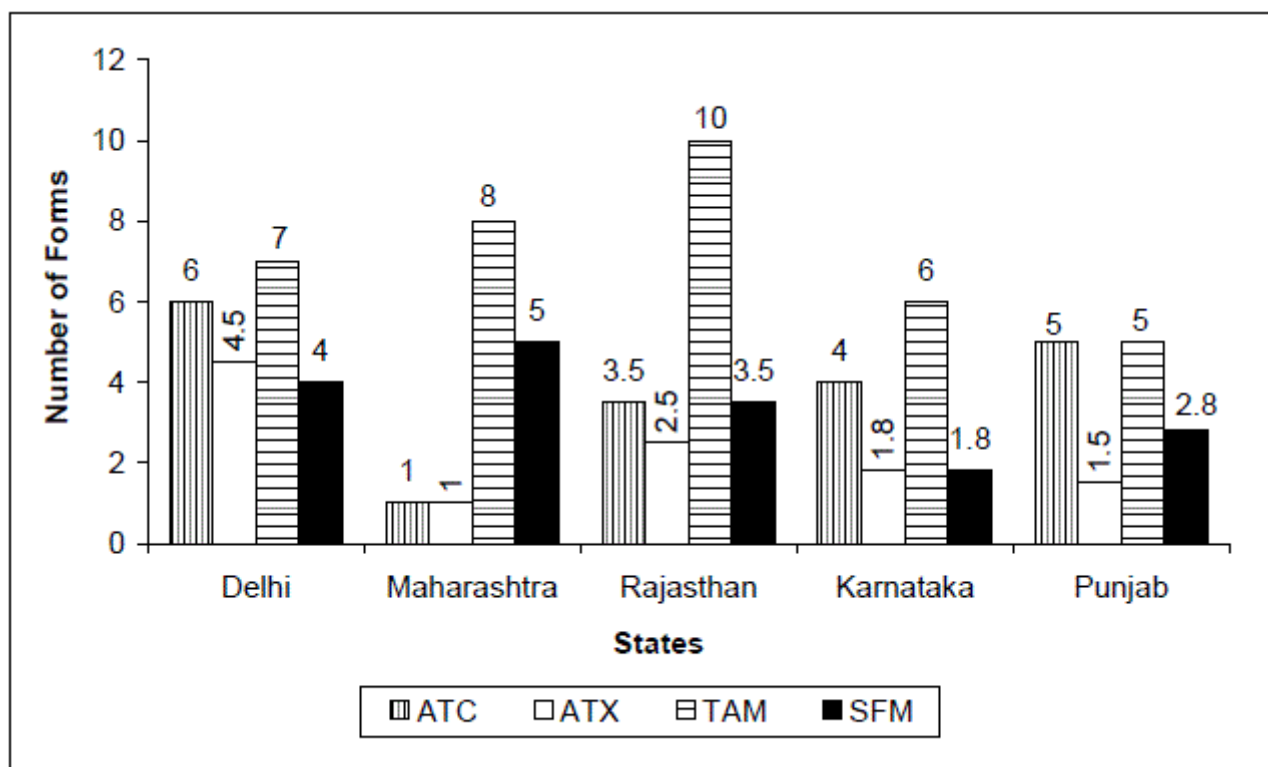
Feedback

 **Bookmark**

 **Answer key/Solution**

Directions for questions 47 to 50: Answer the questions on the basis of the information given below.

The following bar graph provides information about the number of forms (in 000's) sold for four different MBA entrance tests namely ATC, ATX, TAM and SFM, in 5 different states of India, in August 2015. The price at which each form of ATC, ATX, TAM and SFM was sold was Rs. 1300, Rs. 1000, Rs. 700 and Rs. 1100 respectively. Assume that these are the only five states in India where the forms of the above mentioned MBA entrance tests were sold and no other form except the forms of the mentioned tests were sold in the given states.



Q.50

In August 2015, in which state(s) was the number of TAM forms sold less than 30% of the total number of forms sold for the four tests put together in that particular state?

1 ☐ Punjab, Delhi and Maharashtra

2 ☐ Only Maharashtra

3 ☐ Delhi and Maharashtra

4 ☐ None of these

Solution:

Correct Answer : 4

Required percentage contribution in Delhi

$$= \left(\frac{7}{21.5} \right) \times 100 = 32.55\%$$

Required percentage contribution in Maharashtra

$$= \left(\frac{8}{15} \right) \times 100 = 53.33\%$$

Required percentage contribution in Rajasthan

$$= \left(\frac{10}{19.5} \right) \times 100 = 51.28\%$$

Required percentage contribution in Karnataka

$$= \left(\frac{6}{13.6} \right) \times 100 = 44.11\%$$

Required percentage contribution in Punjab

$$= \left(\frac{5}{14.3} \right) \times 100 = 34.96\%$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 51 to 54: Answer the questions on the basis of the information given below.

Arjun calls five of his friends - Julie, Sheila, Rano, Jamalo and Rita - from five different phones made by Samsung, Sony, Apple, Nokia and Micromax, not necessarily in the same order. He meets exactly one friend on each day, from Monday to Friday. The day he meets a friend, he does not call her that day, but calls exactly three other friends. He follows this from Monday to Friday, meeting each friend once and calling her thrice in a week. He neither meets nor calls any of these five friends on Saturday and Sunday. It is also known that:

- (i) On Wednesday, he neither calls Julie nor the friend whom he calls from his Nokia phone.
- (ii) He meets the friend whom he calls from his Apple phone on Friday, which is one of the three days on which he calls Sheila.
- (iii) He calls Jamalo, whom he meets on Thursday, from his Sony phone, and two of the three days on which he calls her are the days on which he meets Sheila and Rita.
- (iv) He does not use his Samsung phone, which he uses to call Rita, on either Tuesday or Thursday.
- (v) Two of the three days on which he calls Julie are Monday and Thursday, and he does not use his Apple phone to call her.
- (vi) One of the three days on which he calls Sheila is Tuesday, which is a day on which he does not use his Micromax cell phone to call any of the given friends.

Q.51

The day on which he does not use his Micromax phone to call his given friends is

- 1 ☐ Tuesday
 - 2 ☐ Wednesday
 - 3 ☐ Either (1) or (2)
 - 4 ☐ Both (1) and (2)
-

Solution:

Correct Answer : 4

From statement (iv), we can see that Arjun must have called Rita on Monday, Wednesday and Friday. Also from statement (iii), it is clear that he does not meet Rita on Friday. Hence Arjun must meet Rita on Tuesday. From statements (ii) and (v), we can deduce that Apple mobile is used to talk to Rano, and Arjun meets her on Friday. From statement (i), we can deduce that MicroMax and Nokia mobiles are used to talk to Julie and Sheila respectively.

As Arjun talks to Julie on Monday, he must meet her on Wednesday. So he meets Sheila on Monday. Hence, from statement (iii), it can be concluded that Arjun talks to Jamalo on Monday and Tuesday. Considering Arjun talks to each girl on exactly 3 days, we get the following table:

Friend	Phone	Monday	Tuesday	Wednesday	Thursday	Friday
Julie	Micromax	Call	x	Meet	Call	Call
Sheila	Nokia	Meet	Call	x	Call	Call
Rano	Apple	x	Call	Call	Call	Meet
Jamalo	Sony	Call	Call	Call	Meet	x
Rita	Samsung	Call	Meet	Call	x	Call

He does not talk to Julie on Tuesday or Wednesday.

FeedBack

Bookmark

Answer key/Solution

Directions for questions 51 to 54: Answer the questions on the basis of the information given below.

Arjun calls five of his friends - Julie, Sheila, Rano, Jamalo and Rita - from five different phones made by Samsung, Sony, Apple, Nokia and Micromax, not necessarily in the same order. He meets exactly one friend on each day, from Monday to Friday. The day he meets a friend, he does not call her that day, but calls exactly three other friends. He follows this from Monday to Friday, meeting each friend once and calling her thrice in a week. He neither meets nor calls any of these five friends on Saturday and Sunday. It is also known that:

- (i) On Wednesday, he neither calls Julie nor the friend whom he calls from his Nokia phone.
- (ii) He meets the friend whom he calls from his Apple phone on Friday, which is one of the three days on which he calls Sheila.
- (iii) He calls Jamalo, whom he meets on Thursday, from his Sony phone, and two of the three days on which he calls her are the days on which he meets Sheila and Rita.
- (iv) He does not use his Samsung phone, which he uses to call Rita, on either Tuesday or Thursday.
- (v) Two of the three days on which he calls Julie are Monday and Thursday, and he does not use his Apple phone to call her.
- (vi) One of the three days on which he calls Sheila is Tuesday, which is a day on which he does not use his Micromax cell phone to call any of the given friends.

Q.52

The mobile phone that he does not use to call the given friends on the day he meets Rita is

1 ☐ Nokia

2 ☐ Sony

3 ☐ Micromax

4 ☐ Apple

Solution:

Correct Answer : 3

From statement (iv), we can see that Arjun must have called Rita on Monday, Wednesday and Friday. Also from statement (iii), it is clear that he does not meet Rita on Friday. Hence Arjun must meet Rita on Tuesday. From statements (ii) and (v), we can deduce that Apple mobile is used to talk to Rano, and Arjun meets her on Friday. From statement (i), we can deduce that MicroMax and Nokia mobiles are used to talk to Julie and Sheila respectively.

