

DIRECTIONS for questions 1 to 6: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

All over Europe, there is concern about an increase in anti-Semitism, and deliberation over how to respond. Earlier this month the Parisian home of a 78-year-old Jewish community leader was attacked by intruders who shouted: "You are Jews, where is the money?" Along with his wife and son, the man was taken hostage, beaten and robbed, in what the government acknowledged was "an act ...directly related to their religion". Around the same time, the former head of a school in Marseille made waves by saying that when he was in charge he would advise Jews against enrolling, for fear of harassment.

Meanwhile the Vatican recently co-organised a symposium in Rome on anti-Semitism and minority rights in the Middle East, at which Tony Blair declared: "There is anti-Semitism in the East, but also in the West. There are manifestations in European countries, and also in the United Kingdom."

So how bad are things in Mr Blair's homeland? On the face of things, Britain is a relatively good place to be Jewish. When anti-Semitic feelings across Europe are compared, the UK tends to do well. But a new study by the London-based Institute for Jewish Policy Research gives an unusually nuanced picture of opinion in Britain.

It found that hard-core anti-Semites, who "express multiple anti-Semitic attitudes readily and confidently", amounted to 2.4% of the population, while a further 3% could be described as "softer" anti-Semites, expressing somewhat fewer negative views. To probe their opinions, respondents were invited to react to propositions like "Jews think they are better than other people" or "The interests of Jews in Britain are different from....the rest" or "Jews have too much power in Britain..." Besides these, the study said that there was a "much larger number of people who believe a small number of negative ideas about Jews but...may not be consciously hostile or prejudiced towards them". It found that 15% of Britons agreed at least in part to two or more anti-Semitic propositions, with a further 15% agreeing at least in part to one of them. The researchers' interpretation was cautious:

"This emphatically does not mean that 30% of the population of Great Britain is anti-Semitic.... Rather the 30% figure captures the current level of the diffusion of anti-Semitic ideas in British society, and offers an indication of the likelihood of British Jews encountering such ideas."

The report also tackled the sensitive question of how far hostility towards Jews is linked with negative feelings towards Israel. It found the two mind-sets to be correlated, but not co-extensive. Thus 86% of those British people who hold no anti-Israel attitudes hold no anti-Semitic views either; but among those who hold a large number of anti-Israel attitudes, only 26% are completely free of anti-Semitic feelings.

Still, there clearly are people who are strongly critical of Israel, but not anti-Jewish, and a somewhat smaller contingent who harbour anti-Semitic sentiments but have no particular gripe with the Jewish state. As the report puts it, "anti-Semitism and anti-Israel attitudes exist both separately and together."

A working definition of anti-Semitism was drafted last year by the International Holocaust Remembrance Alliance (IHRA) which says:

Anti-Semitism is a certain perception of Jews, which may be expressed as hatred toward Jews. Rhetorical and physical manifestations of anti-Semitism are directed toward Jewish or non-Jewish individuals and/or their property, toward Jewish community institutions and religious facilities.

The definition is controversial. It has been criticised by some British Jews on the political left who argued that it could muzzle legitimate criticism of Israel, and by a leading British barrister who concluded after studying the text, and the accompanying guidelines, that it was both too narrow (it might fail to capture some anti-Jewish conduct) and too broad, in the sense that free speech over the Middle East, for example in universities, might be curtailed.

Q1. Which of the following has not been addressed in the study by the Institute for Jewish Policy Research?

- a) Exploring the relation between anti-Semitic attitudes and anti-Israel attitudes.
- b) Understanding how anti-Semitic ideas diffuse in the British society. Your answer is correct
- c) Finding the prevalence of anti-Semitic attitudes in the British society.
- d) Finding the percentage of British population holding anti-Semitic attitudes across varying intensities of anti-Semitism.

Time spent / Accuracy Analysis

Time taken by you to answer this question	671
Avg. time spent on this question by all students	418
Difficulty Level	D
Avg. time spent on this question by students who got this question right	411
% of students who attempted this question	44.05
% of students who got the question right of those who attempted	43.12

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

The author says that when anti-Semitic feelings across Europe are compared, the UK tends to do well. But a study by the Institute for Jewish Policy Research gives an unusually nuanced picture of opinion in Britain.

Option A: The relation between anti-Semitic attitudes and anti-Israel attitudes has been addressed in the fourth and fifth paragraphs of the passage. Hence, this is not the answer

Option B: Although the diffusion of anti-Semitic ideas in the British society has been mentioned in the passage, how these ideas have been diffused has not been addressed. Hence, this is the answer.

Option C: The prevalence of anti-Semitic attitudes in the British society has been addressed in the third paragraph of the passage. Hence, this is not the answer.

Option D: The percentage of population having anti-Semitic ideas, has also been addressed in the third paragraph of the passage, Hence, this is not the answer.

Choice (B)

undefined

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All over Europe, there is concern about an increase in anti-Semitism, and deliberation over how to respond. Earlier this month the Parisian home of a 78-year-old Jewish community leader was attacked by intruders who shouted: "You are Jews, where is the money?" Along with his wife and son, the man was taken hostage, beaten and robbed, in what the government acknowledged was "an act ...directly related to their religion". Around the same time, the former head of a school in Marseille made waves by saying that when he was in charge he would advise Jews against enrolling, for fear of harassment.

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It found that hard-core anti-Semites, who "express multiple anti-Semitic attitudes readily and confidently", amounted to 2.4% of the population, while a further 3% could be described as "softer" anti-Semites, expressing somewhat fewer negative views. To probe their opinions, respondents were invited to react to propositions like "Jews think they are better than other people" or "The interests of Jews in Britain are different from...the rest" or "Jews have too much power in Britain..." Besides these, the study said that there was a "much larger number of people who believe a small number of negative ideas about Jews but...may not be consciously hostile or prejudiced towards them". It found that 15% of Britons agreed at least in part to two or more anti-Semitic propositions, with a further 15% agreeing at least in part to one of them. The researchers' interpretation was cautious:

"This emphatically does not mean that 30% of the population of Great Britain is anti-Semitic.... Rather the 30% figure captures the current level of the diffusion of anti-Semitic ideas in British society, and offers an indication of the likelihood of British Jews encountering such ideas."

The report also tackled the sensitive question of how far hostility towards Jews is linked with negative feelings towards Israel. It found the two mind-sets to be correlated, but not co-extensive. Thus 86% of those British people who hold no anti-Israel attitudes hold no anti-Semitic views either; but among those who hold a large number of anti-Israel attitudes, only 26% are completely free of anti-Semitic feelings.

Still, there clearly are people who are strongly critical of Israel, but not anti-Jewish, and a somewhat smaller contingent who harbour anti-Semitic sentiments but have no particular gripe with the Jewish state. As the report puts it, "anti-Semitism and anti-Israel attitudes exist both separately and together."

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Q2. How are hard-core anti-Semites different from softer anti-Semites in Britain?

- a) Hard-core anti-Semites express a multitude of negative ideas about Jews but softer anti-Semites have relatively fewer negative ideas to express.
- b) **Hard-core anti-Semites amount to 2.4% of the population but softer anti-Semites account for 3% of the population.**
- c) Hard-core anti-Semites are consciously hostile or prejudiced towards Jews but softer anti-Semites are not hostile or prejudiced towards Jews.
- d) **Hard-core anti-Semites are unperturbed in their contempt for Jews while softer anti-Semites are a bit less unperturbed in their hatred for Jews.** Your answer is incorrect

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	211
Avg. time spent on this question by all students	120
Difficulty Level	M
Avg. time spent on this question by students who got this question right	112
% of students who attempted this question	47.48
% of students who got the question right of those who attempted	61.85

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

It is mentioned in the passage that hard-core anti-Semites express multiple anti-Semitic attitudes readily and confidently and softer anti-Semites, express somewhat fewer negative views. The difference is in the number of negative attitudes that they express towards Jews..

Option A: This is true. Hard-core anti-Semites express multiple negative ideas towards Jews but softer anti-Semites express relatively fewer negative ideas. Hence, this is the answer.

Option B: Though this is true, this does not talk about the difference between hardcore and softer anti-Semites. Hence, this is not the answer.

Option C: It is not true that softer anti-Semites are not hostile and prejudiced towards Jews. They do have prejudices towards Jews but not as much as the hardcore anti-Semites. Hence, this is not the answer.

Option D: The difference between hardcore and softer anti-Semites is not in the extent of their hatred for Jews but the number of negative attitudes that they express. Hence, this is not the answer.

Choice (A)

undefined

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answer to each question.

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It found that hard-core anti-Semites, who "express multiple anti-Semitic attitudes readily and confidently", amounted to 2.4% of the population, while a further 3% could be described as "softer" anti-Semites, expressing somewhat fewer negative views. To probe their opinions, respondents were invited to react to propositions like "Jews think they are better than other people" or "The interests of Jews in Britain are different from...the rest" or "Jews have too much power in Britain..." Besides these, the study said that there was a "much larger number of people who believe a small number of negative ideas about Jews but...may not be consciously hostile or prejudiced towards them". It found that 15% of Britons agreed at least in part to two or more anti-Semitic propositions, with a further 15% agreeing at least in part to one of them. The researchers' interpretation was cautious:

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The report also tackled the sensitive question of how far hostility towards Jews is linked with negative feelings towards Israel. It found the two mind-sets to be correlated, but not co-extensive. Thus 86% of those British people who hold no anti-Israel attitudes hold no anti-Semitic views either; but among those who hold a large number of anti-Israel attitudes, only 26% are completely free of anti-Semitic feelings.

Still, there clearly are people who are strongly critical of Israel, but not anti-Jewish, and a somewhat smaller contingent who harbour anti-Semitic sentiments but have no particular gripe with the Jewish state. As the report puts it, "anti-Semitism and anti-Israel attitudes exist both separately and together."

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Q3. Which of the following statements can be inferred from the findings of the study conducted by the Institute for Jewish Policy Research?

- a) More than 20% of the population of Britain is slightly prejudiced against Jews, even if they do not do so consciously.
- b) **It is probable that among every 10 persons that British Jews come across in Britain, three of them are anti-Semitic.**
- c) Almost one-third of the population of Britain is anti-Semitic.
- d) **None of the above.** Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	137
Avg. time spent on this question by all students	120
Difficulty Level	M
Avg. time spent on this question by students who got this question right	120
% of students who attempted this question	38.75

Time spent / Accuracy Analysis

% of students who got the question right of those who attempted

49.76

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

The study conducted by the Institute for Jewish Policy Research talked about the extent of anti-Semitism prevalent in Britain.

Option A: It is clearly stated that it does not mean that 30% of the population of Great Britain is anti-Semitic. It is the probability of British Jews coming across anti-Semitic sentiments that is 30%. Hence, this cannot be inferred.

Option B: It is clearly stated that it does not mean that 30% of the population of Great Britain is anti-Semitic. It is the probability of British Jews coming across anti-Semitic sentiments that is 30%. It does not mean that three in every ten persons are anti-Semitic. Hence, this is not the answer.

Option C: It is clearly stated that it does not mean that 30% of the population of Great Britain is anti-Semitic. It is the probability of British Jews coming across anti-Semitic sentiments that is 30%. It does not mean that one-third of the population is anti-Semitic. Hence, this cannot be inferred. **Choice (D)**

undefined

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Q4. Which of the following can be inferred from the statement "It found the two mind-sets to be correlated, but not co-extensive"?

- I.
There is a good chance that people with anti-Semitic attitudes also hold anti-Israel attitudes and vice versa.
- II.
In most of the cases, people with anti-Semitic attitudes do not hold anti-Israel attitudes.
- III.
In the British society, anti-Semitic attitudes are not as prevalent as anti-Israel attitudes.
- IV.
In the British society, anti-Israel attitudes are not as prevalent as anti-Semitic attitudes.

a) Only I Your answer is correct

b) Only II and IV

c) Only I and IV

d) Only II and III

Time spent / Accuracy Analysis

Time taken by you to answer this question	436
Avg. time spent on this question by all students	173
Difficulty Level	M
Avg. time spent on this question by students who got this question right	170
% of students who attempted this question	35.57
% of students who got the question right of those who attempted	38.21

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[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

The report given by the Institute of Jewish Policy stated that although there was a correlation between anti-Semitic and anti-Israel attitudes, there was no co-extension.

Statement I: From 'among those who hold a large number of anti-Israel attitudes, only 26% are completely free of anti-Semitic feelings', it can be understood that this statement can be inferred.

Statement II: From 'among those who hold a large number of anti-Israel attitudes, only 26% are completely free of anti-Semitic feelings', it can be understood that the opposite is true in most of the cases. Hence, this statement cannot be inferred.

Statement III: From the passage, it can be inferred that both anti-Semitic and anti-Israel attitudes are prevalent in the British society but which mindset is more prevalent has not been discussed or implied in the passage. Hence, this cannot be inferred.

Statement IV: From the passage, it can be inferred that both anti-Semitic and anti-Israel attitudes are prevalent in the British society but which mindset is more prevalent has not been discussed or implied in the passage. Hence, this cannot be inferred.

Choice (A)

undefined

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Q5. The definition of anti-Semitism drafted by IHRA was criticised for which of the following reasons?

- i. The definition may overlook well-founded censure of Israel.
- ii. The definition does not comprehensively cover anti-Semitic behaviour.
- iii. The definition completely turns a blind eye to the issue of free speech over the Middle East.

a) i only

b) i and ii Your answer is correct

c) ii and iii

d) i, ii and iii

Time spent / Accuracy Analysis

Time taken by you to answer this question	175
Avg. time spent on this question by all students	120
Difficulty Level	D
Avg. time spent on this question by students who got this question right	116
% of students who attempted this question	38.47
% of students who got the question right of those who attempted	21.44

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

Statement i: The definition has been criticised by some British Jews on the political left who argued that it could muzzle legitimate criticism of Israel. Hence, this is one of the answers.

Statement ii: The definition might fail to capture some anti-Jewish conduct. Hence, this is one of the answers.

Statement iii: This is not true. There isn't enough to say that a blind eye would be turned to the issue of free speech over the Middle East; it is just that the freedom of speech may be restricted to a certain extent. Hence, this is not an answer.

Only statements i and ii are right.

Choice (B)

undefined

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Q6. Which of the following cannot be inferred from the passage?

- a) One of the prejudices about Jews is that they possess a lot of wealth.
- b) Hatred directed towards the Jews, contempt for the Jewish way of life and having a few negative perceptions about Jews can be deemed 'anti-Semitic', according to the definition drafted by IHRA.
- c) Tony Blair acknowledges the anti-Semitic feelings prevalent in the UK even as it seemed that the UK fared better than any other European country in the sphere of anti-Semitism.
- d)

Among the people holding anti-Semitic attitudes, the percentage of people bereft of anti-Israel feelings is high.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

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Difficulty Level	D
Avg. time spent on this question by students who got this question right	111
% of students who attempted this question	35.68
% of students who got the question right of those who attempted	32.61

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 634

Option A: From 'Earlier this month the Parisian home of a 78-year-old Jewish community leader was attacked by intruders who shouted: "You are Jews, where is the money?"' Along with his wife and son, the man was taken hostage, beaten and robbed, in what the government acknowledged was "an act ...directly related to their religion", it can be inferred that possessing wealth is indeed a prejudice associated with Jews. Hence, choice A can be inferred. Choice A is not the answer.

Option B: The definition drafted by IRHA is:

Anti-Semitism is a certain perception of Jews, which may be expressed as hatred toward Jews. Rhetorical and physical manifestations of anti-Semitism are directed toward Jewish or non-Jewish individuals and/or their property, toward Jewish community institutions and religious facilities. So, choice B is correct. Note: Having a few (i.e. a really small but still recognisable number) negative perceptions about Jews still amounts to having negative perceptions about Jews. So this can be deemed anti-Semitic. Choice B can be inferred and is not the answer.

Option C: Tony Blair stated that there is anti-Semitism in the East, but also in the West. There are manifestations in European countries, and also in the United Kingdom. From this, it can be inferred that he acknowledged the anti-Semitic feelings prevalent in the UK. It is also stated in the passage that when anti-Semitic feelings across Europe are compared, the UK tends to do well. So choice C is true. Hence, choice C is not the answer.

Option D: Refer to para 6. There clearly are people who are strongly critical of Israel, but not anti-Jewish, and a somewhat smaller contingent who harbour anti-Semitic sentiments but have no particular gripe with the Jewish state. It is given that there are 26% anti-Israel people who are not anti-Semitic. We also know that 86% of people having no anti-Israel attitudes have no anti-Semitic views. This means that 14% of people having no anti-Israel attitudes have anti-Semitic views. But we do not know the size (number) of anti-Israel people and the size of non-anti-Israel people. Hence we cannot make the comparison given in choice D. Choice D is the required answer.

Choice (D)

undefined

DIRECTIONS for questions 7 to 9: The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

While much of the work in social aesthetics/relational aesthetics is taking place in the discipline of cultural studies, improvisation theory is asserting itself as a self-consciously interdisciplinary endeavor. In the musical field, improvisation is the art of composing and recording in the same time; in other words, it is inventing in that time. The improvisation theory

draws together musicians, musicologists, philosophers, historians, and cultural theorists to consider questions of how and why improvisation as both a musical and social practice contributes to social organization overall.

Another developing area is the ethics of improvisation. Tracey Nicholls argues that the examination and adoption of the norms and values that flourish in communities of improvising musicians - those who improvise in the “free jazz” tradition, in particular - can help us to build more responsive, more democratic political societies. To be part of an improvising ensemble demands an openness to others, a willingness to listen carefully, closely, and charitably, and to respond in constructive ways that advance the musical “conversation.” This requires capacities for self-trust and respect for others on the part of every participant. The payoff is an expanded ability to engage differences creatively, instead of through an attitude of fear and hostility, and this in turn leads to a greater ability to deal with the complexity of a fast paced, globalized world.

The ideal actor, in both musical improvisation and the sphere of grassroots popular political action, is the figure Cornel West dubs “the jazz freedom fighter”. To be a jazz freedom fighter is to attempt to galvanize and energize world-weary people into forms of organization with accountable leadership that promote critical exchange and broad reflection. The interplay of individuality and unity is not one of uniformity and unanimity imposed from above but rather of conflict among diverse groupings that reach a dynamic consensus subject to questioning and criticism. “As with a soloist in a jazz quartet, quintet or band, individuality is promoted in order to sustain and increase the creative tension with the group – a tension that yields higher levels of performance to achieve the aim of the collective project,” West says.

In developing our capacities for openness to difference and living with risk (that, for instance, our attempts to negotiate and communicate might fail), this ethics of improvisation grounds subsidiary virtues that are not otherwise encouraged by our *social status quo*. Virtues like generosity towards others, willingness to support their risk-taking and their struggles to find creative ways out of impasses, commitment to an enhanced capacity to forgive the mis-steps that inevitably happen in these struggles, and greater respect for acknowledging and accepting different views are also encouraged. This suggests that, given that our best-laid plans may fail, there is an enormous value to developing our individual capacities for improvisatory action.

Q7. According to the passage, improvisation in music can inspire us in all the following ways EXCEPT?

- a) **Affects the social configuration.**
- b) **Points the way to more resilient societies.**
- c) Encourages greater respect for the ability to integrate, adopt, and even switch between different perspectives that people may have.
- d) **Advocates that one dispense with planning and strategizing.**

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	50
Avg. time spent on this question by all students	294
Difficulty Level	D
Avg. time spent on this question by students who got this question right	296
% of students who attempted this question	30.54
% of students who got the question right of those who attempted	54.46

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 459

Option A: The improvisation theory draws together musicians, musicologists, philosophers, historians, and cultural theorists, among others, to consider questions of how and why improvisation as both a musical and social practice contributes to social organization overall. Hence choice A is true.

Option B: Adoption of the norms and values that flourish in communities of improvising musicians – those who improvise in the “free jazz” tradition, in particular – can help us to build more responsive, more democratic political societies. this in turn leads to a greater ability to deal with the complexity of a fast paced, globalized world to respond in constructive ways that advance the musical “conversation.” willingness to support their risk-taking and their struggles to find creative ways out of impasses, commitment to an enhanced capacity to forgive the mis-steps So choice B is also correct.

Option C: In developing our capacities for openness to difference and living with risk (that, for instance, our attempts to negotiate and communicate might fail), this ethics of improvisation grounds subsidiary virtues that are not otherwise encouraged by our social *status quo*. Virtues like generosity towards others, willingness to support their risk-taking and their struggles to find creative ways out of impasses, commitment to an enhanced capacity to forgive the mis-steps that inevitably happen in these struggles, and greater respect for acknowledging and accepting different views are also encouraged. Therefore choice C is also correct.

Option D: Improvisation is the art of composing and recording in the same time; in other words, it is inventing in that time. This suggests that, given that our best-laid plans may fail, there is an enormous value to developing our individual capacities for improvisatory action. However, this does not translate into “improvisation theory advocating that one dispense with planning and strategizing”, as choice D suggests. So choice D is not true and is the answer.

Choice (D)

undefined

DIRECTIONS for questions 7 to 9: The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

While much of the work in social aesthetics/relational aesthetics is taking place in the discipline of cultural studies, improvisation theory is asserting itself as a self-consciously interdisciplinary endeavor. In the musical field, improvisation is the art of composing and recording in the same time; in other words, it is inventing in that time. The improvisation theory draws together musicians, musicologists, philosophers, historians, and cultural theorists to consider questions of how and why improvisation as both a musical and social practice contributes to social organization overall.

Another developing area is the ethics of improvisation. Tracey Nicholls argues that the examination and adoption of the norms and values that flourish in communities of improvising musicians - those who improvise in the “free jazz” tradition, in particular - can help us to build more responsive, more democratic political societies. To be part of an improvising ensemble demands an openness to others, a willingness to listen carefully, closely, and charitably, and to respond in constructive ways that advance the musical “conversation.” This requires capacities for self-trust and respect for others on the part of every participant. The payoff is an expanded ability to engage differences creatively, instead of through an attitude of fear and hostility, and this in turn leads to a greater ability to deal with the complexity of a fast paced, globalized world.

The ideal actor, in both musical improvisation and the sphere of grassroots popular political action, is the figure Cornel West dubs “the jazz freedom fighter”. To be a jazz freedom fighter is to attempt to galvanize and energize world-weary people into forms of organization with accountable leadership that promote critical exchange and broad reflection. The interplay of

individuality and unity is not one of uniformity and unanimity imposed from above but rather of conflict among diverse groupings that reach a dynamic consensus subject to questioning and criticism. "As with a soloist in a jazz quartet, quintet or band, individuality is promoted in order to sustain and increase the creative tension with the group – a tension that yields higher levels of performance to achieve the aim of the collective project," West says.

In developing our capacities for openness to difference and living with risk (that, for instance, our attempts to negotiate and communicate might fail), this ethics of improvisation grounds subsidiary virtues that are not otherwise encouraged by our social *status quo*. Virtues like generosity towards others, willingness to support their risk-taking and their struggles to find creative ways out of impasses, commitment to an enhanced capacity to forgive the mis-steps that inevitably happen in these struggles, and greater respect for acknowledging and accepting different views are also encouraged. This suggests that, given that our best-laid plans may fail, there is an enormous value to developing our individual capacities for improvisatory action.

Q8. It can be inferred that "the jazz freedom fighter" spoken about in the passage

- a) is an individual who pits his or her creative vision and talents against other members of a group in a way that is both competitive and collaborative.
- b) is none other than Cornel West himself.
- c) encourages accountable leadership but teaches people to refrain from questioning authority and taking chances.
- d) is a character who increases the creative tension in the group by promoting fear and hostility.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	129
Difficulty Level	M
Avg. time spent on this question by students who got this question right	120
% of students who attempted this question	35.35
% of students who got the question right of those who attempted	52.16

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 459

Refer to para 3.

Option A: The interplay of individuality and unity is not one of uniformity and unanimity imposed from above but rather of conflict among diverse groupings that reach a dynamic consensus subject to questioning and criticism. Hence choice A is true and is the answer.

Option B: The ideal actor, in both musical improvisation and the sphere of grassroots popular political action, is the figure Cornel West **dubs** "the jazz freedom fighter". Choice B cannot be understood from the passage.

Option C: To be a jazz freedom fighter is to attempt to galvanize and energize world-weary people into forms of organization with accountable leadership that promote critical exchange and broad reflection. The first part of choice C is true. The second part of choice C is incorrect. rather of conflict among diverse groupings that reach a dynamic consensus subject to questioning and criticism This ethics of improvisation grounds subsidiary virtues that are not otherwise encouraged by our social *status quo* (the existing state of affairs, especially regarding social or political issues). Hence choice C is incorrect.

Option D: As with a soloist in a jazz quartet, quintet or band, individuality is promoted in order to sustain and increase the creative tension with the group. The interplay of individuality and unity is not one of uniformity and unanimity The payoff of improvisation is an expanded ability to engage differences creatively, instead of *through an attitude of fear and hostility*. Choice D is rendered incorrect.

Choice (A)

undefined

DIRECTIONS for questions 7 to 9: The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

While much of the work in social aesthetics/relational aesthetics is taking place in the discipline of cultural studies, improvisation theory is asserting itself as a self-consciously interdisciplinary endeavor. In the musical field, improvisation is the art of composing and recording in the same time; in other words, it is inventing in that time. The improvisation theory draws together musicians, musicologists, philosophers, historians, and cultural theorists to consider questions of how and why improvisation as both a musical and social practice contributes to social organization overall.

Another developing area is the ethics of improvisation. Tracey Nicholls argues that the examination and adoption of the norms and values that flourish in communities of improvising musicians - those who improvise in the “free jazz” tradition, in particular - can help us to build more responsive, more democratic political societies. To be part of an improvising ensemble demands an openness to others, a willingness to listen carefully, closely, and charitably, and to respond in constructive ways that advance the musical “conversation.” This requires capacities for self-trust and respect for others on the part of every participant. The payoff is an expanded ability to engage differences creatively, instead of through an attitude of fear and hostility, and this in turn leads to a greater ability to deal with the complexity of a fast paced, globalized world.

The ideal actor, in both musical improvisation and the sphere of grassroots popular political action, is the figure Cornel West dubs “the jazz freedom fighter”. To be a jazz freedom fighter is to attempt to galvanize and energize world-weary people into forms of organization with accountable leadership that promote critical exchange and broad reflection. The interplay of individuality and unity is not one of uniformity and unanimity imposed from above but rather of conflict among diverse groupings that reach a dynamic consensus subject to questioning and criticism. “As with a soloist in a jazz quartet, quintet or band, individuality is promoted in order to sustain and increase the creative tension with the group – a tension that yields higher levels of performance to achieve the aim of the collective project,” West says.

In developing our capacities for openness to difference and living with risk (that, for instance, our attempts to negotiate and communicate might fail), this ethics of improvisation grounds subsidiary virtues that are not otherwise encouraged by our social *status quo*. Virtues like generosity towards others, willingness to support their risk-taking and their struggles to find creative ways out of impasses, commitment to an enhanced capacity to forgive the mis-steps that inevitably happen in these struggles, and greater respect for acknowledging and accepting different views are also encouraged. This suggests that, given that our best-laid plans may fail, there is an enormous value to developing our individual capacities for improvisatory action.

Q9. What is the style of the passage?