As Arjun talks to Julie on Monday, he must meet her on Wednesday. So he meets Sheila on Monday. Hence, from statement (iii), it can be concluded that Arjun talks to Jamalo on Monday and Tuesday. Considering Arjun talks to each girl on exactly 3 days, we get the following table:

Friend	Phone	Monday	Tuesday	Wednesday	Thursday	Friday
Julie	Micromax	Call	x	Meet	Call	Call
Sheila	Nokia	Meet	Call	x	Call	Call
Rano	Apple	x	Call	Call	Call	Meet
Jamalo	Sony	Call	Call	Call	Meet	x
Rita	Samsung	Call	Meet	Call	x	Call

He does not talk to Julie on Tuesday and does not use MicroMax mobile.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 51 to 54: Answer the questions on the basis of the information given below.

Arjun calls five of his friends - Julie, Sheila, Rano, Jamalo and Rita - from five different phones made by Samsung, Sony, Apple, Nokia and Micromax, not necessarily in the same order. He meets exactly one friend on each day, from Monday to Friday. The day he meets a friend, he does not call her that day, but calls exactly three other friends. He follows this from Monday to Friday, meeting each friend once and calling her thrice in a week. He neither meets nor calls any of these five friends on Saturday and Sunday. It is also known that:

- (i) On Wednesday, he neither calls Julie nor the friend whom he calls from his Nokia phone.
- (ii) He meets the friend whom he calls from his Apple phone on Friday, which is one of the three days on which he calls Sheila.
- (iii) He calls Jamalo, whom he meets on Thursday, from his Sony phone, and two of the three days on which he calls her are the days on which he meets Sheila and Rita.
- (iv) He does not use his Samsung phone, which he uses to call Rita, on either Tuesday or Thursday.
- (v) Two of the three days on which he calls Julie are Monday and Thursday, and he does not use his Apple phone to call her.
- (vi) One of the three days on which he calls Sheila is Tuesday, which is a day on which he does not use his Micromax cell phone to call any of the given friends.

Q.53

The friend whom he does not call on the day when he meets Sheila is

1 ☐ Rita

2 ☐ Julie

3 ☐ Jamalo

4 ☐ Rano

Solution:

Correct Answer : 4

From statement (iv), we can see that Arjun must have called Rita on Monday, Wednesday and Friday. Also from statement (iii), it is clear that he does not meet Rita on Friday. Hence Arjun must meet Rita on Tuesday. From statements (ii) and (v), we can deduce that Apple mobile is used to talk to Rano, and Arjun meets her on Friday. From statement (i), we can deduce that MicroMax and Nokia mobiles are used to talk to Julie and Sheila respectively.

As Arjun talks to Julie on Monday, he must meet her on Wednesday. So he meets Sheila on Monday. Hence, from statement (iii), it can be concluded that Arjun talks to Jamalo on Monday and Tuesday. Considering Arjun talks to each girl on exactly 3 days, we get the following table:

Friend	Phone	Monday	Tuesday	Wednesday	Thursday	Friday
Julie	Micromax	Call	x	Meet	Call	Call
Sheila	Nokia	Meet	Call	x	Call	Call
Rano	Apple	x	Call	Call	Call	Meet
Jamalo	Sony	Call	Call	Call	Meet	x
Rita	Samsung	Call	Meet	Call	x	Call

He meets Sheila on Monday, and does not call Sheila and Rano on that day.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 51 to 54: Answer the questions on the basis of the information given below.

Arjun calls five of his friends - Julie, Sheila, Rano, Jamalo and Rita - from five different phones made by Samsung, Sony, Apple, Nokia and Micromax, not necessarily in the same order. He meets exactly one friend on each day, from Monday to Friday. The day he meets a friend, he does not call her that day, but calls exactly three other friends. He follows this from Monday to Friday, meeting each friend once and calling her thrice in a week. He neither meets nor calls any of these five friends on Saturday and Sunday. It is also known that:

- (i) On Wednesday, he neither calls Julie nor the friend whom he calls from his Nokia phone.
- (ii) He meets the friend whom he calls from his Apple phone on Friday, which is one of the three days on which he calls Sheila.
- (iii) He calls Jamalo, whom he meets on Thursday, from his Sony phone, and two of the three days on which he calls her are the days on which he meets Sheila and Rita.
- (iv) He does not use his Samsung phone, which he uses to call Rita, on either Tuesday or Thursday.
- (v) Two of the three days on which he calls Julie are Monday and Thursday, and he does not use his Apple phone to call her.
- (vi) One of the three days on which he calls Sheila is Tuesday, which is a day on which he does not use his Micromax cell phone to call any of the given friends.

Q.54

The day on which he meets Rita is

- 1 ☐ Thursday
- 2 ☐ Tuesday
- 3 ☐ Either (1) or (2)
- 4 ☐ Cannot be determined

Solution:

Correct Answer : 2

From statement (iv), we can see that Arjun must have called Rita on Monday, Wednesday and Friday. Also from statement (iii), it is clear that he does not meet Rita on Friday. Hence Arjun must meet Rita on Tuesday. From statements (ii) and (v), we can deduce that Apple mobile is used to talk to Rano, and Arjun meets her on Friday. From statement (i), we can deduce that MicroMax and Nokia mobiles are used to talk to Julie and Sheila respectively.

As Arjun talks to Julie on Monday, he must meet her on Wednesday. So he meets Sheila on Monday. Hence, from statement (iii), it can be concluded that Arjun talks to Jamalo on Monday and Tuesday. Considering Arjun talks to each girl on exactly 3 days, we get the following table:

Friend	Phone	Monday	Tuesday	Wednesday	Thursday	Friday
Julie	Micromax	Call	x	Meet	Call	Call
Sheila	Nokia	Meet	Call	x	Call	Call
Rano	Apple	x	Call	Call	Call	Meet
Jamalo	Sony	Call	Call	Call	Meet	x
Rita	Samsung	Call	Meet	Call	x	Call

He meets Rita on Tuesday.

FeedBack

 Bookmark

 Answer key/Solution

Directions for questions 55 to 58: Answer the questions on the basis of the information given below.

Seth Dhanpat Ram distributed 100 notes among 7 persons namely Lalu, Malu, Salu, Dalu, Kalu, Falu and Galu, such that except Galu, everyone received the same number of notes. Galu got 5 notes less than the others.

These persons exchanged notes among themselves in the manner specified below:

- Lalu took 5 notes from Kalu.
- Dalu received notes from two of her friends.
- Malu gave 3 notes to Dalu and received one note from Galu.
- Two of them did not give any note and three of the others did not receive any note.
- Falu was involved in only one exchange and received two notes.
- Lalu had 20 notes and Dalu and Falu had equal number of notes at the end of all the exchanges.
- There were five exchanges in all.

Q.55

At the end of the fifth exchange, who had the least number of notes?

Fill "1 if your answer is Salu"

Fill "2 if your answer is Galu"

Fill "3 if your answer is Kalu"

Fill "4 if your answer is Salu and Kalu"

Solution:

Correct Answer : 2

Let the number of notes that Galu had be x .

The number of notes with each of the remaining six persons
= $x + 5$

$$\therefore 6(x + 5) + x = 100 \Rightarrow x = 10$$

So, initially Galu had 10 notes and the rest had 15 each.

The five transactions T1, T2, T3, T4, T5 are:

T1 : Kalu gave 5 notes to Lalu

T2 : Malu gave 3 notes to Dalu

T3 : Malu received 1 note from Galu

T4 : Falu received 2 notes

T5 : Dalu received some notes

By using statements (i) and (iii), it can be concluded that the number of notes after the first three transactions with Lalu, Malu, Dalu, Kalu and Galu were 20, 13, 18, 10 and 9 notes respectively.

By using statement (iv), it is apparent that Salu, Kalu and Galu did not receive any note. Now as the number of people who did not give any note was 2. It means the giver in each transaction was different.

By using statements (v) and (vi), Falu and Dalu had 17 notes in the end. Hence, Dalu must be the one who gave the two notes to Falu.

Dalu must have received one note from someone else. We know that the giver could not be Falu. It could not be Lalu either, as Lalu had to have 20 notes in the end. As we know that the givers in all the five transactions are different, Kalu, Malu and Galu are also ruled out. Hence, Salu must have given the note to Dalu.

Further analysis leads to the following table:

Persons	Initial number of notes	Notes received	Notes given	Final number of notes
Lalu	15	5	0	20
Malu	15	1	3	13
Salu	15	0	1	14
Dalu	15	3+1	2	17
Kalu	15	0	5	10
Falu	15	2	0	17
Galu	10	0	1	9

FeedBack

Bookmark

Answer key/Solution

Directions for questions 55 to 58: Answer the questions on the basis of the information given below.

Seth Dhanpat Ram distributed 100 notes among 7 persons namely Lalu, Malu, Salu, Dalu, Kalu, Falu and Galu, such that except Galu, everyone received the same number of notes. Galu got 5 notes less than the others.

These persons exchanged notes among themselves in the manner specified below:

- i. Lalu took 5 notes from Kalu.
- ii. Dalu received notes from two of her friends.
- iii. Malu gave 3 notes to Dalu and received one note from Galu.
- iv. Two of them did not give any note and three of the others did not receive any note.
- v. Falu was involved in only one exchange and received two notes.
- vi. Lalu had 20 notes and Dalu and Falu had equal number of notes at the end of all the exchanges.
- vii. There were five exchanges in all.

Q.56

At the end of the fifth exchange, what was the difference in the number of notes held by the person who had the maximum number of notes and the number of notes held by the person with the least number of notes?

Fill "1 if your answer is 11"

Fill "2 if your answer is 12"

Fill "3 if your answer is 9"

Fill "4 if your answer is 8"

Solution:

Correct Answer : 1

 **Bookmark**

 **Answer key/Solution**

Let the number of notes that Galu had be x .

The number of notes with each of the remaining six persons
= $x + 5$

$$\therefore 6(x + 5) + x = 100 \Rightarrow x = 10$$

So, initially Galu had 10 notes and the rest had 15 each.

The five transactions T1, T2, T3, T4, T5 are:

T1 : Kalu gave 5 notes to Lalu

T2 : Malu gave 3 notes to Dalu

T3 : Malu received 1 note from Galu

T4 : Falu received 2 notes

T5 : Dalu received some notes

By using statements (i) and (iii), it can be concluded that the number of notes after the first three transactions with Lalu, Malu, Dalu, Kalu and Galu were 20, 13, 18, 10 and 9 notes respectively.

By using statement (iv), it is apparent that Salu, Kalu and Galu did not receive any note. Now as the number of people who did not give any note was 2. It means the giver in each transaction was different.

By using statements (v) and (vi), Falu and Dalu had 17 notes in the end. Hence, Dalu must be the one who gave the two notes to Falu.

Dalu must have received one note from someone else. We know that the giver could not be Falu. It could not be Lalu either, as Lalu had to have 20 notes in the end. As we know that the givers in all the five transactions are different, Kalu, Malu and Galu are also ruled out. Hence, Salu must have given the note to Dalu.

Further analysis leads to the following table:

Persons	Initial number of notes	Notes received	Notes given	Final number of notes
Lalu	15	5	0	20
Malu	15	1	3	13
Salu	15	0	1	14
Dalu	15	3+1	2	17
Kalu	15	0	5	10
Falu	15	2	0	17
Galu	10	0	1	9

FeedBack

Directions for questions 55 to 58: Answer the questions on the basis of the information given below.

Seth Dhanpat Ram distributed 100 notes among 7 persons namely Lalu, Malu, Salu, Dalu, Kalu, Falu and Galu, such that except Galu, everyone received the same number of notes. Galu got 5 notes less than the others.

These persons exchanged notes among themselves in the manner specified below:

- Lalu took 5 notes from Kalu.**
 - Dalu received notes from two of her friends.**
 - Malu gave 3 notes to Dalu and received one note from Galu.**
 - Two of them did not give any note and three of the others did not receive any note.**
 - Falu was involved in only one exchange and received two notes.**
 - Lalu had 20 notes and Dalu and Falu had equal number of notes at the end of all the exchanges.**
 - There were five exchanges in all.**
-

Q.57

Who had fewer notes than Malu?

Fill "1 if your answer is Kalu and Galu"

Fill "2 if your answer is Dalu and Falu"

Fill "3 if your answer is Dalu, Falu and Galu"

Fill "4 if your answer is Salu and Dalu"

Solution:

Correct Answer : 1

Let the number of notes that Galu had be x .

The number of notes with each of the remaining six persons
= $x + 5$

$$\therefore 6(x + 5) + x = 100 \Rightarrow x = 10$$

So, initially Galu had 10 notes and the rest had 15 each.

The five transactions T1, T2, T3, T4, T5 are:

T1 : Kalu gave 5 notes to Lalu

T2 : Malu gave 3 notes to Dalu

T3 : Malu received 1 note from Galu

T4 : Falu received 2 notes

T5 : Dalu received some notes

By using statements (i) and (iii), it can be concluded that the number of notes after the first three transactions with Lalu, Malu, Dalu, Kalu and Galu were 20, 13, 18, 10 and 9 notes respectively.

By using statement (iv), it is apparent that Salu, Kalu and Galu did not receive any note. Now as the number of people who did not give any note was 2. It means the giver in each transaction was different.

By using statements (v) and (vi), Falu and Dalu had 17 notes in the end. Hence, Dalu must be the one who gave the two notes to Falu.

Dalu must have received one note from someone else. We know that the giver could not be Falu. It could not be Lalu either, as Lalu had to have 20 notes in the end. As we know that the givers in all the five transactions are different, Kalu, Malu and Galu are also ruled out. Hence, Salu must have given the note to Dalu.

Further analysis leads to the following table:

Persons	Initial number of notes	Notes received	Notes given	Final number of notes
Lalu	15	5	0	20
Malu	15	1	3	13
Salu	15	0	1	14
Dalu	15	3+1	2	17
Kalu	15	0	5	10
Falu	15	2	0	17
Galu	10	0	1	9

FeedBack

Bookmark

Answer key/Solution

Directions for questions 55 to 58: Answer the questions on the basis of the information given below.

Seth Dhanpat Ram distributed 100 notes among 7 persons namely Lalu, Malu, Salu, Dalu, Kalu, Falu and Galu, such that except Galu, everyone received the same number of notes. Galu got 5 notes less than the others.

These persons exchanged notes among themselves in the manner specified below:

- i. Lalu took 5 notes from Kalu.
- ii. Dalu received notes from two of her friends.
- iii. Malu gave 3 notes to Dalu and received one note from Galu.
- iv. Two of them did not give any note and three of the others did not receive any note.
- v. Falu was involved in only one exchange and received two notes.
- vi. Lalu had 20 notes and Dalu and Falu had equal number of notes at the end of all the exchanges.
- vii. There were five exchanges in all.

Q.58

At the end of the fifth exchange, how many of person, the number of notes hold by them is prime

Fill "1 if your answer is 1"

Fill "2 if your answer is 2"

Fill "3 if your answer is 3"

Fill "4 if your answer is 4"

Solution:

Correct Answer : 3

 **Bookmark**

 **Answer key/Solution**

Let the number of notes that Galu had be x .

The number of notes with each of the remaining six persons
= $x + 5$

$$\therefore 6(x + 5) + x = 100 \Rightarrow x = 10$$

So, initially Galu had 10 notes and the rest had 15 each.

The five transactions T1, T2, T3, T4, T5 are:

T1 : Kalu gave 5 notes to Lulu

T2 : Malu gave 3 notes to Dalu

T3 : Malu received 1 note from Galu

T4 : Falu received 2 notes

T5 : Dalu received some notes

By using statements (i) and (iii), it can be concluded that the number of notes after the first three transactions with Lulu, Malu, Dalu, Kalu and Galu were 20, 13, 18, 10 and 9 notes respectively.

By using statement (iv), it is apparent that Salu, Kalu and Galu did not receive any note. Now as the number of people who did not give any note was 2. It means the giver in each transaction was different.

By using statements (v) and (vi), Falu and Dalu had 17 notes in the end. Hence, Dalu must be the one who gave the two notes to Falu.

Dalu must have received one note from someone else. We know that the giver could not be Falu. It could not be Lulu either, as Lulu had to have 20 notes in the end. As we know that the givers in all the five transactions are different, Kalu, Malu and Galu are also ruled out. Hence, Salu must have given the note to Dalu.

Further analysis leads to the following table:

Persons	Initial number of notes	Notes received	Notes given	Final number of notes
Lulu	15	5	0	20
Malu	15	1	3	13
Salu	15	0	1	14
Dalu	15	3+1	2	17
Kalu	15	0	5	10
Falu	15	2	0	17
Galu	10	0	1	9

The number of notes with three persons Malu, Dalu and Falu is prime.

FeedBack

Directions for questions 59 to 62: Answer the questions on the basis of the information given below.

There are four married couples. A, B, C and D are the male members, and E, F, G and H are female members making the four couples. Each couple celebrates its marriage anniversary on a different date from among 7th, 12th, 14th and 24th, falling in different months out of March, May, October and December.

Further, the following information is given:

- (i) E celebrates her marriage anniversary on a date the numerical value of which is twice the numerical value of the date on which H celebrates her marriage anniversary.
- (ii) The sum of the numerical values of the date and the month number of the marriage anniversary of D, is equal to the numerical value of the date of the marriage anniversary of C.
- (iii) A and E are married to each other. Only for this couple, the sum of the numerical values of date and the month number of their marriage anniversary is a prime number.
- (iv) A and D celebrate their marriage anniversaries in different months starting with the same letter.

Q.59

If G's marriage anniversary falls on 24th December, which of the following combinations of a couple and the date on which they celebrate their marriage anniversary could be correct?

1 ☐ D-F, 7th May

2 ☐ C-F, 12th October

3 ☐ C-G, 24th December

4 ☐ D-H, 7th March

Solution:

Correct Answer : 2

From statement (i), E's anniversary date can be 14th or 24th and that of H can be 7th or 12th.

From statement (ii), the anniversary date of D can be 7th May or 12th December and correspondingly C's anniversary date can be 12th or 24th.

From statement (iii), the anniversary date of A-E can be 24th May or 14th May or 14th March.

From above conclusions and statement (iv), we can conclude that A's marriage anniversary is on 14th March and D's marriage anniversary is on 7th May.

Thus, C's anniversary date comes out to be 12th. For both D and H, the marriage anniversary date comes out to be 7th May. So, they must form a couple.

Husband	A	B	C	D
Wife	E	F/G	G/F	H
Anniversary date	14	24	12	7
Month	March	Oct/Dec	Dec/Oct	May

Only option (2) is a possible combination.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 59 to 62: Answer the questions on the basis of the information given below.

There are four married couples. A, B, C and D are the male members, and E, F, G and H are female members making the four couples. Each couple celebrates its marriage anniversary on a different date from among 7th, 12th, 14th and 24th, falling in different months out of March, May, October and December.