- a) **Rationally polemical.**
- b) **Comprehensively explanatory.**
- c) Broadly analytical.
- d) **Mildly argumentative.**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	52
Difficulty Level	D
Avg. time spent on this question by students who got this question right	50
% of students who attempted this question	23.74
% of students who got the question right of those who attempted	16.31

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 459

Option A: A polemical passage would involve strongly critical or disputatious writing. The passage is not polemical. There is no debate or dispute here i.e. the passage does not present arguments and counterarguments for any idea or concept. Hence choice A is not the answer.

Option B: In the first para, the author explains what the improvisation theory is, its social objective etc. In the next para, he explains the basic requirements of improvisation in music. In the last two paras, he explores the advantages of music improvisation in society. But the author has used the explanation to provide a gentle build-up to the conclusion at the end. The author's style is mildly argumentative. The author supports the pros of improvisation. So choice B is not correct.

Option C: Analysis involves examining aspects of a situation in its pluses and minuses, and making an evaluation at the end of it. In this passage, the author does not analyze a situation or and weighs up any study. Hence choice C is not the answer.

Option D: 'Argumentative' as a style of passage could involve either (i) presenting an argument or (ii) in the nature of a debate. While the author isn't doing (ii), he could be considered to be doing (i) when you consider the last line of the passage: This suggests that, given that our best-laid plans may fail, there is an enormous value to developing our individual capacities for improvisatory action. Hence choice D is correct.

Choice (D)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

We then examined participants' responses to figure out how their judgments of what was possible changed when they had to answer quickly compared with when they had time to reflect before answering. For the ordinary actions, there was no real difference: naturally, people judged ordinary actions to be possible whether they answered quickly or had time to reflect. There was a striking difference, however, for immoral actions. When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time. This suggests that before they had time to really think about it, they weren't actually thinking of many of these actions as even possible. We

also compared these actions with ones that were *statistically* improbable but not immoral and found that this kind of effect was specific to the immoral actions, so it's not something that can be explained by probability alone.

Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q10. What is the main purpose of the passage?

- a) To highlight the difference in the way moral and immoral people think.
- b) To understand what factors impact people's morality.
- c) To understand why improbable actions are usually considered immoral.
- d) To explore the relation between immoral actions and their perceived impossibility. Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	414
Avg. time spent on this question by all students	313
Difficulty Level	M
Avg. time spent on this question by students who got this question right	313
% of students who attempted this question	47.91
% of students who got the question right of those who attempted	64.71

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 740

The author raises a question about why we do not consider immoral actions in certain situations even if they were feasible and answers that question by the end of the passage.

Option A: The author does not even mention the difference in the way immoral and moral people think. Hence, this is not the answer.

Option B: The morality of people and what factors impact their morality has not been discussed in the passage. Hence, this is not the answer.

Option C: The author does not state or imply anywhere in the passage that improbable actions are immoral. This is not the answer.

Option D: This is precisely what the passage is about. The author starts with a situation and raises a question as to why we do not tend to come up with actions that are immoral in that situation and throughout the passage he explores that question and the different possibilities. Hence, this is the answer.

Choice (D)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do

that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

We then examined participants' responses to figure out how their judgments of what was possible changed when they had to answer quickly compared with when they had time to reflect before answering. For the ordinary actions, there was no real difference: naturally, people judged ordinary actions to be possible whether they answered quickly or had time to reflect. There was a striking difference, however, for immoral actions. When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time. This suggests that before they had time to really think about it, they weren't actually thinking of many of these actions as even possible. We also compared these actions with ones that were *statistically* improbable but not immoral and found that this kind of effect was specific to the immoral actions, so it's not something that can be explained by probability alone.

Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q11. Which of the following statements can be understood from the passage?

- a) We turn a blind eye to the atrocities that happen around us because we refuse to acknowledge their occurrence.
- b) Neighbours of serial killers, despite knowing that a serial killer lives next door, refuse to report the matter to the police.
- c) We tend not to believe atrocities happening in other countries because our morally right character refuses to believe it.
- d) Our initial response to atrocities happening in other countries is disbelief because we perceive immorality to be nearly impossible. Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	42
Avg. time spent on this question by all students	93
Difficulty Level	D
Avg. time spent on this question by students who got this question right	87
% of students who attempted this question	46.95
% of students who got the question right of those who attempted	74.57

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 740

Option A: Neither do we turn a blind eye to atrocities nor do we refuse to acknowledge them. It is only that our initial response to these atrocities is disbelief rather than outrage. Hence, this cannot be inferred.

Option B: They do not refuse to report it to the police. They just find it difficult to believe that their neighbour could have killed multiple people. This is not what the author stated. Hence, this cannot be inferred.

Option C: The initial response to atrocities is disbelief because prior to their occurrence, we did not think that it was possible for such things to occur. Hence, we are in disbelief. Not because our morally right character refuses to accept it. Hence, this cannot be inferred.

Option D: The author talks about how we respond to certain situations and why we do so. He states that our initial response to certain events is disbelief because we do not tend to think that it was possible for something like that to happen. Hence, this can be inferred from the passage.

Choice (D)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

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Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q12. Which of the following can be inferred to be the result of the study mentioned in the last sentence of the fourth paragraph of the passage?

- a) The participants who were given time to reflect tended to judge improbable moral actions as impossible, while those who were not given time to reflect tended to judge otherwise.
- b) The participants who were given time to reflect tended to judge improbable moral actions as possible, while those who were not given time to reflect tended to judge otherwise. □ **Your answer is incorrect**
- c) The participants who were given time to reflect and those who were not given any time to reflect both tended to judge improbable immoral actions as impossible to the same extent.
- d) The extent to which participants tended to judge improbable moral actions as impossible was the same irrespective of the time given to reflect.

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	243
Avg. time spent on this question by all students	162
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	178
% of students who attempted this question	39.47
% of students who got the question right of those who attempted	18.94

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 740

The fourth paragraph of the passage talks about the study conducted by the author regarding the probability of people coming up with moral and immoral actions as solutions in different situations.

Option A: This cannot be inferred because the participants who were given time to reflect did not judge improbable moral actions as impossible. Hence, this is not the answer.

Option B: It can be inferred from the last sentence of the passage that as far as improbable moral actions are considered, there was not much difference in the participants' responses with and without the time constraints. Hence, this is not the answer.

Option C: The participants who were given time to reflect judged improbable immoral actions to be possible but those who were not given time to reflect judged improbable immoral actions as impossible to pursue 40% of the time. Therefore, the extent to which they tend to judge improbable immoral actions is not the same with time constraints and without time constraints. Hence, this is not the answer.

Option D: From the last sentence of the fourth paragraph of the passage, it can be inferred that the extent to which the participants tended to judge improbable moral actions as possible was the same in with and without the time constraints. Hence, this can be inferred.

Choice (D)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

We then examined participants' responses to figure out how their judgments of what was possible changed when they had to answer quickly compared with when they had time to reflect before answering. For the ordinary actions, there was no real difference: naturally, people judged ordinary actions to be possible whether they answered quickly or had time to reflect. There was a striking difference, however, for immoral actions. When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time. This suggests that before they had time to really think about it, they weren't actually thinking of many of these actions as even possible. We also compared these actions with ones that were *statistically* improbable but not immoral and found that this kind of effect was specific to the immoral actions, so it's not something that can be explained by probability alone.

Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q13. In the first two paragraphs of the passage, the author suggests that morally good persons

- a) evaluate and discard immoral actions. Your answer is incorrect
- b) find it impossible to think as an immoral person would.
- c) cannot come up with immoral actions as possibilities.
- d) are not creative enough to come up with many possibilities.

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	94
Avg. time spent on this question by all students	78
Difficulty Level	D
Avg. time spent on this question by students who got this question right	74
% of students who attempted this question	48.82
% of students who got the question right of those who attempted	72.09

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 740

The author says that morally good persons usually do not tend to come up with immoral actions as possible solutions.

Option A: The author states that morally good persons cannot even come up with immoral actions as possibilities. Hence, this is not the answer.

Option B: The author has not talked about whether morally good persons can think like an immoral person or not. This is not the answer.

Option C: This is precisely what the author says about morally good persons in the first two paragraphs. Morally good persons cannot come up with immoral actions as possibilities. Hence, this is the answer.

Option D: The author has neither mentioned nor implied anything about the creativity of morally good persons. Hence, this is not the answer.

Choice (C)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

We then examined participants' responses to figure out how their judgments of what was possible changed when they had to answer quickly compared with when they had time to reflect before answering. For the ordinary actions, there was no real difference: naturally, people judged ordinary actions to be possible whether they answered quickly or had time to reflect. There was a striking difference, however, for immoral actions. When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time. This suggests that before they had time to really think about it, they weren't actually thinking of many of these actions as even possible. We also compared these actions with ones that were *statistically* improbable but not immoral and found that this kind of effect was specific to the immoral actions, so it's not something that can be explained by probability alone.

Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q14. Mr. X is supposed to raise \$1000 and asks his friend, Mr. Y, for his suggestions. If Mr. Y has less than a minute to think, according to the studies mentioned in the passage, he is least likely to come up with which of the following suggestions?

- a) Ask Mr. X to take a loan from a bank.
- b) Give Mr. X a map of a treasure located in a secret island.
- c) Borrow the amount from a friend with no intention of repaying it. Your answer is correct
- d) Offer to sell his car and give the amount to Mr. X.

Time spent / Accuracy Analysis

Time taken by you to answer this question	70
Avg. time spent on this question by all students	72
Difficulty Level	D
Avg. time spent on this question by students who got this question right	68
% of students who attempted this question	46.56
% of students who got the question right of those who attempted	50.22

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 740

We are least likely to come up with solutions that are immoral especially when there is a time constraint. So the option we are looking for must be one where the action is immoral.

Option A: This is an ordinary action and not immoral. Hence, this is not the answer.

Option B: Although this is highly improbable, it is not immoral. Hence, this is not the answer.

Option C: This is immoral. Because you are cheating your friend. Since this is immoral, we are less likely to think of it especially when there is a time constraint. Hence, this is the answer.

Option D: This is not an immoral way of raising money. Hence, this is not the answer.

Choice (C)

undefined

DIRECTIONS for questions 10 to 15: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

Suppose you're on the way to the airport to catch a flight, but your car breaks down. Some of the actions you immediately consider are obvious: you might try to call a friend, look for a taxi, or book a later flight. If those don't work out, you might consider something more far-fetched, such as finding public transportation or getting the tow-truck driver to tow you to the airport. But here's a possibility that would likely never come to mind: you could take a taxi but not pay for it when you get to the airport. Why wouldn't you think of this? After all, it's a pretty sure-fire way to get to the airport on time, and it's definitely cheaper than having your car towed.

One natural answer is that you don't consider this possibility because you're a morally good person who wouldn't actually do that. But there are at least two reasons why this doesn't seem like a compelling answer to the question, even if you are morally good. The first is that, though being a good person would explain why you wouldn't actually do this, it doesn't seem to explain why you wouldn't have been able to come up with this as a solution in the first place. After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. And the second reason is that it seems equally likely that you wouldn't have come up with this possibility for someone else in the same situation - even someone whom you didn't know was morally good. So what does explain why we don't consider the possibility of taking a taxi but not paying? Here's a radically different suggestion: before I mentioned it, you didn't think it was even possible to do that.

Consider, for example, a series of studies that I conducted with my colleague Fiery Cushman at Harvard University. In these studies, participants were asked to read short stories about people facing a series of problems (such as a car breaking down

on the way to the airport). They were then asked to make judgments about what would be possible or impossible for a person to do in that situation. The critical manipulation was that half of the participants were asked to make judgments very quickly, in about one second, which prevented them from having time to reflect, and forced them to rely on their default way of thinking about what was possible. The other half were asked to reflect before deciding whether something was possible. Then both groups were asked about a set of different possibilities, some of which were completely ordinary (like taking a taxi), and others of which were immoral (like taking a taxi without paying).

We then examined participants' responses to figure out how their judgments of what was possible changed when they had to answer quickly compared with when they had time to reflect before answering. For the ordinary actions, there was no real difference: naturally, people judged ordinary actions to be possible whether they answered quickly or had time to reflect. There was a striking difference, however, for immoral actions. When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time. This suggests that before they had time to really think about it, they weren't actually thinking of many of these actions as even possible. We also compared these actions with ones that were *statistically* improbable but not immoral and found that this kind of effect was specific to the immoral actions, so it's not something that can be explained by probability alone.

Once one begins to see the central thesis that these studies suggest, it's not hard to notice that this way of thinking pervades many aspects of our lives. And suddenly, it begins to make sense why, whenever the former neighbours of a serial killer are interviewed, they consistently report not being able to believe that their neighbour actually killed multiple people. Or why, when we hear about an atrocity that is being committed in a foreign country, our initial response is disbelief rather than outrage. Immoral actions often seem to us not merely bad or undesirable - but, in fact, impossible.

Q15. Which of the following statements is true, according to the passage?

- a) Only in times of desperation will a human being resort to immoral actions.
- b) The participants of the study mentioned in the passage, when not given time to think, believed that it is actually impossible to pursue solutions that are deemed immoral almost 40% of the time. Your answer is correct
- c) A morally good person would neither contemplate immoral actions nor actually do them.
- d) The participants of the study mentioned in the passage, when given time to evaluate, believed that improbable immoral actions are impossible to pursue in majority of cases.

Time spent / Accuracy Analysis

Time taken by you to answer this question	66
Avg. time spent on this question by all students	78
Difficulty Level	D
Avg. time spent on this question by students who got this question right	79
% of students who attempted this question	43.48
% of students who got the question right of those who attempted	71.06

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 740

Option A: The passage does not mention anything about when and why people resort to immoral actions. Hence, this is not the answer.

Option B: From the sentences, "When participants reflected before answering, they typically judged that it was possible for someone to do these immoral actions. In contrast, when they had to answer quickly, participants judged that it was actually impossible to pursue these solutions almost 40% of the time", it is clear that this statement is true. Hence, this is the answer.