Further, the following information is given:

- (i) E celebrates her marriage anniversary on a date the numerical value of which is twice the numerical value of the date on which H celebrates her marriage anniversary.
- (ii) The sum of the numerical values of the date and the month number of the marriage anniversary of D, is equal to the numerical value of the date of the marriage anniversary of C.
- (iii) A and E are married to each other. Only for this couple, the sum of the numerical values of date and the month number of their marriage anniversary is a prime number.
- (iv) A and D celebrate their marriage anniversaries in different months starting with the same letter.

Q.60

If the sum of the numerical values of the date and the month number of marriage anniversary of F is maximum but not a perfect square, who is the husband of F?

1 ☐ B

2 ☐ C

3 ☐ D

4 ☐ Either B or C

Solution:

Correct Answer : 1

From statement (i), E's anniversary date can be 14th or 24th and that of H can be 7th or 12th.

From statement (ii), the anniversary date of D can be 7th May or 12th December and correspondingly C's anniversary date can be 12th or 24th.

From statement (iii), the anniversary date of A-E can be 24th May or 14th May or 14th March.

From above conclusions and statement (iv), we can conclude that A's marriage anniversary is on 14th March and D's marriage anniversary is on 7th May.

Thus, C's anniversary date comes out to be 12th. For both D and H, the marriage anniversary date comes out to be 7th May. So, they must form a couple.

Husband	A	B	C	D
Wife	E	F/G	G/F	H
Anniversary date	14	24	12	7
Month	March	Oct/Dec	Dec/Oct	May

The possible anniversary dates of F can be 24th October or 24th December or 12th October or 12th December.

Among these only 24th October and 24th December gives the maximum value, in other cases sum is not maximum.

But $24\text{th December} = 24 + 12 = 36$ is a perfect square.

So F's anniversary is on 24th October.

As B has his anniversary date on 24th so F is the wife of B.

The possible anniversary date of F can be 24th October, 24th December, 12th October or 12th December.

FeedBack

Bookmark

Answer key/Solution

Directions for questions 59 to 62: Answer the questions on the basis of the information given below.

There are four married couples. A, B, C and D are the male members, and E, F, G and H are female members making the four couples. Each couple celebrates its marriage anniversary on a different date from among 7th, 12th, 14th and 24th, falling in different months out of March, May, October and December.

Further, the following information is given:

- (i) E celebrates her marriage anniversary on a date the numerical value of which is twice the numerical value of the date on which H celebrates her marriage anniversary.
- (ii) The sum of the numerical values of the date and the month number of the marriage anniversary of D, is equal to the numerical value of the date of the marriage anniversary of C.
- (iii) A and E are married to each other. Only for this couple, the sum of the numerical values of date and the month number of their marriage anniversary is a prime number.
- (iv) A and D celebrate their marriage anniversaries in different months starting with the same letter.

Q.61

If the sum of the numerical values of the date and the month number of marriage anniversary of F is maximum but not a perfect square, what is the date on which G celebrates her marriage anniversary?

1 ☐ 7th May

2 ☐ 12th October

3 ☐ 12th December

4 ☐ Cannot be determined

Solution:

Correct Answer : 3

From statement (i), E's anniversary date can be 14th or 24th and that of H can be 7th or 12th.

From statement (ii), the anniversary date of D can be 7th May or 12th December and correspondingly C's anniversary date can be 12th or 24th.

From statement (iii), the anniversary date of A-E can be 24th May or 14th May or 14th March.

From above conclusions and statement (iv), we can conclude that A's marriage anniversary is on 14th March and D's marriage anniversary is on 7th May.

Thus, C's anniversary date comes out to be 12th. For both D and H, the marriage anniversary date comes out to be 7th May. So, they must form a couple.

Husband	A	B	C	D
Wife	E	F/G	G/F	H
Anniversary date	14	24	12	7
Month	March	Oct/Dec	Dec/Oct	May

The possible anniversary dates of F can be 24th October or 24th December or 12th October or 12th December.

Among these only 24th October and 24th December gives the maximum value, in other cases sum is not maximum.

But 24th December = $24 + 12 = 36$ is a perfect square.

So F's anniversary is on 24th October.

As B has his anniversary date on 24th so F is the wife of B.

G's marriage anniversary is on 12th December.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 59 to 62: Answer the questions on the basis of the information given below.

There are four married couples. A, B, C and D are the male members, and E, F, G and H are female members making the four couples. Each couple celebrates its marriage anniversary on a different date from among 7th, 12th, 14th and 24th, falling in different months out of March, May, October and December.

Further, the following information is given:

- (i) E celebrates her marriage anniversary on a date the numerical value of which is twice the numerical value of the date on which H celebrates her marriage anniversary.
- (ii) The sum of the numerical values of the date and the month number of the marriage anniversary of D, is equal to the numerical value of the date of the marriage anniversary of C.
- (iii) A and E are married to each other. Only for this couple, the sum of the numerical values of date and the month number of their marriage anniversary is a prime number.
- (iv) A and D celebrate their marriage anniversaries in different months starting with the same letter.

Q.62

If the sum of the numerical values of the date and the month number of marriage anniversary of G is twice of the month number then which of the following combination of a couple and the date on which they celebrate their marriage anniversary could be correct.

1 ☐ C – G, 24 December

2 ☐ B – F, 12 December

3 ☐ B – F, 24 October

4 ☐ None of these

Solution:

Correct Answer : 3

From statement (i), E's anniversary date can be 14th or 24th and that of H can be 7th or 12th.

From statement (ii), the anniversary date of D can be 7th May or 12th December and correspondingly C's anniversary date can be 12th or 24th.

From statement (iii), the anniversary date of A-E can be 24th May or 14th May or 14th March.

From above conclusions and statement (iv), we can conclude that A's marriage anniversary is on 14th March and D's marriage anniversary is on 7th May.

Thus, C's anniversary date comes out to be 12th. For both D and H, the marriage anniversary date comes out to be 7th May. So, they must form a couple.

Husband	A	B	C	D
Wife	E	F/G	G/F	H
Anniversary date	14	24	12	7
Month	March	Oct/Dec	Dec/Oct	May

The possible anniversary dates of F can be 24th October or 24th December or 12th October or 12th December.

Among these only 24th October and 24th December gives the maximum value, in other cases sum is not maximum.

But 24th December = $24 + 12 = 36$ is a perfect square.

So F's anniversary is on 24th October.

As B has his anniversary date on 24th so F is the wife of B.

G's marriage anniversary on 12th December, B – F, 24 October.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 63 to 66: Answer the questions on the basis of the information given below:

Nine persons namely P, Q, R, S, T, U, V, W and X stood in a row from left to right facing the camera, for a photo shoot. It is also known that:

- Out of the nine persons exactly three were formally dressed.
- P, U and V are males.
- S and X are females.
- Q, who was a male, was formally dressed.
- R, who was a female, was formally dressed.
- Males and females stood alternately in the row.

Q.63

Which of the following statements is sufficient to determine the gender of the nine persons and the three persons who were formally dressed?

1 ☐ X is a formally dressed female.

2 ☐ W is a formally dressed female.

3 ☐ P is a formally dressed male.

4 ☐ T is a formally dressed male.

Solution:

Correct Answer : 4

From the data given in the question the following table can be drawn:

	Formally Dressed	Non-formally Dressed
Males	Q	P, U, V
Females	R	S, X

Total formally dressed persons should be 3 in number. Thus, we must know about one more person who was formally dressed.

Since males and females stood alternately, total number of males/females should be 4/5 (in any order). We already know about 4 males and 3 females. Thus, the remaining two people T and W can either be both females or 1 male and 1 female.

If T is a formally dressed male, it can be concluded that P, U and V are males who are not formally dressed, and S, X and W are females who are not formally dressed. It can also be concluded that there are 5 males and 4 females.

FeedBack

 Bookmark

 Answer key/Solution

Directions for questions 63 to 66: Answer the questions on the basis of the information given below:

Nine persons namely P, Q, R, S, T, U, V, W and X stood in a row from left to right facing the camera, for a photo shoot. It is also known that:

- Out of the nine persons exactly three were formally dressed.
- P, U and V are males.
- S and X are females.
- Q, who was a male, was formally dressed.
- R, who was a female, was formally dressed.
- Males and females stood alternately in the row.

Q.64

If W was a male and was not dressed formally, then which of the following is necessarily false?

- 1 ☐ P sits fifth from the left in the row.
- 2 ☐ Q sits seventh from the right in the row.
- 3 ☐ W sits fourth from the left in the row.
- 4 ☐ S sits second from the right in the row.

Solution:

Correct Answer : 3

From the data given in the question the following table can be drawn:

	Formally Dressed	Non-formally Dressed
Males	Q	P, U, V
Females	R	S, X

Total formally dressed persons should be 3 in number. Thus, we must know about one more person who was formally dressed.

Since males and females stood alternately, total number of males/females should be 4/5 (in any order). We already know about 4 males and 3 females. Thus, the remaining two people T and W can either be both females or 1 male and 1 female.

Since W is a male, T has to be female as number of males and number of females has to be 5 and 4 respectively to satisfy the fourth condition. If positions are numbered 1, 2, 3, 4, 5, 6, 7, 8, 9 from left to right; males stood at positions 1, 3, 5, 7, 9 and females stood at 2, 4, 6, 8. Interpreting the options,

In option (1), P is a male and hence he can be fifth from the left.

In option (2), Q is a male and he can be seventh from right (or third from left).

In option (3), W is a male and hence he cannot be fourth from left.

In option (4), S is a female and she can be second from right.

Thus, option (3) is necessarily false.

 **Bookmark**

 **Answer key/Solution**

FeedBack

Directions for questions 63 to 66: Answer the questions on the basis of the information given below:

Nine persons namely P, Q, R, S, T, U, V, W and X stood in a row from left to right facing the camera, for a photo shoot. It is also known that:

- Out of the nine persons exactly three were formally dressed.
- P, U and V are males.
- S and X are females.
- Q, who was a male, was formally dressed.
- R, who was a female, was formally dressed.
- Males and females stood alternately in the row.

Q.65

If T, who was a female, formally dressed and the three persons who were formally dressed stood at three right most positions, which of the following is an acceptable sequence of the persons from left to right?

1 ☐ PSUXVWRQT

2 ☐ VXUSPWTQR

3 ☐ WVXPUSTQR

4 ☐ XPSUWVRQT

Solution:

Correct Answer : 4

From the data given in the question the following table can be drawn:

	Formally Dressed	Non-formally Dressed
Males	Q	P, U, V
Females	R	S, X

Total formally dressed persons should be 3 in number. Thus, we must know about one more person who was formally dressed.

Since males and females stood alternately, total number of males/females should be 4/5 (in any order). We already know about 4 males and 3 females. Thus, the remaining two people T and W can either be both females or 1 male and 1 female.

Three rightmost seats are numbered 7, 8 and 9 respectively (from left to right). Q is the only male among formally dressed people, thus he should be at position 8. Thus, there must be 4 males and 5 females. Hence, W is also a female.

Males are P, Q, U, V.

Females are R, S, T, W, X.

Males stood at positions numbered 2, 4, 6 and 8.

Females stood at positions numbered 1, 3, 5 and 7 and 9.

Options (1) and (2) are not acceptable because the sequence cannot start with a male. In option (3), P and U are both males, hence they cannot be together.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Directions for questions 63 to 66: Answer the questions on the basis of the information given below:

Nine persons namely P, Q, R, S, T, U, V, W and X stood in a row from left to right facing the camera, for a photo shoot. It is also known that:

- Out of the nine persons exactly three were formally dressed.
- P, U and V are males.
- S and X are females.
- Q, who was a male, was formally dressed.
- R, who was a female, was formally dressed.
- Males and females stood alternately in the row.

Q.66

If T, who was a male, was formally dressed, and no three or more persons who were not formally dressed stood together, which of the following information is sufficient to determine the position of R?

- 1 ☐ A formally dressed person sat first from the left.
-
- 2 ☐ A formally dressed person sat fifth from the left.
-
- 3 ☐ A formally dressed person sat fifth from the right.
-
- 4 ☐ A formally dressed person sat third from the right.
-

Solution:

Correct Answer : 1

 Bookmark

 Answer key/Solution

From the data given in the question the following table can be drawn:

	Formally Dressed	Non-formally Dressed
Males	Q	P, U, V
Females	R	S, X

Total formally dressed persons should be 3 in number. Thus, we must know about one more person who was formally dressed.

Since males and females stood alternately, total number of males/females should be 4/5 (in any order). We already know about 4 males and 3 females. Thus, the remaining two people T and W can either be both females or 1 male and 1 female.

Working through the options, it can be observed that: If option (1) is provided then the only combination possible is:

FM NF NM FF NM NF FM NF NM

Where,

FM = Formally dressed male

NM = Non-formally dressed male

NF = Non-formally dressed female

FF = Formally dressed female

Thus, R could be standing at fourth position from left.

If option (2) is provided, then the following combinations could be possible:

NM FF NM NF FM NF FM NF NM

NM NF FM NF FM NF NM FF NM

Thus, R could be standing either at the second position or the eighth position (from the left).

[Note: There might be other cases possible but these two are enough to prove that option (2) is not sufficient]

Option (3) is exactly the same as option (2) since, fifth from the left and fifth from the right are the same position.

Thus, (3) is not sufficient.

If option (4) is provided, then the following combinations could be possible:

FM NF NM FF NM NF FM NF NM

NM FF NM NF FM NF FM NF NM

Thus, R could be standing either at the fourth or the second position (from the left).

FeedBack

Sec 3

Q.67

A natural number N which is not a perfect cube, has exactly four factors. The sum of the positive factors of N that are less than N is 2014. Find the value of N.

Solution:

Correct Answer : 4022

N has only four factors
Therefore, $N = p_1 \times p_2$, where p_1 and p_2 are prime numbers.

Factors of N less than N are 1, p_1 and p_2 and
Sum of these factors

$$1 + p_1 + p_2 = 2014$$

$$p_1 + p_2 = 2013$$

So the value of p_1 and p_2 are 2 and 2011 (in any order)

(AB sum of two prime number is odd so one of the number must be even i.e. 2.)

$$\therefore N = 4022.$$

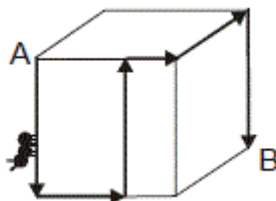
FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.68

The length of edges of a cube is 12 cm. An ant moves on the surface of cube from point A to point B along the path shown. The length of the path travelled by ant is



1 ☐ 60 cm

2 ☐ 50 cm

3 ☐ 48 cm

4 ☐ 80 cm

Solution:

Correct Answer : 1

The ant covers 5 edges of the cube .
Total distance covered by the ant is 60 cm.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.69

There are two concentric circular tracks of radii 100 metres and 102 metres respectively. A runs on the inner track and completes one round in 1 minute and 30 seconds; while B runs on the outer track and completes one round in 1 minute and 32 seconds. Find the ratio of speed of A to that of B.

1 ☐ 460 : 459

2 ☐ 230 : 229

3 ☐ 400 : 469

4 ☐ 360 : 359

Solution:

Correct Answer : 1

A covers 200π in 90 secs

B covers 204π in 92 secs

$$\text{Speed of A} = \frac{200\pi}{90}$$

$$\text{Speed of B} = \frac{204\pi}{92}$$

Ratio of speed of A to that of B
 $= 18400 : 18360 = 460 : 459$.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.70

A company that sells widgets has to pay Rs.720 as maintenance fees each day and then it also pays each worker Rs.30 per hour. Each worker makes 6 widgets per hour and each widget is sold at Rs. 6. What is the least number of workers working 8 hours per day the company has to hire in order to reach break-even i.e. no profit no loss?

Solution:

Correct Answer : 15

Let the number of required workers be n

$$720 + 30n \times 8 = 36 \times 8 \times n$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.71

Three balls numbered 1, 2, and 3 are placed in a bag. A ball is drawn from the bag and the number is recorded and the ball is returned to the bag. The same is repeated two more times. The numbers recorded in the three trial are x , y and z respectively. If $x + y + z < 8$, then the number of possible ordered triplets (x, y, z) is

1 ☐ 23

2 ☐ 26

3 ☐ 24

4 ☐ 18

Solution:

Correct Answer : 1

The total possible number of (x, y, z) is $3^3 = 27$
Sum 9 can occur in only one way
Sum 8 can occur in three ways $(3 + 3 + 2 \text{ or } 3 + 2 + 3 \text{ or } 2 + 3 + 3)$
Total Number of ways = $27 - 4 = 23$

Feedback

🔖 Bookmark

🔑 Answer key/Solution

Q.72

If p is a prime number satisfying the inequality $719! + 1 < p < 719! + 719$, then how many values can p assume?

Solution:

Correct Answer : 0

Let $p = 719! + x$, $1 < x < 719$
 $p = x[y + 1]$
(Since $719!$ is divisible by all the natural numbers less than or equal to 719)
' p ' has factor other than 1 and p . Hence, the number of possible value of p is zero.

Feedback

🔖 Bookmark

🔑 Answer key/Solution

Q.73

In triangle ABC, there are 3 points P, Q and R on AB, AC and BC respectively. If $AP : AB = AQ : AC$, then which position of R will give the maximum area of $\triangle PQR$?

1 ☐ $BR : RC = 1 : 1$

2 ☐ $BR : RC = 3 : 1$

3 ☐ $BR : RC = 2 : 1$

4 ☐ The position of R does not have any bearing on the area of the triangle.

Solution:

Correct Answer : 4

As $AP : AB = AQ : AC \Rightarrow PQ \parallel BC$.
The height of triangle PQR does not depend on the position of R but the distance between PQ and BC.
Hence, the position of R does not have any bearing on the area of triangle PQR.

Feedback

🔖 Bookmark

🔑 Answer key/Solution

Q.74

Amesh starts walking from point A at 3 p.m and reaches point B at 6 p.m. without stopping anywhere. P is a point between A and B. The time taken to reach point P from point A is 50 minutes more than four times the time taken to reach point B from point P. Time taken by Amesh to reach point B from point P is

1 ☐ 30 minutes

2 ☐ 26 minutes

3 ☐ 45 minutes

4 ☐ 60 minutes

Solution:

Correct Answer : 2


Let the time taken by Amesh to reach point B be x .

Therefore, $4x + 50 + x = 180$

$x = 26$

FeedBack

 Bookmark

 Answer key/Solution

Q.75

What is sum of the digits of the largest palindromic 8-digit number which is divisible by 45? (A palindromic number is a number that is the same when written forwards or backwards)

Solution:

Correct Answer : 54

The number should end in 0 or 5.