Option C: Choice C is false from the lines in the passage: "After all, your good moral character doesn't stop you from admitting that it is a way of getting to the airport, even if you wouldn't go through with it. Hence, this is not the answer.

Option D: Participants in the study, when given enough time, judged improbable immoral actions as possible. Therefore, this statement is false. Hence, this is not the answer.

Choice (B)

undefined

DIRECTIONS for questions 16 to 18: The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

Carbon dioxide gas (acidic when dissolved in water) is lowering the pH of the seas. Marine calcifiers like mollusks, crustaceans and reef-forming corals which create skeletons out of calcium carbonate are vulnerable to small pH changes. The essential building block for their shell making process - the carbonate ion (CO_3^{2-}) - is rendered useless when it combines with hydrogen ions released by carbonic acid (H_2CO_3). Their calcium carbonate shells also dissolve in too acidic environments. Corals, whose growth is supported by nutrient poor waters, are likely to have the toughest time. Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems.

Numerous laboratory experiments have provided evidence that the shells of several marine species are thinner now than they were earlier. What there has not been though, is a controlled study of such species in the wild.

The gap has been plugged by Miles Lamare of the University of Otago, in New Zealand. Dr Lamare observed that there are several places in the sea where acidification is happening naturally, because low-level volcanic activity is releasing carbon dioxide from submarine vents. Two such vents are located off the coast of Papua New Guinea. These, he thought, would be a good place for an experiment.

Marine biologists suspect that the threat of acidification is most serious to an animal when it is a small, planktonic larva. Dr Lamare and his colleagues therefore carried out their experiment on the larvae of *Echinometra*, a type of sea urchin. They hung cages containing these larvae, newly hatched from freshly collected adult urchins, in the water above the vents, and also in nearby water of normal pH, to act as a control. They then left the cages for a day or two, to let the larvae grow, before examining their charges under the microscope.

At the first vent site, the differences were startling. All the larvae came from adults collected in the control area (water of normal pH). Those raised in the cages over the vent grew much more slowly and were also more prone to develop asymmetrically.

At the second site, the picture was more complicated. Dr Lamare carried out a more sophisticated experiment on larvae collected from adults that dwelled in the vents as well as from the control area. It tested both sorts of larvae in both locations, to see if the young of adults that had been living in the vent were inured to less alkaline water. Surprisingly, in light of the earlier result, pH made no difference to the growth rates of either sort of larva, though it still affected rates of asymmetry. Dr Lamare also found that larvae whose parents had come from the vent grew larger than those whose parents had not, regardless of the site where they were raised. That does hint at genetic differences between vent-dwelling and non-vent-dwelling *Echinometra* as well.

Though the results look confusing, what really counts is that experiments on acidification's effects on animals have moved into the wild.

Q16. Which of the following correctly represents a fact about coral reefs discussed in the passage?

- a) They are more complex and diverse than most ecosystems located on dry land.
- b) Higher the nutrient load in oceanic waters, the better is the survival rate of coral reefs.
- c) Calcium carbonate dissolves in acid, so an ocean less alkaline than it used to be might make things difficult for coral reef sustenance. **Your answer is correct**
- d) Coral reefs have begun to adapt to lower pH levels of the oceans but global warming can lead to coral bleaching, killing off whole reefs.

Time spent / Accuracy Analysis

Time taken by you to answer this question	499
Avg. time spent on this question by all students	274
Difficulty Level	M
Avg. time spent on this question by students who got this question right	282
% of students who attempted this question	36.6
% of students who got the question right of those who attempted	60.84

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 507

Option A: Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems. There isn't adequate discussion to make the comparison in choice A.

Option B: Corals, whose growth is supported by nutrient poor waters, are likely to have the toughest time. So higher the nutrient load in oceanic waters, the lower would be the survival rate of coral reefs. Choice B is not true.

Option C: Marine calcifiers like mollusks, crustaceans and reef-forming corals which create skeletons out of calcium carbonate are vulnerable to small pH changes. Their calcium carbonate shells also dissolve in too acidic environments. Corals, whose growth is supported by nutrient poor waters, are likely to have the toughest time. Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems. The passage does use the term 'less alkaline water' in the penultimate para of the passage. Choice C can be inferred from the passage.

Option D: Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems. We cannot infer that Coral reefs have begun to adapt to lower pH levels of the oceans. Choice D is not the answer.

Choice (C)

undefined

DIRECTIONS for questions 16 to 18: The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

Carbon dioxide gas (acidic when dissolved in water) is lowering the pH of the seas. Marine calcifiers like mollusks, crustaceans and reef-forming corals which create skeletons out of calcium carbonate are vulnerable to small pH changes. The essential building block for their shell making process - the carbonate ion (CO_3^{2-}) - is rendered useless when it combines with hydrogen ions released by carbonic acid (H_2CO_3). Their calcium carbonate shells also dissolve in too acidic environments. Corals, whose growth is supported by nutrient poor waters, are likely to have the toughest time. Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems.

Numerous laboratory experiments have provided evidence that the shells of several marine species are thinner now than they were earlier. What there has not been though, is a controlled study of such species in the wild.

The gap has been plugged by Miles Lamare of the University of Otago, in New Zealand. Dr Lamare observed that there are several places in the sea where acidification is happening naturally, because low-level volcanic activity is releasing carbon dioxide from submarine vents. Two such vents are located off the coast of Papua New Guinea. These, he thought, would be a good place for an experiment.

Marine biologists suspect that the threat of acidification is most serious to an animal when it is a small, planktonic larva. Dr Lamare and his colleagues therefore carried out their experiment on the larvae of *Echinometra*, a type of sea urchin. They hung cages containing these larvae, newly hatched from freshly collected adult urchins, in the water above the vents, and also in nearby water of normal pH, to act as a control. They then left the cages for a day or two, to let the larvae grow, before examining their charges under the microscope.

At the first vent site, the differences were startling. All the larvae came from adults collected in the control area (water of normal pH). Those raised in the cages over the vent grew much more slowly and were also more prone to develop asymmetrically.

At the second site, the picture was more complicated. Dr Lamare carried out a more sophisticated experiment on larvae collected from adults that dwelled in the vents as well as from the control area. It tested both sorts of larvae in both locations, to see if the young of adults that had been living in the vent were inured to less alkaline water. Surprisingly, in light of the earlier result, pH made no difference to the growth rates of either sort of larva, though it still affected rates of asymmetry. Dr Lamare also found that larvae whose parents had come from the vent grew larger than those whose parents had not, regardless of the site where they were raised. That does hint at genetic differences between vent-dwelling and non-vent-dwelling *Echinometra* as well.

Though the results look confusing, what really counts is that experiments on acidification's effects on animals have moved into the wild.

Q17. Which of the following statements best conveys the central idea of the passage?

- a) The oceans tend to get short shrift when it comes to climate change.
- b) Scientists have now discovered an important natural laboratory in which to further investigate the detrimental effects of ocean acidification on marine life forms.
- c) Numerous laboratory experiments have confirmed that acidification will make the oceans much less hospitable to many forms of marine life.
- d) Experiments on acidification's effects on zoological species have moved into the wild and have provided definitive answers about what many see as a worrying problem.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	108
Avg. time spent on this question by all students	96
Difficulty Level	D
Avg. time spent on this question by students who got this question right	98
% of students who attempted this question	32.38
% of students who got the question right of those who attempted	18.66

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 507

The passage drives home the point that acidification of the oceans is placing various forms of marine life at risk (end of para 1, beginning of para 2). The purpose of the passage is to detail the improved means/ ability to confirm that understanding.

Option A: Choice A is not an opinion expressed in the passage. It is not the central idea or finding of the passage. (short shrift means rapid and unsympathetic dismissal; curt treatment; not enough attention paid).

Option B: Numerous laboratory experiments have provided evidence that the shells of several marine species are thinner and weaker now than they were earlier. What there has not been though, is a controlled study of such species in the wild. The gap has been plugged by Miles Lamare of the University of Otago, in New Zealand. There are several places in the sea where acidification is happening naturally Low-level volcanic activity is releasing carbon dioxide from submarine vents. Two such vents are located off the coast of Papua New Guinea. These, he thought, would be a good place for an experiment. The remaining paras of the passage get into the details of an experiment carried out in the wild. Refer to the last sentence of the passage. What really counts is that experiments on acidification's effects on animals have moved into the wild. Hence choice B is the correct answer.

Option C: Choice C can be inferred from the first para of the passage. But it cannot be the central finding of the passage. Numerous laboratory experiments have provided evidence that the shells of several marine species are thinner now than they were earlier. Choice C (which does not refer to 'natural laboratory') is too general and it ignores the remaining (and important) paras of the passage.

Option D: The first part of choice D is correct, as explained in choice B. However, more investigations will be required as the results look confusing (non-expected). Choice D is not the answer.

Choice (B)

undefined

DIRECTIONS for questions 18 to 20. The passage given below is accompanied by a set of three questions. Choose the best answer to each question.

Carbon dioxide gas (acidic when dissolved in water) is lowering the pH of the seas. Marine calcifiers like mollusks, crustaceans and reef-forming corals which create skeletons out of calcium carbonate are vulnerable to small pH changes. The essential building block for their shell making process - the carbonate ion (CO_3^{2-}) - is rendered useless when it combines with hydrogen ions released by carbonic acid (H_2CO_3). Their calcium carbonate shells also dissolve in too acidic environments. Corals, whose growth is supported by nutrient poor waters, are likely to have the toughest time. Combined threats of direct ocean warming and lower pH levels can lead to coral bleaching, killing off the complex and diverse coral reef ecosystems.

Numerous laboratory experiments have provided evidence that the shells of several marine species are thinner now than they were earlier. What there has not been though, is a controlled study of such species in the wild.

The gap has been plugged by Miles Lamare of the University of Otago, in New Zealand. Dr Lamare observed that there are several places in the sea where acidification is happening naturally, because low-level volcanic activity is releasing carbon dioxide from submarine vents. Two such vents are located off the coast of Papua New Guinea. These, he thought, would be a good place for an experiment.

Marine biologists suspect that the threat of acidification is most serious to an animal when it is a small, planktonic larva. Dr Lamare and his colleagues therefore carried out their experiment on the larvae of *Echinometra*, a type of sea urchin. They hung cages containing these larvae, newly hatched from freshly collected adult urchins, in the water above the vents, and also in nearby water of normal pH, to act as a control. They then left the cages for a day or two, to let the larvae grow, before examining their charges under the microscope.

At the first vent site, the differences were startling. All the larvae came from adults collected in the control area (water of normal pH). Those raised in the cages over the vent grew much more slowly and were also more prone to develop asymmetrically.

At the second site, the picture was more complicated. Dr Lamare carried out a more sophisticated experiment on larvae collected from adults that dwelled in the vents as well as from the control area. It tested both sorts of larvae in both locations, to see if the young of adults that had been living in the vent were inured to less alkaline water. Surprisingly, in light of the earlier result, pH made no difference to the growth rates of either sort of larva, though it still affected rates of asymmetry. Dr Lamare also found that larvae whose parents had come from the vent grew larger than those whose parents had not, regardless of the site where they were raised. That does hint at genetic differences between vent-dwelling and non-vent-dwelling *Echinometra* as well.

Though the results look confusing, what really counts is that experiments on acidification's effects on animals have moved into the wild.

Q18. Which of the following can be inferred from Dr Lamare's experiment conducted at the second vent site and in the nearby water of normal pH (the control area)?

- a) The larvae collected from adults that were living in the second vent site had a lower growth rate than the larvae of adults dwelling in the control area.
- b) The larvae collected from adults that were living in the control area were more asymmetrical than the larvae of adults dwelling in the second vent site.
- c) The larvae collected from adults that were living in the control area were larger in size than the larvae whose parents had come from the second vent site.
- d) The young of adults that had been living in the vent acclimatized to less alkaline water, showing a growth rate similar to the larvae of adults dwelling in the control area. Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	232
Avg. time spent on this question by all students	151
Difficulty Level	D
Avg. time spent on this question by students who got this question right	153
% of students who attempted this question	32.15
% of students who got the question right of those who attempted	50.76

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 507

Refer to para 6.

Option A: Dr Lamare carried out a more sophisticated experiment on larvae collected from adults that dwelled in the vents as well as from the control area. It tested both sorts of larvae in both locations, to see if the young of adults that had been living in the vent were inured to less alkaline water. Surprisingly, in light of the earlier result, pH made no difference to the growth rates of either sort of larva. Choice A is not correct.

Option B: pH made no difference to the growth rates of either sort of larva, though it still affected rates of asymmetry. The larvae of adults dwelling in the second vent site were more prone to develop asymmetrically than the larvae collected from adults that were living in the control area. Choice B is inverted.

Option C: Lamare also found that larvae whose parents had come from the vent grew larger than those whose parents had not, regardless of the site where they were raised. That does hint at genetic differences between vent-dwelling and non-vent-dwelling *Echinometra* as well. Choice B is not the answer.

Option D: It tested both sorts of larvae in both locations, to see if the young of adults that had been living in the vent were inured (habituated or acclimatized) to less alkaline water. Surprisingly, in light of the earlier result, pH made no difference to the growth rates of either sort of larva, though it still affected rates of asymmetry. Choice D is the correct answer.

Choice (D)

undefined

DIRECTIONS for questions 19 to 24: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

The everyday “life-world” for most people is an evanescent transforming stage in which living is consumed, philosophically speaking, by an either-or, ego-logical, dualistic paradigm of thinking with its attendant psychological states such as stress and anxiety. Zen demands an overcoming of this paradigm by practically achieving a holistic perspective in cognition, so that the Zen practitioner can celebrate, with a stillness of mind, a life of tending toward the concrete thing-events of everyday life and nature. ... Generally speaking, Zen cherishes simplicity and straightforwardness in grasping reality and acting on it “here and now,” for it believes that a thing-event that is immediately presencing before one’s eyes or under one’s foot is no other than an expression of suchness, i.e., it *is* such *that* it is showing its primordial mode of *being*. It also understands a specificity of thing-event to be a recapitulation of the whole; parts and the whole are to be lived in an inseparable relationship. As such, Zen maintains a stance of “not one” and “not two,” i.e., “positionless position,” where “not two” signals a negation of the stance that divides the whole into two parts, while “not one” designates a negation of this stance when the Zen practitioner dwells in the whole as one, while suspending judgment in meditation.