If it ends in 0 the first digit should also be zero. Then it will not be an 8-digit number

The number starts with 5 and ends in 5.

5abccba5 and Sum of digits should be a multiple of 9

$10 + 2(a + b + c) = 9k$

$$(a + b + c) = \frac{[9k - 10]}{2}$$

$$\frac{[9k - 10]}{2} \leq 27$$

$$9k \leq 64 \Rightarrow k \leq 7$$

k should be even.

Max value of $k = 6$

$$(a + b + c) = 22$$

$a = 9, b = 9$ and $c = 4$

Number is 59944995

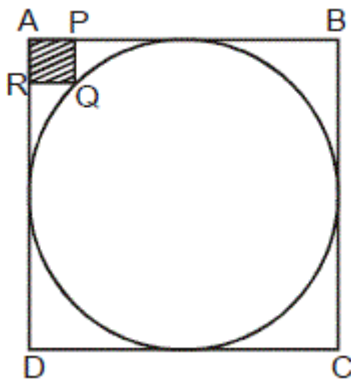
Sum of digits is 54.

FeedBack

 Bookmark

 Answer key/Solution

Q.76



In square ABCD, the dimensions of shaded rectangle APQR, whose one of the vertices lies on the circumference of the circle inscribed in the square, are 6 cm × 12 cm. What is the radius of the circle?

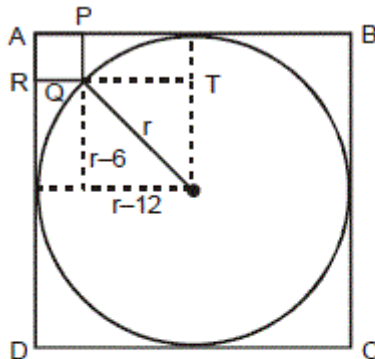
- 1 ☐ 6 cm
- 2 ☐ 42 cm
- 3 ☐ 30 cm
- 4 ☐ Data insufficient

Solution:

Correct Answer : 3

Bookmark

Answer key/Solution



Let the radius of the circle be 'r' units.

$$\therefore (r - 12)^2 + (r - 6)^2 = r^2$$

$$\Rightarrow r^2 - 36r + 180 = 0$$

$$\Rightarrow (r - 30)(r - 6) = 0$$

$$\Rightarrow r = 30$$

(As $r = 6$ is not possible because if it were so then $r - 12 < 0$)

[FeedBack](#)

Q.77

If sum of 28 consecutive integers is 294, what is the fourth smallest number?

- 1 ☐ - 3

2 ☐ - 1

3 ☒ 0

4 ☐ 1

Solution:

Correct Answer : 3

$$[n + n + 1 + n + 2 + \dots + n + 27] = 294$$

$$[28n + 27 \times 14] = 294$$

$$[2n + 27] = 21$$

$$2n = -6$$

$$n = -3$$

Fourth number is zero.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.78

If the equation $3x^2 + \frac{5p^2}{p+q+r}x + 2p^2k^2 = 0$, where p, q and r are the length of three sides of a scalene triangle, has distinct and real roots, then which of the following is a possible value of k?

1 ☐ -0.55

2 ☐ -0.45

3 ☐ 0.6

4 ☐ 0.75

Solution:

Correct Answer : 2

🔖 Bookmark

🔍 Answer key/Solution

Discriminant of the given quadratic equation

$$= \frac{25p^4}{(p+q+r)^2} - 24p^2k^2$$

$$= 24p^2 \left[\frac{25p^2}{24(p+q+r)^2} - k^2 \right]$$

For real, distinct roots,

$$24p^2 \left[\frac{25p^2}{24(p+q+r)^2} - k^2 \right] > 0$$

$$\Rightarrow k^2 < \frac{25p^2}{24(p+q+r)^2} \quad \dots (i)$$

As, p, q and r are the sides of a triangle,
 $q + r > p$

$$\Rightarrow \frac{p^2}{(p+q+r)^2} < \frac{1}{4} \quad \dots (ii)$$

Using (i) and (ii), we get

$$k^2 < \frac{25}{24} \times \frac{1}{4}$$

$$\text{or } k^2 < \frac{25}{96}$$

$$\Rightarrow \frac{-5}{4\sqrt{6}} < k < \frac{5}{4\sqrt{6}}$$

$$\Rightarrow -0.51 < k < 0.51.$$

Out of given options, only -0.45 lies inside this range.

FeedBack

Q.79

In a public library on 31st July, every person who came, read exactly 5 different books. Every book was read by exactly 60 persons. The public library had copy each of 15 different books. If the number of persons who visited the public library that day was 50% of the average number of persons who visit the public library per day in the month, then find the average number of persons who visit the public library per day.

1 ☐ 180

2 ☐ 230

3 ☐ 360

4 ☐ 900

Solution:

Correct Answer : 3

The total number of "readings" = $60 \times 15 = 900$.
If every person read 5 book each, the total number of

persons who read the books = $\frac{900}{5} = 180$.

This forms 50 % of the total persons, hence the number
of persons who visit the public library = 360.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.80

By taking OB, one of the sides of a parallelogram ABDO, as radius the circle with centre O is drawn. The circle cuts AB and DO at points N and M respectively. If the radius of the circle is 3 units, AN = 1 unit and NB = 4 units, which of the following is definitely correct?

1 ☐ Area of quadrilateral ANMD = $\frac{3\sqrt{5}}{2}$ square units

2 ☐ Area of $\triangle BON = 3\sqrt{5}$ square units

3 ☐ BD = 5 units

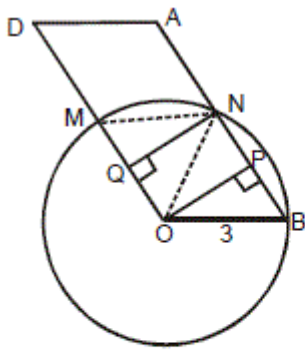
4 ☐ DM = 1 unit

Solution:

Correct Answer : 1

🔖 Bookmark

🔍 Answer key/Solution



Join ON to form an isosceles triangle $\triangle ONB$.

Since, ABOD is a parallelogram, we have $AB = DO$.

Therefore, $DM = 2$ units as $OM = 3$ units.

In $\triangle BON$

$OP \perp BN$ and OP bisects BN .

$$\Rightarrow OP = \sqrt{OB^2 - BP^2} = \sqrt{3^2 - 2^2} = \sqrt{5} \text{ units}$$

$$\therefore \text{Area of } \triangle BON = \frac{1}{2} \times 4 \times \sqrt{5} = 2\sqrt{5} \text{ square units}$$

Area of parallelogram ABOD = base \times height

$$= 5 \times \sqrt{5} = 5\sqrt{5} \text{ square units}$$

Now $QN = OP$ (As two perpendiculars between two parallel lines are equal and parallel)

$$\therefore \text{The area of the } \triangle ONM = \frac{1}{2} \times 3 \times \sqrt{5} = \frac{3\sqrt{5}}{2} \text{ sq. units}$$

Area of the quadrilateral ANMD

= Area of ABOD – Area of NMBO

$$= 5\sqrt{5} - \left(2\sqrt{5} + \frac{1}{2} \times 3\sqrt{5} \right) = \frac{3\sqrt{5}}{2} \text{ square units}$$

Also, the length of BD cannot be equal to 5 units because it has to be greater than AB or OD.

FeedBack

Q.81

Alok has been growing two types of bacteria R and J in two different enclosures on a particular day. R bacteria had a starting population of 2, while J Bacteria had a starting population of 8. However, R bacteria starts growing five hours before the J bacteria starts growing. On the same day at 8 p.m., Alok checks the enclosures and finds that the two types of bacteria have the same population. If the population of R doubles every hour, but the population of J is quadrupled every hour, at what time did he start growing J?

1 ☐ 12 noon

2 ☐ 3 pm

3 ☐ 5 pm

4 ☐ 4 pm

Solution:

Correct Answer : 3

Let the time of starting J be 't' hours ago.

Population of J now = $8 \times 4^t = 2^{(2t+3)}$

Population of R now = $2 \times 2^{(t+5)} = 2^{(t+6)}$

$2t + 3 = t + 6$

$t = 3$

J started to grow at 5 pm.

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.82

Two sprinters are running in clockwise direction on a circular track 'x' kms long ($x > 1$). Their second meeting takes place at a point C which is 200 m from their starting point in the anticlockwise direction on the circular track. If both of them started at the same time, then the location of their first meeting point is:

- I. 100 m from the starting point in the anticlockwise direction.
- II. 100 m, in the anticlockwise direction, from the point diametrically opposite to the starting point.
- III. 200 m from the starting point in the anticlockwise direction.

Which of the above statement is definitely true?

1 ☐ only I

2 ☐ only II

3 ☐ only III

4 ☐ Either I or II

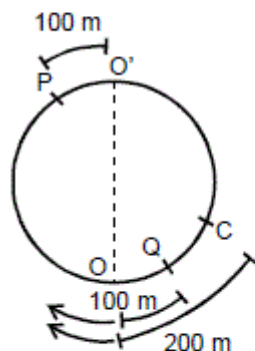
Solution:

Correct Answer : 4

Second meeting happens when one of the runners has covered a distance of $(nx - 200)$ metres, where n is a natural number

\Rightarrow 1st meeting must happen after the runner has covered a distance of

$$\left(\frac{nx - 200}{2}\right) \text{metres} = \left(\frac{nx}{2} - 100\right) \text{metres}$$



If their starting point is O and O' is a point diametrically opposite to O.