Logically speaking, Zen explains that “two” things arise because the everyday standpoint stipulates Aristotelian either-or logic as the standard for cognizing the whole, however the whole may be construed. This logic thinks it reasonable to divide the whole into two parts when knowing or understanding reality. It prioritizes one part *at the expense* of the other part(s), disregards the other as irrelevant or meaningless. In so doing, it looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something “obvious” to the senses and the rational mind. It champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Unlike the Aristotelian either-or logic, the Zen logic speaks of mind-body oneness, an holistic perspective, as *it abhors one-sidedness*. However, it warns that as soon as “one” is contrasted with “two” in a discourse, it is no longer genuine and authentic, because once it is objectified linguistically or reflectively, it slips into being an idea, an abstraction.

From the point of view of epistemology developed by modern European philosophy, the “two things” are the subject who knows and the object that is known. Zen finds that these two things impose on the epistemological subject a structuring that is framed dualistically and either-or ego-logically. Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Consequently, the subject stands *opposed* either to the outer world (e.g., nature) or to the inner world (the world of *psychē*), or both, and hence it promotes an *oppositional* mode of thinking. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are distanced from each other either really or ideally. It depends on whether the “distance” and “opposition” occur in space-consciousness or in time-consciousness; an object appears to be “out there” with space-consciousness, while it appears to be “in here” as an immanent object in the field of consciousness in time-consciousness. Suppose one applies this

epistemological structure in knowing others, for example, one's friend. When one attempts to know her from the everyday standpoint, one relies on the language she speaks and her body language. Here one cannot know her *in toto*, let alone the destiny of her life-history, because she is shielded from an observer by the spatial-temporal density of her being.

Q19. Which of the following cannot be said to be a characteristic of Aristotelian Logic as given in the passage?

- (a) When applied to the whole, it compels the user of this logic to choose, reasonably in the mind of the user, one part, while excluding the other as nonsensical.
- (b) Its use may psychologically impact a person through stress and anxiety.
- (c) In Aristotelian Logic, both the explicit and the tacit are plainly obvious to the senses and the rational mind.
- (d) It maintains a stance of "two" and "not one".

- a) **a and c**
- b) **b and d**
- c) **c and d**
- d) **Only d**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	28
Avg. time spent on this question by all students	304
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	298
% of students who attempted this question	11.01
% of students who got the question right of those who attempted	25.38

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 689

Statement (a): The Aristotelian either-or logic prioritizes one part at the expense of the other part(s), disregards the other as irrelevant or meaningless. Hence (a) is true and is not the answer.

Statement (b): Living is consumed, philosophically speaking, by an either-or, ego-logical, dualistic paradigm of thinking with its attendant psychological states such as stress and anxiety. Everyday standpoint stipulates Aristotelian either-or logic as the standard for cognizing the whole ... Statement (b) is true and is not the answer.

Statement (c): In so doing, the Aristotelian either-or logic looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a supporting ground for the explicit, where the explicit is something "obvious" to the senses and the rational mind. Statement (c) is wrong as it states that both (implicit and explicit) are obvious. Statement (c) is an answer.

Statement (d): Zen maintains a stance of "not one" and "not two". Aristotelian Logic maintains a stance of "Either-or". It prioritizes one part at the expense of the other part(s), disregards the other as irrelevant or meaningless. In so doing, it looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a supporting ground for the explicit. Hence statement (d) is not true and is the answer.

So (c) and (d) apply. Choice (C)

DIRECTIONS for questions 19 to 24: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

The everyday “life-world” for most people is an evanescent transforming stage in which living is consumed, philosophically speaking, by an either-or, ego-logical, dualistic paradigm of thinking with its attendant psychological states such as stress and anxiety. Zen demands an overcoming of this paradigm by practically achieving a holistic perspective in cognition, so that the Zen practitioner can celebrate, with a stillness of mind, a life of tending toward the concrete thing-events of everyday life and nature. ... Generally speaking, Zen cherishes simplicity and straightforwardness in grasping reality and acting on it “here and now,” for it believes that a thing-event that is immediately presencing before one’s eyes or under one’s foot is no other than an expression of suchness, i.e., it *is such that* it is showing its primordial mode of *being*. It also understands a specificity of thing-event to be a recapitulation of the whole; parts and the whole are to be lived in an inseparable relationship. As such, Zen maintains a stance of “not one” and “not two,” i.e., “positionless position,” where “not two” signals a negation of the stance that divides the whole into two parts, while “not one” designates a negation of this stance when the Zen practitioner dwells in the whole as one, while suspending judgment in meditation.

Logically speaking, Zen explains that “two” things arise because the everyday standpoint stipulates Aristotelian either-or logic as the standard for cognizing the whole, however the whole may be construed. This logic thinks it reasonable to divide the whole into two parts when knowing or understanding reality. It prioritizes one part *at the expense of* the other part(s), disregards the other as irrelevant or meaningless. In so doing, it looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something “obvious” to the senses and the rational mind. It champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Unlike the Aristotelian either-or logic, the Zen logic speaks of mind-body oneness, an holistic perspective, as *it abhors one-sidedness*. However, it warns that as soon as “one” is contrasted with “two” in a discourse, it is no longer genuine and authentic, because once it is objectified linguistically or reflectively, it slips into being an idea, an abstraction.

From the point of view of epistemology developed by modern European philosophy, the “two things” are the subject who knows and the object that is known. Zen finds that these two things impose on the epistemological subject a structuring that is framed dualistically and either-or ego-logically. Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Consequently, the subject stands *opposed* either to the outer world (e.g., nature) or to the inner world (the world of *psychē*), or both, and hence it promotes an *oppositional* mode of thinking. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are distanced from each other either really or ideally. It depends on whether the “distance” and “opposition” occur in space-consciousness or in time-consciousness; an object appears to be “out there” with space-consciousness, while it appears to be “in here” as an immanent object in the field of consciousness in time-consciousness. Suppose one applies this epistemological structure in knowing others, for example, one’s friend. When one attempts to know her from the everyday standpoint, one relies on the language she speaks and her body language. Here one cannot know her *in toto*, let alone the destiny of her life-history, because she is shielded from an observer by the spatial-temporal density of her being.

Q20. Which of the following is consistent about Zen Logic as can be gathered from the passage?

- a) Zen does not advocate one-sidedness in cognition and judgment as the supreme form of knowing and understanding but it believes in a holistic perspective.
- b) Zen aims at an understanding of the whole and does not violate the cardinal principle of knowing.
- c) In Zen logic, “not two” is a negation of dualism and “not one” is a negation of “non-dualism”.
- d) All of the above.

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	3
Avg. time spent on this question by all students	81
Difficulty Level	D
Avg. time spent on this question by students who got this question right	77
% of students who attempted this question	13.48
% of students who got the question right of those who attempted	75.12

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 689

Zen demands an overcoming of the either-or, ego-logical, dualistic paradigm of thinking by practically achieving an holistic perspective in cognition.

Option A: The Aristotelian either-or logic champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Choice A is correct.

Option B: The Aristotelian either-or logic looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something "obvious" to the senses and the rational mind. Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Choice B is also correct.

Option C: Zen maintains a stance of "not one" and "not two," i.e., "positionless position," where "not two" signals a negation of the stance that divides the whole into two parts, while "not one" designates a negation of this stance when the Zen practitioner dwells in the whole as one Hence Choice C is also true.

Choice (D)

undefined

DIRECTIONS for questions 19 to 24: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

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Logically speaking, Zen explains that "two" things arise because the everyday standpoint stipulates Aristotelian either-or logic as the standard for cognizing the whole, however the whole may be construed. This logic thinks it reasonable to divide the whole into two parts when knowing or understanding reality. It prioritizes one part *at the expense* of the other part(s), disregards the other as irrelevant or meaningless. In so doing, it looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something "obvious" to the senses and the rational mind. It champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Unlike the Aristotelian either-or logic, the Zen logic speaks of mind-body oneness, an holistic perspective, as *it abhors one-sidedness*. However, it warns that as soon as "one" is contrasted with "two" in a discourse, it is no longer genuine and authentic, because once it is objectified linguistically or reflectively, it slips into being an idea, an abstraction.

From the point of view of epistemology developed by modern European philosophy, the "two things" are the subject who knows and the object that is known. Zen finds that these two things impose on the epistemological subject a structuring that is framed dualistically and either-or ego-logically. Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Consequently, the subject stands *opposed* either to the outer world (e.g., nature) or to the inner world (the world of *psychē*), or both, and hence it promotes an *oppositional* mode of thinking. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are distanced from each other either really or ideally. It depends on whether the "distance" and "opposition" occur in space-consciousness or in time-consciousness; an object appears to be "out there" with space-consciousness, while it appears to be "in here" as an immanent object in the field of consciousness in time-consciousness. Suppose one applies this

epistemological structure in knowing others, for example, one's friend. When one attempts to know her from the everyday standpoint, one relies on the language she speaks and her body language. Here one cannot know her *in toto*, let alone the destiny of her life-history, because she is shielded from an observer by the spatial-temporal density of her being.

Q21. Consider the following two hypothetical positions I and II given below as true:

- I.
If one maintains that the mind is real, one disregards the body as unreal, yielding an idealist position.
- II.
If one thinks that the body is real, one disposes of the mind as unreal and emphasizes that only the physical is true and real.

Which of the following choices concurs with the views of the passage?

- a) Both positions I and II serve to exemplify the reductionist aspect of Aristotelian Either-or Logic.
- b) Position I is an example of the reductionist aspect of the Aristotelian Either-or Logic while Position II highlights the holistic perspective of Zen Logic.
- c) Position I is an example of the holistic perspective of Zen Logic while Position II highlights the reductionist aspect of the Aristotelian Either-or Logic.
- d) Both positions I and II do not satisfy the principles of the Aristotelian Either-or Logic and the Zen logic.

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	6
Avg. time spent on this question by all students	85
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	85
% of students who attempted this question	7.56
% of students who got the question right of those who attempted	50.23

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 689

The Aristotelian Either-or logic prioritizes one part *at the expense of* the other part(s), disregards the other as irrelevant or meaningless. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Unlike the Aristotelian either-or logic, the Zen logic speaks of mind-body oneness, an holistic perspective, as it abhors one-sidedness.

We can say that choice A is the correct answer. Position I (mind is real, one disregards the body as unreal) and Position II (disposes of the mind) cannot highlight the holistic perspective of Zen logic. These positions are examples of the reductionist aspect of the Aristotelian Either-or Logic. {It looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something "obvious" to the senses and the rational mind. It champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality.} Choices B and C are incorrect. Zen (Logic) cherishes simplicity and straightforwardness in grasping reality and acting on it "here and now," It also understands a specificity of thing-event to be a recapitulation of the whole; parts and the whole are to be lived in an inseparable relationship. So, neither Position I nor II can be said to be examples of the holistic perspective of Zen Logic.

Choice D does not apply.

Choice (A)

undefined

DIRECTIONS for questions 19 to 24: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

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Q22. Which of the following is a major concern of the author in the passage?

- a) S/he wonders why people, in their day to day living and thinking, support Aristotelian logic at the cost of Zen harmony.
- b) S/he extolls Zen's approach towards oneness and laments the egological reduction of Aristotelian logic.
- c) S/he condemns the double standards of Zen idealism while upholding the judgments and the evident opposition of Aristotelian logic.
- d) S/he attempts at an objective analysis of Aristotelian Logic and Zen Logic while leaning towards the latter.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	66
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	65
% of students who attempted this question	7.4
% of students who got the question right of those who attempted	53.11

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 689

The underlying theme of the passage is Zen's approach towards oneness as compared to the dualistic approach of logic.

Option A: "at the cost of" in choice A renders it incorrect. Choice A is not the correct view of the author.

Option B: There isn't enough in the passage to support the use of 'extolls'. The word 'laments' in choice B is also incorrect. The only negative statement with reference to Aristotelian Logic is "Either-or logic fails on this account" in the second-last para. Choice B is not the correct answer.

Option C: Choice C is distorted. Aristotelian logic is idealist and one-sided, not Zen logic. Though the author favours Zen Logic, we cannot say that s/he condemns Aristotelian logic. We can infer that the author maintains a neutral stance as s/he explores the difference between Zen logic and Aristotelian logic in the passage. Hence choice C is not the answer.

Option D: The passage is, broadly, objective but the author leans towards Zen Logic. Aristotelian logic is analysed more in the nature of what it covers and doesn't, not really pointing out to 'flaws'. The author then explains Zen Logic in detail and contrasts it with Aristotelian logic (However, Zen thinks that this prioritization, this exclusion, violates Moreover, it contends that when this logic attempts to understand the whole, it theoretically reduces the other Unlike the Aristotelian either-or logic, Zen Logic).

We can infer that the author leans towards Zen Logic from an overall reading of the second para. The words given in italics in para 2 also emphasize this point: at the expense of, supporting (ground), reduces (the other to), it abhors one-sidedness.

Choice (D)

undefined

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Q23. Which of the following can be inferred about 'subject' and 'object' in the light of Zen logic as discussed in the last para of the passage?

- a) The epistemological subject can become, dualistically and logically speaking, the object.
- b) An object is “out there” with space-consciousness and a subject is “in here” in time-consciousness.
- c) The subject can either be in the outer world or in the inner world; and the position of the object could change relative to the perspective used to observe it.
- d) The epistemological subject stands opposed either to the outer world and/ or the inner world and is separated from the object due to spatio-temporal reasons.