For $n = \text{even}$, runners meet at Q
and $n = \text{odd}$, runners meet at P.

FeedBack

Bookmark

Answer key/Solution

Q.83

Mrs. Gupta is a teacher at Navodaya School. She needs to indent for chalks to last the entire academic year comprising 175 working days. When a chalk reduces to $\frac{1}{6}$ th of its original length, it gets too small for her to hold and hence, she keeps it aside. Later, she joins 6 such pieces to make a new chalkstick of the same length as the original chalksticks and then uses the new chalkstick.

If she uses $\frac{5}{6}$ th of one chalkstick per day, what is the minimum number of chalksticks that she must indent for?

1 ☐ 150

2 ☐ 148

3 ☐ 144

4 ☐ 146

Solution:

Correct Answer : 4

 **Bookmark**

 **Answer key/Solution**

Mrs. Gupta uses $\frac{5}{6}$ th of the chalk and keeps aside the rest $\frac{1}{6}$ th everyday. On the 7th day, she may use a new chalkstick made by joining the leftover pieces of the preceding 6 days. Hence, every 7 days she ends up using 6 purchased chalksticks and leaves $\frac{1}{6}$ th piece of the chalk used on the 7th day, which will make a full chalkstick after $7 \times 6 = 42$ days and can be used on the 43rd day.

So, the number of chalksticks used in 43 days
 $= 6 \times 6 = 36$, with $\frac{1}{6}$ th left.

Hence, the number of chalk sticks used in 172 (i.e. 43×4) days $= 36 \times 4 = 144$, with $\frac{4}{6}$ th left.

On the 173rd and 174th days, she will need to use two more chalksticks. By joining the leftover of these chalksticks along with the leftovers of the earlier days chalksticks, she can make a new chalkstick that she can use on the 175th day.

Hence, total number of chalks needed for 175 days
 $= 144 + 2 = 146$.

Feedback

Q.84

Daniel begins with 64 coins in his coin jar. Each time he reaches into the jar, he removes half of the coins that are in the jar. How many times must he reach in and remove coins from his jar so that exactly 1 coin remains in the jar?

Solution:

Correct Answer : 6

 **Bookmark**

 **Answer key/Solution**

He needs to carry out the process six times in order to achieve the required result
i.e. $[32 + 16 + 8 + 4 + 2 + 1 = 63]$

Feedback

Q.85

When $f(x) = px^3 + qx^2 + rx + t$, where p, q, r and t are natural numbers, is divided by x , the remainder is a^4 , where ' a ' is a prime number. The square root of the remainder when $f(x)$ is divided by $(x - a)$ is the perfect cube of a natural number. If p, q, r and t , in the same order, are in an increasing Geometric Progression, find the value of ' a '.

1 ☐ 2

2 ☐ 3

3 ☐ 5

4 ☐ 7

Solution:

Correct Answer : 1

🔖 Bookmark

🔍 Answer key/Solution

When $f(x)$ is divided by x , the remainder will be

$$f(0) = t = a^4$$

Now, 'a' is a prime number and p, q, r and t form an increasing G.P.

$$\therefore r = a^3, q = a^2, p = a \text{ (because } p, q, r, t \in \mathbb{N})$$

So the remainder when $f(x)$ is divided by $(x - a)$, i.e.

$$f(a) = 4 \times a^4$$

$$\text{So square root of } f(a) = 2a^2$$

It will be in the form of a perfect cube only when $a = 2$.

FeedBack

Q.86

Ayesha started running from one end of a straight road at 5 a.m. Bhumika, standing at the other end of the road, started running towards Ayesha at 6 a.m. and met Ayesha for the first time at point P on the road. They continued running till they reached the opposite ends. Immediately after reaching their respective ends, they turned back towards their starting points and coincidentally met again at the same point P. If they met for the first time at 7 a.m., then what was the ratio of the speed of Ayesha to that of Bhumika?

1 ☐ 1 : 1

2 ☐ 1 : $\sqrt{2}$

3 ☐ $\sqrt{2} : \sqrt{3}$

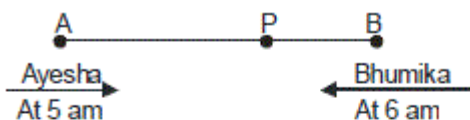
4 ☐ 1 : 2

Solution:

Correct Answer : 2

🔖 Bookmark

🔍 Answer key/Solution



Let the speeds of Ayesha and Bhumika be 'a' and 'b' units respectively.

Since Ayesha and Bhumika started running at 5 am and 6 am respectively and they met at 7 am for the first time, the ratio of the distance $AP : PB = 2a : b$

It is also given that they met at the same point P for the second time.

$$\text{Thus, } 2AP : 2PB = b : a$$

$$\therefore \frac{2a}{b} = \frac{b}{a} \Rightarrow \left(\frac{a}{b}\right)^2 = \frac{1}{2} \text{ or } \frac{a}{b} = \frac{1}{\sqrt{2}}$$

FeedBack

Q.87

The sequence N_1, N_2, N_3, \dots is defined by $N_n = N_{n-1} - N_{n-2} + N_{n-3} - N_{n-4}$ for all $n \geq 5$. If $N_1 = 211, N_2 = 375, N_3 = 420, N_4 = 523$, then what will be the value of $(N_{531} + N_{753} + N_{975})$?

1 ☐ 898

2 ☐ 631

3 ☐ 364

4 ☐ 544

Solution:

Correct Answer : 1

$$N_5 = N_4 - N_3 + N_2 - N_1$$

$$N_5 = 267$$

$$N_6 = N_5 - N_4 + N_3 - N_2$$

$$N_6 = -N_1$$

$$N_7 = N_6 - N_5 + N_4 - N_3$$

$$N_7 = -N_2$$

Similarly,

$$N_8 = -N_3$$

$$N_9 = -N_4$$

$$N_{10} = -N_5$$

Thus, the sequence repeats its terms after every 10 terms.

Following this pattern, we observe that

$$N_{531} = N_{(530+1)} = N_1 = 211$$

$$N_{753} = N_{(750+3)} = N_3 = 420$$

$$N_{975} = N_{(970+5)} = N_5 = 267$$

$$\text{So, } N_{531} + N_{753} + N_{975} = 211 + 420 + 267 = 898.$$

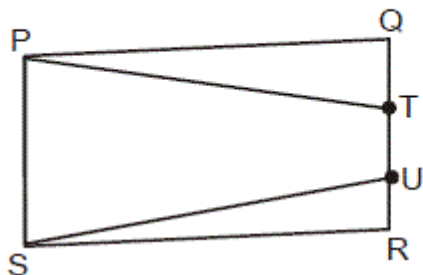
Feedback

 **Bookmark**

 **Answer key/Solution**

Q.88

In quadrilateral PQRS, points T and U are chosen on QR such that $\angle QPT = \angle RSU$ and $\angle TPU = \angle UST$. If the measure of $\angle QPR$ is 70° , then what is the measure of $\angle QSR$?



1 ☐ 110°

2 ☐ 80°

3 ☐ 105°

4 ☐ 70°

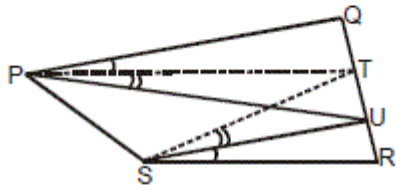
Solution:

Correct Answer : 4

Since $\angle TPU$ and $\angle UST$ are equal, the quadrilateral PTUS is a cyclic quadrilateral.

(When two equal angles lie on a line segment then the four points form a cyclic quadrilateral.)

Therefore, $\angle PTU + \angle USP = 180^\circ$.



Also, since $\angle QPT = \angle RSU$, therefore

$$\angle PSR + \angle PQR = \angle USP + \angle RSU + \angle PTU - \angle QPT = 180^\circ$$

\Rightarrow PQRS is a cyclic quadrilateral.

(the sum of the opposite angle of a cyclic quadrilateral is 180°)

Therefore, $\angle QSR = \angle QPR = 70^\circ$.

Feedback

Bookmark

Answer key/Solution

Q.89

Let p be a solution of the equation $x^6 - 2 = 0$. The value of $(p - 1)(p^{12} + p^{13} + \dots + p^{41})$ is

Solution:

Correct Answer : 124

$$(p - 1)(p^{12} + p^{13} + \dots + p^{41}) = (p - 1) \times p^{12}(1 + p + p^2 + p^3 + \dots + p^{29}) = p^{12}(p^{30} - 1)$$

Now, $p^{12} = 4$ and $p^{30} = 32$

$$\therefore (p - 1)(p^{12} + p^{13} + \dots + p^{41}) = 4(32 - 1) = 124.$$

Feedback

Bookmark

Answer key/Solution

Q.90

A special die having a number written on each of its faces is rolled. The probability of getting a number that is a multiple of three is $1/2$. The probability of getting an even number is $1/3$. Which of the following is a possible set of the numbers on the faces of the die?

1 ☐ 1; 2; 3; 5; 5; 6

2 ☐ 1; 2; 3; 3; 5; 6

3 ☐ 1; 2; 3; 4; 6; 6

4 ☐ 1; 2; 3; 3; 4; 6

Solution:

Correct Answer : 2

There should be 3 multiples of 3 and 2 even numbers
Choice (2) which contains 3 multiples of 3 and 2 even
numbers satisfies the given condition.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.91

In how many ways can three flags, of colors red, blue and green be arranged at the vertices of an equilateral triangle of side 5 m?