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	99
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	99
% of students who attempted this question	7.87
% of students who got the question right of those who attempted	28.11

[Video Solution](#)

Text Solution

Number of words and Explanatory notes for RC:

Number of words: 689

Option A: Zen finds that these two things impose on the epistemological subject a structuring that is framed dualistically and either-or ego-logically. Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are distanced from each other either really or ideally. Hence choice A is not true.

Option B: An object appears to be "out there" with space-consciousness, while it appears to be "in here" as an immanent object in the field of consciousness in time-consciousness. Choice B is distorted.

Option C: The subject stands *opposed* either to the outer world (e.g., nature) or to the inner world (the world of *psychē*), or both, and hence it promotes an *oppositional* mode of thinking. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are distanced from each other either really or ideally. It depends on whether the "distance" and "opposition" occur in space-consciousness or in time-consciousness; an object appears to be "out there" with space-consciousness, while it appears to be "in here" as an immanent object in the field of consciousness in time-consciousness. Hence choice C is true.

Option D: It depends on whether the "distance" and "opposition" occur in space-consciousness or in time-consciousness. This is not the same as "time" and "space" given in choice D of the passage. (..... she is shielded from an observer by the spatial-temporal density of her being i.e. her consciousness). Choice D is incorrect.

Choice (C)

undefined

DIRECTIONS for questions 19 to 24: The passage given below is accompanied by a set of six questions. Choose the best answer to each question.

The everyday "life-world" for most people is an evanescent transforming stage in which living is consumed, philosophically speaking, by an either-or, ego-logical, dualistic paradigm of thinking with its attendant psychological states such as stress and anxiety. Zen demands an overcoming of this paradigm by practically achieving a holistic perspective in cognition, so that the Zen practitioner can celebrate, with a stillness of mind, a life of tending toward the concrete thing-events of everyday life and nature. ... Generally speaking, Zen cherishes simplicity and straightforwardness in grasping reality and acting on it "here and now," for it believes that a thing-event that is immediately presencing before one's eyes or under one's foot is no other than an expression of suchness, i.e., it *is* such *that* it is showing its primordial mode of *being*. It also understands a specificity of thing-event to be a recapitulation of the whole; parts and the whole are to be lived in an inseparable relationship. As such, Zen maintains a stance of "not one" and "not two," i.e., "positionless position," where "not two" signals a negation of the stance that divides the whole into two parts, while "not one" designates a negation of this stance when the Zen practitioner dwells in the whole as one, while suspending judgment in meditation.

Logically speaking, Zen explains that "two" things arise because the everyday standpoint stipulates Aristotelian either-or logic as the standard for cognizing the whole, however the whole may be construed. This logic thinks it reasonable to divide the whole into two parts when knowing or understanding reality. It prioritizes one part *at the expense* of the other part(s), disregards the other as irrelevant or meaningless. In so doing, it looks to the explicit while becoming oblivious to the fact that the implicit equally exists as a *supporting* ground for the explicit, where the explicit is something "obvious" to the senses and the rational mind. It champions one-sidedness in cognition and judgment as the supreme form of knowing and understanding reality. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Moreover, it contends that when this logic attempts to understand the whole, it theoretically *reduces* the other to the one that is judged to be true and/or real. Unlike the Aristotelian either-or logic, the Zen logic speaks of mind-body oneness, an holistic perspective, as *it abhors one-sidedness*. However, it warns that as soon as "one" is contrasted with "two" in a discourse, it is no longer genuine and authentic, because once it is objectified linguistically or reflectively, it slips into being an idea, an abstraction.

From the point of view of epistemology developed by modern European philosophy, the "two things" are the subject who knows and the object that is known. Zen finds that these two things impose on the epistemological subject a structuring that is framed dualistically and either-or ego-logically. Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Consequently, the subject stands *opposed* either to the outer world (e.g., nature) or to the inner world (the world of *psychē*), or both, and hence it promotes an *oppositional* mode of thinking. Moreover, Zen notes that the subject cannot by definition become the object or vice versa, for they are

distanced from each other either really or ideally. It depends on whether the "distance" and "opposition" occur in space-consciousness or in time-consciousness; an object appears to be "out there" with space-consciousness, while it appears to be "in here" as an immanent object in the field of consciousness in time-consciousness. Suppose one applies this epistemological structure in knowing others, for example, one's friend. When one attempts to know her from the everyday standpoint, one relies on the language she speaks and her body language. Here one cannot know her *in toto*, let alone the destiny of her life-history, because she is shielded from an observer by the spatial-temporal density of her being.

Q24. All of the following can be understood from the passage EXCEPT?

- a) Zen stipulates self-understanding as necessary in order to understand other things in the universe.
- b) The use of the phrase "not two" expresses Zen's proclivity to favour the simple, such that it is not expressed as a negation of dualism.
- c) Zen logic is inclusive and does not prioritize the visible over the invisible, the explicit over the implicit, and vice versa.
- d) "East is East, and West is West" and "When one side is illuminated, the other side remains in darkness" are examples of the fallout of Aristotelian's dualistic logic.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	65
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	71
% of students who attempted this question	7.13
% of students who got the question right of those who attempted	19.44

[Video Solution](#)

[Text Solution](#)

Number of words and Explanatory notes for RC:

Number of words: 689

Option A: Accordingly, this structuring unknowingly frames things to appear dualistically and either-or ego-logically to the epistemological subject, while extending the paradigm to itself for self-understanding as well as things other than itself in the same manner. Though Zen promotes the understanding of 'self', the passage does not explicitly mention this as a 'necessary' condition to understand other things. Thus choice A can be negated. Choice A is the required answer.

Option B: Generally speaking, Zen cherishes simplicity and straightforwardness in grasping reality and acting on it "here and now," As such, Zen maintains a stance of "not one" and "not two," i.e., "positionless position," where "not two" signals a negation of the stance that divides the whole into two parts. "not one" designates a negation of this stance when the Zen practitioner dwells in the whole as one, while suspending judgment in meditation. Choice B is true.

Option C: It also understands a specificity of thing-event to be a recapitulation of the whole; parts and the whole are to be lived in an inseparable relationship. However, Zen thinks that this prioritization, this exclusion, violates a cardinal principle of knowing, for knowledge of anything demands an understanding of the whole. Either-or logic fails on this account. Choice C is also correct.

Option D: Choice D can be understood from an overall reading of the passage.

Choice (A)

undefined

Q25. DIRECTIONS for questions 25 to 27: Each of the following questions has five sentences. Each sentence is labelled with a number. All but one of the sentences can be rearranged to form a logically coherent paragraph. Key in the number of

the sentence that does not fit contextually with the paragraph formed by the other four sentences.

1. So lots of people will be selling dollars in the forward market.
2. Imagine that American 12-month interest rates are 10% and Japanese rates are 5%.
3. Markets may freeze even more quickly than before and asset prices may get even more out of whack than they did in 2008.
4. They will keep doing so until the dollar is 5% cheaper there than in the spot market, and there is no profit in the trade.
5. Japanese investors will be tempted to buy dollars, earn interest on them for a year and then cover the exchange-rate risk through a forward deal.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	159
Difficulty Level	E
Avg. time spent on this question by students who got this question right	138
% of students who attempted this question	47.26
% of students who got the question right of those who attempted	42.81

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 2 is a general sentence that begins the paragraph. It has the general terms "Imagine that ...". Sentence 2 gives us a hypothetical case. Sentences 2 and 4 form a mandatory pair. Sentence 5 tells us the consequence of what has been mentioned in sentence 2. "Japanese investors tempted to buy dollars earn interest for a year cover the exchange-rate risk" in sentence 5 links with "American 12-month interest rates are 10% and Japanese rates are 5%" in sentence 2. Sentence 5 is followed by sentence 1. "selling dollars in the **forward** market" in sentence 1 follows after "buy dollars for a year cover the exchange-rate risk through a **forward** deal" in sentence 5. So, 251. Sentence 1 is followed by sentence 4. "lots of people will be selling dollars in the forward market" in sentence 1 links with "They will keep doing so until the dollar is 5% cheaper there (i.e. forward market) than in the spot market" in sentence 4. {selling dollars until the dollar is 5% cheaper there than in the spot market, and there is no profit in the trade} in sentence 4 contrasts the 5 % difference {American 12-month interest rates are 10% and Japanese rates are 5%} given in sentence 2. So, the para flows as 2514 {buy dollars earn interest for a year sell dollars until the dollar is 5% cheaper in forward market than in spot market i.e. till such time there is no profit in the trade. Sentence 3 is out of scope. Sentence 3 points to 'markets' and 'asset prices' while the remaining sentences of the para point to "buying and selling dollars".

Ans: (3)

undefined

Q26. DIRECTIONS for questions 25 to 27: Each of the following questions has five sentences. Each sentence is labelled

with a number. All but one of the sentences can be rearranged to form a logically coherent paragraph. Key in the number of the sentence that does not fit contextually with the paragraph formed by the other four sentences.

1. Some suggest the costs of expensive therapies like this might be spread over many years.
2. Cures for rare genetic diseases, both for children and adults, were once no more than a dream, but now they are set to become commercial reality.
3. When families leave the genetic institute at the San Raffaele Hospital in Milan, they are still anxious.
4. Youngsters who had been sentenced to short lives, full of suffering caused by faulty DNA, get better and thrive.
5. Later, many will come to see the day their children received gene therapy as a blessed new start.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	140
Difficulty Level	D
Avg. time spent on this question by students who got this question right	123
% of students who attempted this question	44.6
% of students who got the question right of those who attempted	28.88

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be seen that sentence 3 is a general sentence that begins the paragraph. It cites the location: genetic institute at the San Raffaele Hospital in Milan. It mentions the topic of discussion: Families are still anxious. Sentence 3 is contrasted by sentence 5. "Families leave **genetic** institute are *still anxious*" in sentence 3 links with "*many* will see the day their children received **gene therapy** as a *blessed new start*" in sentence 5. Sentence 5 is followed by sentence 4. "children blessed new start" in sentence 5 links with "youngsters, sentenced to short lives by faulty DNA, get better and thrive" in sentence 4. Sentence 2 concludes the para: Cures for rare genetic diseases commercial reality. So, 3542. Sentence 1 is the odd sentence out. It can be a part of another paragraph which explains other expensive therapies and it also mentions a tangential point: the cost of expensive therapies.

Ans: (1)

undefined

Q27. DIRECTIONS for questions 25 to 27: Each of the following questions has five sentences. Each sentence is labelled with a number. All but one of the sentences can be rearranged to form a logically coherent paragraph. Key in the number of the sentence that does not fit contextually with the paragraph formed by the other four sentences.

1. From the image thus formed, *Synechocystis* can thus work out which direction the life-sustaining light is coming from, and travel towards it.
2. *Synechocystis*, whose cells are spherical and three microns across, is among these phototactic species.
3. Cyanobacteria have been known, for over a century, to be phototactic, meaning they can orient in the direction of, and travel towards, light sources.
4. Simpler eyes than a human's can work perfectly well, even if they do not produce such sophisticated images.
5. Like a glass bead, the entire *Synechocystis* cell acts as a lens, focussing light on the point on the bacterial cell wall farthest from the light source.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	120
Difficulty Level	D
Avg. time spent on this question by students who got this question right	108
% of students who attempted this question	41.68
% of students who got the question right of those who attempted	50.71

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 3 is a general sentence that begins the paragraph. It introduces the topic of discussion: Cyanobacteria are phototactic. Sentence 3 is followed by sentence 2. "Cyanobacteria have been known for over a century to be phototactic" in sentence 3 links with "*Synechocystis* is among these phototactic species" in sentence 2. Sentence 2 is followed by sentence 5. Sentence 5 explains how *Synechocystis* acts as a phototactic species: as a lens, focussing light on the point on the bacterial cell wall farthest from the light source. Sentences 5 and 1 form a mandatory pair. "focussing light on the point" in sentence 5 links with "from the image thus formed" in sentence 1. Also "can thus work out which direction the life-sustaining light is coming from, and travel towards it" in sentence 1 concludes the para. It also mirrors the introduction sentence 3: they can orient in the direction of, and travel towards, light sources. So, 3251. Sentence 4 is the odd sentence out. It is a very general sentence and does not specifically apply to *Synechocystis*. It can be a part of a paragraph earlier in the thought flow. "Simpler eyes than a human's can work perfectly well" in sentence 4 can be a prior thought and can lead to the para formed by sentences 3251.

Ans: (4)

undefined

Q28. DIRECTIONS for questions 28 to 32: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer, in the input box given below the question.

1. Mr Jorgen Vig Knudstorp, the boss of the Lego group, reiterates this point and frets that in ageing Europe, labour markets will grow ever tighter for skilled designers, software engineers and others with many years of valuable experience.

2. They want to know about a firm's "vision" and whether it has "an environment where they have a sense of choice", he says.

3. Luka Mucic, the Chief Financial Officer of SAP, Europe's largest software firm, also notes a change of attitude among recent graduates, saying recruits care less than previous generations did about status and title.

4. Big, old firms try to package themselves as nimble and open because they have to compete ever harder for talent, including against technology firms.