1 ☐ 1

2 ☐ 2

3 ☐ 3

4 ☐ 4

Solution:

Correct Answer : 2

If we fix one flag at any one corner of the equilateral triangle then the other two flags can be arranged in 2! ways.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.92

A company namely Nuts & Spices is planning to launch two type of nut cracker packets weighing 10 gm each. One called Nutty will be made up of 30% almonds, 10% cashews, and 60% peanuts. The second called Spicy will be made up of 20% almonds, 30% cashews, and 50% peanuts. Currently each Nutty can be sold at Rs 40 and each Spicy at Rs 45. Cost (in Rs.) per gram of almonds, cashews and peanuts are 6, 4 and 2 respectively. Demand for Nutty and Spicy are in the ratio 3 : 2. What is the profit percentage earned by selling the two products if production are in tune with the market demand for the items which is in the ratio 3 : 2? (Assume sufficient quantity of ingredients is available.)

1 ☐ 23.5

2 ☐ 20.5

3 ☐ 30

4 ☐ 16.67

Solution:

Correct Answer : 1

Cost of a Nutty mix = $(3 \times 6 + 1 \times 4 + 6 \times 2) = \text{Rs.}34$

Profit of a Nutty mix = Rs.6

Cost of a Spicy mix = $(2 \times 6 + 3 \times 4 + 5 \times 2) = \text{Rs.}34$

Profit of a Nutty mix = Rs.11

Let the production and sales of Nutty mix and Spicy mix be $3k$ and $2k$ respectively.

Profit = $[6 \times 3k + 11 \times 2k] = 40k$

Cost Price = $[34 \times 3k + 34 \times 2k] = 170k$

Profit percentage = $100 \times \frac{4}{17} = \frac{400}{17} = 23.5\%$.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.93

Statistics show that 10% of smokers get lung cancer and 90% of lung cancer patients are smokers. If 20% of the population smoke, then the percentage of the population having lung cancer is

1 ☐ 9/5

2 ☐ 2

3 ☐ 3

4 ☐ 20/9

Solution:

Correct Answer : 4

Let the number of population = $100k$

Smokers = $20k$

10% of smokers = $2k$

Now, 90% of lung cancer patients = $2k$

Lung cancer patients = $\frac{200k}{90} = \frac{20k}{9}$

Percentage of the Population having lung cancer

= $\frac{20}{9}\%$.

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.94

David was trying to make Batasha by heating a solution of water and sugar and evaporating the water. The mass of the solution is 3 kg which contains 90% water and 10% sugar by mass. After sometime, he finds that the solution contains 85% water. What will be the mass (in kg) of the final solution?

Solution:

Correct Answer : 2

Total mass	Sugar	Water
3 kg	0.3 kg	2.7
Water Evaporates	0	x
2 kg	0.3 kg	
100%	15%	85%

The mass of the solution is 2 kg.

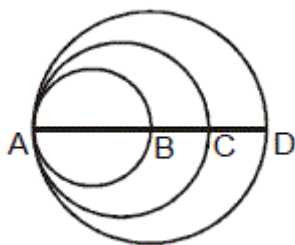
FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.95

In the figure given below, there are 3 circles. The radius of the smaller circle is 1 cm and the radius of the bigger circle exceeds that of the middle circle by 2 cm. If area of the middle circle is average of the areas of the three circles and centres of the circles lie on the line AD, then find the length (in cm) of BC.



Solution:

Correct Answer : 8

$$AB = 2 \text{ cm}$$

$$BC = x \text{ cm}$$

$$CD = 4 \text{ cm}$$

Areas of the circles are proportional to square of radii (diameters of the circles).

$$\frac{1}{3} [4 + (x + 2)^2 + (x + 6)^2] = (x + 2)^2$$

$$\Rightarrow 2x^2 + 16x + 44 = 3x^2 + 12x + 12$$

$$\Rightarrow x^2 - 4x - 32 = 0$$

$$\Rightarrow (x - 8) \times (x + 4) = 0$$

$$\Rightarrow x = 8.$$

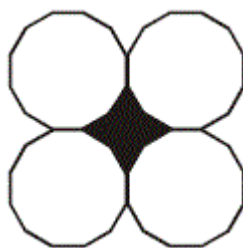
FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.96

Four regular dodecagons (polygons having 12 sides) are placed as shown below. If each side has length 1 unit, what is the area (in square units)of the shaded region?



1 ☐ $1 + \sqrt{3}$

2 ☐ $2 + 2\sqrt{3}$

3 ☐ $3 + 3\sqrt{3}$

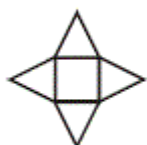
4 ☐ $4 + 4\sqrt{3}$

Solution:

Correct Answer : 1

External angle in a regular dodecagons = $\frac{360}{12} = 30^\circ$.

The shaded area comprises four equilateral triangles and a square each of side 1 cm.



The required area = area of 4 triangles + area of

$$\text{square} = 4 \times \frac{\sqrt{3}}{4} \times 1^2 + 1^2$$

$$= (\sqrt{3} + 1) \text{ square units.}$$

FeedBack

🔖 Bookmark

🔍 Answer key/Solution

Q.97

In a test, consisting of 28 questions, 5 points are deducted for each incorrect answer, 2 points are deducted for each unanswered question and 9 points are awarded for each correct answer. Arun writes the test and obtains a final score of 0 (zero). If Arun answered all the questions, how many questions did he answer correctly?

Solution:

Correct Answer : 10

Let the number of questions answered correctly and answered incorrectly be c and w respectively.

$$c + w = 28 \text{ and } 9c - 5w = 0$$

Solving above two equations, we get

$$c = 10 \text{ and } w = 18.$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.98

A bag contains 10 pairs of white cricket gloves, 10 pairs of black cricket gloves, 10 pairs of white socks and 10 pairs of black socks. What is the least number of objects you need to pick up from this bag blindfolded, to ensure that you have picked at least one pair of white socks and at least one pair of white gloves? (Assume that when blind folded, you will not be able to differentiate between the two colours, however you will still be able to differentiate between a sock and a glove).

1 ☐ 43

2 ☐ 53

3 ☐ 48

4 ☐ 55

Solution:

Correct Answer : 2

 **Bookmark**

 **Answer key/Solution**

The catch here is to figure out that a pair of white socks would include any two white socks (as we can wear the socks interchangeably in left and right foot), however a pair of white cricket gloves must necessarily include a white glove for left hand and one for the right hand as we cannot wear the cricket gloves interchangeably in left and right hand.

To pick up at least one pair of white socks, we need to pick up a minimum of 22 socks.

For example, in the worst scenario the first 20 socks that we pick up may all turn out to be black (note that 10 pairs of black socks would be equal to 20 black socks). However, the next two socks that we pick up have to be necessarily white.

However, to pick up at least one pair of white gloves, we need to pick up a minimum of 31 gloves.

For example, in the worst scenario the first 20 gloves that we pick up may all turn out to be black (note that 10 pairs of black gloves would be equal to 20 black gloves). The next 10 gloves that we pick up may turn out to be all white gloves of any one hand (say right hand). So, still we do not have a pair of white gloves.

However, the next sock that we pick up have to be necessarily white, and from a different hand (say left), that will necessarily pair up with one of the 10 white gloves that was picked earlier.

Hence, a minimum of 53 objects need to be picked from this bag (22 socks and 31 gloves), in order to ensure that we have picked at least one pair of white socks and at least one pair of white gloves.

FeedBack

Q.99

Function $f(x) = [x]$ is defined as the greatest integer less than or equal to x . If $[1^{1/3}] + [2^{1/3}] + [3^{1/3}] + \dots + [m^{1/3}] = 700$, then find the value of m .

Solution:

Correct Answer : 184

$$\begin{aligned}
 [1^{1/3}] + [2^{1/3}] + [3^{1/3}] + \dots + [7^{1/3}] &= 7 \times 1 = 7 \\
 [8^{1/3}] + [9^{1/3}] + [10^{1/3}] + \dots + [26^{1/3}] &= 19 \times 2 = 38 \\
 [27^{1/3}] + [28^{1/3}] + [29^{1/3}] + \dots + [63^{1/3}] &= 37 \times 3 = 111 \\
 [64^{1/3}] + [65^{1/3}] + [66^{1/3}] + \dots + [124^{1/3}] &= 61 \times 4 = 244 \\
 \therefore [1^{1/3}] + [2^{1/3}] + [3^{1/3}] + \dots + [124^{1/3}] &= 400 \\
 [125^{1/3}] + [126^{1/3}] + [127^{1/3}] + \dots + [(125+n)^{1/3}] &= (n+1) \times 5 \\
 (n+1) \times 5 &= 300 \\
 n &= 59 \\
 x = 125 + n &= 125 + 59 = 184.
 \end{aligned}$$

FeedBack

 **Bookmark**

 **Answer key/Solution**

Q.100

How many three-digit numbers can be formed using the digits 1, 2, 3, 4, 5, 6, 7 and 8 such that the unit's digit of these numbers is greater than their ten's digit and less than their hundred's digit?

Solution:

Correct Answer : 56

It is clear that each number in S has its three distinct digits.

Of all the 3-digit numbers formed from permutations of 3 distinct digits, there is exactly one with its unit's digit greater than its tens digit but less than its hundreds digit. Hence, the problem reduces to finding the number of ways in which we can select 3 distinct digits from the given 8 digits.

The required answer is ${}^8C_3 = 56$.

 **Bookmark**

 **Answer key/Solution**

Feedback