5. Offering these youngsters a career in a windowless cubicle won't do.

You did not answer this question [Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	199
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	209
% of students who attempted this question	34.33
% of students who got the question right of those who attempted	15.28

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 4 is a general sentence that begins the paragraph. It is more general in nature as compared to sentence 1. Sentence 4 introduces the view: old firms compete for talent ... against technology firms. Sentence 4 is followed by sentence 1. "reiterates this point" in sentence 1 links with "package themselves as nimble and open ... compete for talent ... against technology firms" as mentioned in sentence 4. Sentence 1 is followed by sentence 3. "also notes a change of attitude" in sentence 3, in a way, links with "reiterates this point" in sentence 1 and "package themselves as nimble and open" in sentence 4. Also "recent graduates and recruits" in sentence 3 contrasts "skilled designers, software engineers and others with many years of valuable experience" in sentence 1. Sentences 3 and 2 form a mandatory pair. The pronoun 'they' in sentence 2 points to recent graduates and recruits in sentence 3. The pronoun 'he' in sentence 2 points to "Luka Mucic" in sentence 3. Also "recruits care less than previous generations did about status and title" in sentence 3 is further strengthened by "know about a firm's vision and whether it has an environment where they have a sense of choice" in sentence 2. So, 4132. Sentence 5 concludes the para and it can be further substantiated in the following para. "these youngsters" in sentence 5 points to 'they' in sentence 2 and 'recent graduates and recruits' in sentence 3. Hence, 41325. Ans: (41325)

undefined

Q29. DIRECTIONS for questions 28 to 32: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer, in the input box given below the question.

1. And the parrots' habit of crashing into office windows of Hobart, Tasmania's capital, does them no favours.
2. But the logging of Tasmanian forests has destroyed its habitat.
3. Bruny island, off south-eastern Tasmania, is a home to the swift parrot.
4. Only 2000 individuals may survive.
5. Small and green, with patches of red and blue, it breeds only in Tasmania, feeding on nectar from the blue gum tree, a eucalypt, and migrating to south-eastern Australia for the winter.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	7
Avg. time spent on this question by all students	129
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	125
% of students who attempted this question	44.34
% of students who got the question right of those who attempted	39.63

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 3 is a general sentence that begins the paragraph. It introduces the topic of discussion: swift parrot. It also mentions the location: Bruny island, off south-eastern Tasmania. Sentence 3 is followed by sentence 5 which provides additional information about the swift parrot. Sentence 2 follows sentence 5. It has the contrast conjunction 'but' and mentions a problem: logging of Tasmanian forests has destroyed its habitat. Sentence 4 follows sentence 1: parrots' habit of crashing into office windows of Hobart, Tasmania's capital, does them no favours. Sentence 4 concludes the para.
So, 35214. Ans: (35214)

undefined

Q30. DIRECTIONS for questions 28 to 32: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer, in the input box given below the question.

1. The division of labour produces juridical rules which govern the nature and relations of divided functions, but their violation elicits only restitutive sanctions which do not have an expiatory character.
2. Social life derives from a dual source, the similarity of consciousnesses and the social division of labour.

3. In the second case, because, while having an appearance and personal activity which distinguish him from others, he is dependent on them to the same extent that he is distinguished from them, and consequently upon the society which results from this combination.
4. In the first case the individual is socialized because, in the absence of any real individuality, he is united with others with whom he shares a common likeness, becoming part of the same collective type.
5. The similarity of consciousnesses produces juridical rules accompanied by the threat of repressive sanctions which impose uniform beliefs and practices on everyone.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	3
Avg. time spent on this question by all students	141
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	162
% of students who attempted this question	27.51
% of students who got the question right of those who attempted	5.88

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 2 is a general sentence that begins the paragraph. It mentions the topic of discussion: the dual source of social life. Sentences 4 and 3 follow sentence 2 in that order. "Similarity of consciousness" mentioned in sentence 2 is explained in sentence 4. "Social division of labour" in sentence 2 is explained in sentence 3. So "in the first case" in sentence 4 points to "similarity of consciousness" in sentence 2. Also "absence of any real individuality shares a common likeness part of the same collective type" in sentence 4 links with "similarity of consciousness" in sentence 2. Sentence 4 (in the first case) is followed by sentence 3 (in the second case). "having an appearance and personal activity which distinguish him from others" in sentence 3 contrasts "absence of any real individuality" given in sentence 4. Also "dependent on them to the same extent that he is distinguished from them, and consequently upon the society which results from this combination" in sentence 3 contrasts "united with others with whom he shares a common likeness, becoming part of the same collective type" in sentence 4. Sentences 5 and 1 mention another differentiating feature of "the similarity of consciousness" and "social division of labour" i.e. the juridical rules. "threat of repressive sanctions which impose **uniform** beliefs and practices on everyone" in sentence 5 contrasts "govern the nature and relations of **divided** functions, but their violation elicits only restorative (tending to restore to a previous state) sanctions which do not have an expiatory character" in sentence 1. So, 24351.

Ans: (24351)

undefined

Q31. DIRECTIONS for questions 28 to 32: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer, in the input box given below the question.

1. At the second step, both man and river are not what they once were.

2. These changes in the Mekong are profound: flow means change, but it also brings identity, because it embodies continuity.
3. Mr. Guo thinks that as the river is stilled, precious identities risk being lost for ever.
4. In space and in time, from narrow gorges to salty seas and from great empires to impoverished peasantry, the river Mekong at Mr Guo's feet encompasses more changes than most.
5. In teaching his students that change was the one true constant, the philosopher Heraclitus told them that no one ever steps in the same river twice.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	160
Difficulty Level	VD
Avg. time spent on this question by students who got this question right	182
% of students who attempted this question	33.28
% of students who got the question right of those who attempted	10.2

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 5 is a general sentence that begins the paragraph. It mentions some sayings of the philosopher Heraclitus. Sentences 5 and 1 form a mandatory pair. "no one ever steps in the same river twice" in sentence 5 links with "second step, both man and river are not what they once were" in sentence 1. Sentences 5 and 1 are general sentences about rivers. Sentence 1 is followed by sentence 4. "man and river are not what they once were" in sentence 1 links with "river Mekong encompasses more changes than most" in sentence 4. The river Mekong is introduced in Sentence 4. Sentences 4 and 2 form a mandatory pair. "The river Mekong at Mr Guo's feet encompasses more changes than most" in sentence 4 links with "These changes in the Mekong are profound" in sentence 2. So sentence 2 follows sentence 4. Sentence 2 is followed by sentence 3. "flow means change, but it also brings identity, because it embodies continuity" in sentence 2 contrasts "as the river is stilled, precious identities risk being lost for ever" in sentence 3. Sentence 3 concludes the para. So, 51423.

Ans: (51423)

undefined

Q32. DIRECTIONS for questions 28 to 32: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer, in the input box given below the question.

1. Alexander Herzen, Russia's first socialist, came to London in the 1850s and published his newspaper *Kolokol*, which was smuggled back into Russia.
2. The first Russian to inquire about political asylum in Britain may have been Tsar Ivan the Terrible, who wrote to Queen Elizabeth I in 1570 asking whether she would take him in if things got worse in Moscow.

3. Today, London is home both to Mr Putin's cronies and to opponents of his regime trying to lay the groundwork for the day the regime vanishes.
4. Ivan never came even though the Queen invited him, but England has since offered refuge to generations of Russian political exiles.
5. Another socialist, Lenin lived briefly in Bloomsbury in 1878, and is said to have met Stalin at a pub in Clerkenwell.

Your Answer:12543 □ Your answer is incorrect

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	29
Avg. time spent on this question by all students	146
Difficulty Level	M
Avg. time spent on this question by students who got this question right	149
% of students who attempted this question	30.99
% of students who got the question right of those who attempted	43.26

[Video Solution](#)

[Text Solution](#)

On a careful reading of the sentences, it can be observed that sentence 2 is a general sentence that begins the paragraph. It mentions the topic of discussion: The first Russian to inquire about political asylum in Britain It also has a list of proper nouns. Sentence 2 and sentence 4 form a mandatory pair. "Tsar Ivan the Terrible asking whether Queen Elizabeth would take him in (in Britain) if things got worse in Moscow" in sentence 2 links with "Ivan never came even though the Queen invited him" in sentence 4. Also "England has since offered refuge to generations of Russian political exiles" in sentence 4 links with "political asylum in Britain" in sentence 2. Sentence 1 follows sentence 4. "Alexander Herzen, Russia's first socialist, came to London" in sentence 1 links with "England has since offered refuge to generations of Russian political exiles" in sentence 4. Sentence 5 follows sentence 1. "Another socialist, Lenin lived briefly in Bloomsbury in 1878" in sentence 5 links with "Alexander Herzen, Russia's first socialist, came to London in the 1850s" in sentence 1. Sentences 1 and 5 talk about the Russian socialists who sought asylum in Britain. Sentence 3 concludes the para by discussing about the present day situation. "London is home both to Mr Putin's cronies and to opponents of his regime" in sentence 3 follows "Lenin is said to have met Stalin at a pub in Clerkenwell" in sentence 5. So, 24153.

Ans: (24153)

undefined

Q33. DIRECTIONS for questions 33 and 34: Each question below contains a paragraph followed by alternative summaries. Choose the alternative that best captures the essence of the paragraph.

Genre fiction has a poor reputation. By placing writer x in genre y, the assumption is sometimes that he or she deals with matters tangential to personal experience and hence to the real aims of literature. But such an assumption would seem to be based on a double misapprehension. Direct personal experience does not exist as such; and there is no simple recounting in literature (or in life). Experience can only be talked about in relation to specific concerns, which normally implies some genre or another. To call Defoe an adventure writer, Swift a travel writer, the Brontes writers of sentimental fiction, or Shakespeare a crime and historical writer, may be true - but will shock us, because we are accustomed to viewing great literature as transcending any particular pigeonhole. In other words, a mistaken view holds literature to be genre-free and genre fiction to be literature-free.

- a) Literature is genre-free and transcends any particular category. Genre fiction is literature-free and has a poor reputation.
- b) A good working definition of literature is 'anything that does not fit into a genre'. Defoe, Swift and Shakespeare cannot be bracketed as adventure, travel and crime writers respectively.
- c) When a writer X's literary prowess is analyzed by placing him in a particular genre Y, we understand that s/he deals with matters tangential to personal experience and hence to the real aims of literature. We cannot classify a writer as belonging to a particular genre.
- d) When a writer is placed in a particular genre, we may mistakenly interpret his role to revolve around matters tangential to his personal experience and thus running contrary to the objectives of literature. However, experience is not general or direct; the specific concerns of genres require the context of experience. Literature is not genre-free and genre-fiction is not literature free, as is mistakenly believed.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	6
Avg. time spent on this question by all students	169
Difficulty Level	E
Avg. time spent on this question by students who got this question right	170
% of students who attempted this question	25.87
% of students who got the question right of those who attempted	65.04

[Video Solution](#)

[Text Solution](#)

Choice A is incorrect. A mistaken view holds literature to be genre-free and genre fiction to be literature-free. Choice B is also incorrect. 'anything that does not fit into a genre' in choice B is similar to the view "that holds literature to be genre-free and genre fiction to be literature-free" which is a mistaken view, as is mentioned in the last sentence of the paragraph. The initial part of choice C reflects what is given in the earlier part of the para but choice C fails to explain "But such an assumption would seem to be based on a double misapprehension." Choice C is incorrect and does not focus on the para as a whole. Choice D correctly summarizes all the points of the para. Choice (D)

undefined

Q34. DIRECTIONS for questions 33 and 34: Each question below contains a paragraph followed by alternative summaries. Choose the alternative that best captures the essence of the paragraph.

Intrinsic motivation can help one live better and accomplish more. Intrinsic motivation is the self-desire to seek out new things and new challenges, to analyze one's capacity, to observe and to gain knowledge. It is driven by an interest, curiosity or enjoyment in the task itself, and exists within the individual rather than relying on external pressures or a desire for reward. Intrinsic motivation helps one engage in the task willingly as well as helps one to work at improving one's skills, which will increase one's capabilities. Extrinsic motivation refers to the performance of an activity in order to attain a desired outcome and it is the opposite of intrinsic motivation. Extrinsic motivation comes from influences outside of the individual. In extrinsic motivation, the harder question to answer is where do people get the motivation to carry out and continue to push with persistence. Usually extrinsic motivation is used to attain outcomes that a person wouldn't get from intrinsic motivation. Common extrinsic motivations are competition and rewards (for example money or grades) for showing the desired behavior, and the threat of punishment following misbehavior.

- a) People who are intrinsically motivated do not desire rewards or threats as their motivation exists within themselves. People who are extrinsically motivated are not likely to engage in tasks willingly but are overly dependent on outside influences like threats and rewards.

b) Intrinsic motivation is equivalent to a self-desire, interest, curiosity that helps people believe that they can achieve a goal. Extrinsic motivation encourages the performer to win and to beat others, not simply to enjoy the intrinsic rewards of the activity.

c) Intrinsic motivation is an innate motivational tendency that drives people to discover new things as well as analyze their skills and increase their capabilities. Its opposite, extrinsic motivation, is based on external factors like rewards or threats and is achievement or outcome targeted.

d) Extrinsic motivation is the opposite of intrinsic motivation. While the provision of extrinsic rewards might reduce the desirability of an activity, the use of extrinsic constraints, such as the threat of punishment, against performing an activity can actually increase one's intrinsic interest in that activity. And extrinsic rewards can lead to over justification and a subsequent reduction in intrinsic motivation.

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	12
Avg. time spent on this question by all students	215
Difficulty Level	D
Avg. time spent on this question by students who got this question right	205
% of students who attempted this question	28.1
% of students who got the question right of those who attempted	70.08

[Video Solution](#)

Text Solution

The paragraph distinguishes between two types of motivation – intrinsic motivation and extrinsic motivation. Choice B is incorrect as here, motivation is thought to be one entity with intrinsic and extrinsic effects. The points given for the two types of motivation are not quite correct but they are distorted. Choice A shifts focus from the two types of motivation to a classification of people who are intrinsically and extrinsically motivated. The choice also provides unnecessary details. The first sentence in choice D is correct but the second and third sentences in choice D are out of scope. Choice C provides all the details correctly and succinctly.
Choice (C)

undefined

DIRECTIONS for questions 1 to 4: Answer the questions on the basis of the information given below.

On a particular day, Aravind, a lecturer in a college, gave six lectures, each on a different subject among Classical Mechanics, Solid State Physics, Inorganic Chemistry, Zoology, Geology and Robotics.

Each lecture lasted for at least 45 minutes. The first lecture started at 10:00 AM and the last lecture ended at 6:00 PM. Between any two lectures that he gave, there was a break of exactly 15 minutes.

It is also known that

- i. Aravind gave the Classical Mechanics lecture before he gave the Zoology lecture and he was giving the Robotics lecture at 11:17 AM.
- ii. one of the lectures ended at 12:20 PM and another lecture started at 2:40 PM.
- iii. the longest lecture was the Inorganic Chemistry lecture, which lasted for twice as long as the Geology lecture.

iv.

only two lectures lasted for less than an hour and one of the two started before 12 noon, while the other was the lecture that ended at 6:00 PM.

v.

the Solid State Physics lecture lasted for exactly 65 minutes and this started immediately after the Classical Mechanics lecture.

Q1. DIRECTIONS for question 1: Type in your answer in the input box provided below the question.

For how many minutes did the Robotics lecture last?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	1257
Avg. time spent on this question by all students	541
Difficulty Level	D
Avg. time spent on this question by students who got this question right	749
% of students who attempted this question	25.43
% of students who got the question right of those who attempted	11.83

[Video Solution](#)

[Text Solution](#)

The total time available for the six lectures between 10:00 AM and 6:00 PM is $8 \times 60 - 75 = 405$ minutes (excluding the breaks between classes).

From (ii), one of the lectures ended at 12:20 PM. This implies that the next lecture would have started at 12:35 PM. Also, one of the lectures started at 2:40 PM. Hence, the previous lecture must have ended at 2:25 PM.

From 12:35 PM to 2:25 PM, if there were 2 lectures, then one of the two lectures must have been for less than 60 minutes. However, from (iv), only two lectures lasted for less than an hour and these two lectures cannot be any of the two lectures between 12:35 PM and 2:25 PM.

Hence, the lecture that started at 12:35 PM must have ended at 2:25 PM. This lecture lasted for 110 minutes.

From (v), the Solid State Physics lecture lasted for 65 minutes. These two lectures account for 175 minutes in total. The remaining 4 lectures must last for $405 - 175 = 230$ minutes.

Of these 4 lectures, two must be for less than 60 minutes and two must be for at least 60 minutes. Since each lecture must be for at least 45 minutes, the longest lecture among these four will be for a duration of $230 - 45 - 45 - 60 = 80$ minutes.

Hence, in any case, the lecture starting from 12:35 PM and ending at 2:25 PM must be the longest lecture. From (iii), this must be the Inorganic Chemistry lecture. Also, the Geology lecture must be for 55 minutes.

Between 10:00 AM and 12:20 PM, there cannot be only 1 lecture (since one lecture which lasts for less than one hour started before 12:00 noon). There cannot be more than 3 lectures because only one lecture which started before 12 noon was for less than 60 minutes. Hence, there must have been 2 lectures between 10:00 AM and 12:20 PM. Since there are 2 lectures before 12:20 PM, there must have been 4 lectures after 12:20.

The following table provides the information that we know about the six lectures:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM			
2		12:20 PM		
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM			
5				
6		6:00 PM		

The Solid State Physics lecture cannot be the first lecture (from (v)). If the Classical Mechanics lecture is the first, then the second lecture must be Solid State Physics. This is not possible as Arun was giving a Robotics lecture at 11:17 AM (as one of the

is not possible as Aravind was giving a Robotics lecture at 11:17 AM (i.e., one of the two lectures before 12:20 PM must be the Robotics lecture). Hence, the Classical Mechanics lecture cannot be the first lecture.

If the Classical Mechanics lecture was the second lecture, the Solid State Physics lecture must be the third. However, this is not possible as the third lecture is Inorganic Chemistry lecture.

Hence, the Classical Mechanics lecture must be the 4th lecture, the Solid State Physics lecture must be the 5th and the Zoology lecture must be the 6th.

The Classical Mechanics lecture must have started at 2:40 PM. The Zoology lecture lasted for less than an hour and the Classical Mechanics lecture lasted for at least one hour. Also, each lecture lasted for at least 45 minutes. Hence, the Zoology lecture could not have started later than 5:15 PM.

Further, the Classical Mechanics lecture could have ended the earliest at 3:40 PM (since Classical Mechanics lecture cannot be less than one hour). Solid State Physics could have started earliest at 3:55 PM and ended at earliest 5:00 pm. Hence, the Zoology lecture could have started earliest at 5:15 PM.

Hence, the Zoology lecture must have started at exactly 5:15 PM. The Solid State Physics lecture started at exactly 3:55 PM and the Classical Mechanics lecture started at exactly 2:40 PM.

From (i), for Aravind to be giving the Robotics lecture at 11:17 AM, he must have given the Geology lecture first and then the Robotics lecture.

The following table provides the updated information:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM	10:55 AM	55	Geology
2	11:10 AM	12:20 PM	70	Robotics
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM	3:40 PM	60	Classical Mechanics
5	3:55 PM	5:00 PM	65	Solid State Physics
6	5:15 PM	6:00 PM	45	Zoology

The Robotics lecture lasted for 70 minutes.

Ans: (70)

undefined

DIRECTIONS for questions 1 to 4: Answer the questions on the basis of the information given below.

On a particular day, Aravind, a lecturer in a college, gave six lectures, each on a different subject among Classical Mechanics, Solid State Physics, Inorganic Chemistry, Zoology, Geology and Robotics.

Each lecture lasted for at least 45 minutes. The first lecture started at 10:00 AM and the last lecture ended at 6:00 PM. Between any two lectures that he gave, there was a break of exactly 15 minutes.

It is also known that

- i. Aravind gave the Classical Mechanics lecture before he gave the Zoology lecture and he was giving the Robotics lecture at 11:17 AM.
- ii. one of the lectures ended at 12:20 PM and another lecture started at 2:40 PM.
- iii. the longest lecture was the Inorganic Chemistry lecture, which lasted for twice as long as the Geology lecture.
- iv. only two lectures lasted for less than an hour and one of the two started before 12 noon, while the other was the lecture that ended at 6:00 PM.

v.

the Solid State Physics lecture lasted for exactly 65 minutes and this started immediately after the Classical Mechanics lecture.

Q2. DIRECTIONS for question 2: Select the correct alternative from the given choices.

Which lecture was Aravind giving at 10:50 AM?

- a) Inorganic Chemistry
- b) Classical Mechanics
- c) Geology
- d) Robotics

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	38
Avg. time spent on this question by all students	124
Difficulty Level	D
Avg. time spent on this question by students who got this question right	138
% of students who attempted this question	25.89
% of students who got the question right of those who attempted	50.26

[Video Solution](#)

[Text Solution](#)

The total time available for the six lectures between 10:00 AM and 6:00 PM is $8 \times 60 - 75 = 405$ minutes (excluding the breaks between classes).

From (ii), one of the lectures ended at 12:20 PM. This implies that the next lecture would have started at 12:35 PM. Also, one of the lectures started at 2:40 PM. Hence, the previous lecture must have ended at 2:25 PM.

From 12:35 PM to 2:25 PM, if there were 2 lectures, then one of the two lectures must have been for less than 60 minutes. However, from (iv), only two lectures lasted for less than an hour and these two lectures cannot be any of the two lectures between 12:35 PM and 2:25 PM.

Hence, the lecture that started at 12:35 PM must have ended at 2:25 PM. This lecture lasted for 110 minutes.

From (v), the Solid State Physics lecture lasted for 65 minutes. These two lectures account for 175 minutes in total. The remaining 4 lectures must last for $405 - 175 = 230$ minutes.

Of these 4 lectures, two must be for less than 60 minutes and two must be for at least 60 minutes. Since each lecture must be for at least 45 minutes, the longest lecture among these four will be for a duration of $230 - 45 - 45 - 60 = 80$ minutes.

Hence, in any case, the lecture starting from 12:35 PM and ending at 2:25 PM must be the longest lecture. From (iii), this must be the Inorganic Chemistry lecture. Also, the Geology lecture must be for 55 minutes.

Between 10:00 AM and 12:20 PM, there cannot be only 1 lecture (since one lecture which lasts for less than one hour started before 12:00 noon). There cannot be more than 3 lectures because only one lecture which started before 12 noon was for less than 60 minutes. Hence, there must have been 2 lectures between 10:00 AM and 12:20 PM. Since there are 2 lectures before 12:20 PM, there must have been 4 lectures after 12:20. The following table provides the information that we know about the six lectures:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM			
2		12:20 PM		
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM			
5				

The Solid State Physics lecture cannot be the first lecture (from (v)). If the Classical Mechanics lecture is the first, then the second lecture must be Solid State Physics. This is not possible as Aravind was giving a Robotics lecture at 11:17 AM (i.e., one of the two lectures before 12:20 PM must be the Robotics lecture). Hence, the Classical Mechanics lecture cannot be the first lecture.

If the Classical Mechanics lecture was the second lecture, the Solid State Physics lecture must be the third. However, this is not possible as the third lecture is Inorganic Chemistry lecture.

Hence, the Classical Mechanics lecture must be the 4th lecture, the Solid State Physics lecture must be the 5th and the Zoology lecture must be the 6th.

The Classical Mechanics lecture must have started at 2:40 PM. The Zoology lecture lasted for less than an hour and the Classical Mechanics lecture lasted for at least one hour. Also, each lecture lasted for at least 45 minutes. Hence, the Zoology lecture could not have started later than 5:15 PM.

Further, the Classical Mechanics lecture could have ended the earliest at 3:40 PM (since Classical Mechanics lecture cannot be less than one hour). Solid State Physics could have started earliest at 3:55 PM and ended at earliest 5:00 pm. Hence, the Zoology lecture could have started earliest at 5:15 PM.

Hence, the Zoology lecture must have started at exactly 5:15 PM. The Solid State Physics lecture started at exactly 3:55 PM and the Classical Mechanics lecture started at exactly 2:40 PM.

From (i), for Aravind to be giving the Robotics lecture at 11:17 AM, he must have given the Geology lecture first and then the Robotics lecture.

The following table provides the updated information:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM	10:55 AM	55	Geology
2	11:10 AM	12:20 PM	70	Robotics
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM	3:40 PM	60	Classical Mechanics
5	3:55 PM	5:00 PM	65	Solid State Physics
6	5:15 PM	6:00 PM	45	Zoology

Aravind was giving the Geology lecture at 10:50 AM.

Choice (C)

undefined

DIRECTIONS for questions 1 to 4: Answer the questions on the basis of the information given below.

On a particular day, Aravind, a lecturer in a college, gave six lectures, each on a different subject among Classical Mechanics, Solid State Physics, Inorganic Chemistry, Zoology, Geology and Robotics.

Each lecture lasted for at least 45 minutes. The first lecture started at 10:00 AM and the last lecture ended at 6:00 PM. Between any two lectures that he gave, there was a break of exactly 15 minutes.

It is also known that

- i. Aravind gave the Classical Mechanics lecture before he gave the Zoology lecture and he was giving the Robotics lecture at 11:17 AM.
- ii. one of the lectures ended at 12:20 PM and another lecture started at 2:40 PM.
- iii. the longest lecture was the Inorganic Chemistry lecture, which lasted for twice as long as the Geology lecture.

iv.

only two lectures lasted for less than an hour and one of the two started before 12 noon, while the other was the lecture that ended at 6:00 PM.

v.

the Solid State Physics lecture lasted for exactly 65 minutes and this started immediately after the Classical Mechanics lecture.

Q3. DIRECTIONS for questions 3 and 4: Type in your answer in the input box provided below the question.

What is the duration (in minutes) of the shortest lecture that Aravind gave?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	10
Avg. time spent on this question by all students	84
Difficulty Level	D
Avg. time spent on this question by students who got this question right	80
% of students who attempted this question	20.89
% of students who got the question right of those who attempted	51.85

[Video Solution](#)

[Text Solution](#)

The total time available for the six lectures between 10:00 AM and 6:00 PM is $8 \times 60 - 75 = 405$ minutes (excluding the breaks between classes).

From (ii), one of the lectures ended at 12:20 PM. This implies that the next lecture would have started at 12:35 PM. Also, one of the lectures started at 2:40 PM. Hence, the previous lecture must have ended at 2:25 PM.

From 12:35 PM to 2:25 PM, if there were 2 lectures, then one of the two lectures must have been for less than 60 minutes. However, from (iv), only two lectures lasted for less than an hour and these two lectures cannot be any of the two lectures between 12:35 PM and 2:25 PM.

Hence, the lecture that started at 12:35 PM must have ended at 2:25 PM. This lecture lasted for 110 minutes.

From (v), the Solid State Physics lecture lasted for 65 minutes. These two lectures account for 175 minutes in total. The remaining 4 lectures must last for $405 - 175 = 230$ minutes.

Of these 4 lectures, two must be for less than 60 minutes and two must be for at least 60 minutes. Since each lecture must be for at least 45 minutes, the longest lecture among these four will be for a duration of $230 - 45 - 45 - 60 = 80$ minutes.

Hence, in any case, the lecture starting from 12:35 PM and ending at 2:25 PM must be the longest lecture. From (iii), this must be the Inorganic Chemistry lecture. Also, the Geology lecture must be for 55 minutes.

Between 10:00 AM and 12:20 PM, there cannot be only 1 lecture (since one lecture which lasts for less than one hour started before 12:00 noon). There cannot be more than 3 lectures because only one lecture which started before 12 noon was for less than 60 minutes. Hence, there must have been 2 lectures between 10:00 AM and 12:20 PM. Since there are 2 lectures before 12:20 PM, there must have been 4 lectures after 12:20.

The following table provides the information that we know about the six lectures:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM			
2		12:20 PM		
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM			
5				
6		6:00 PM		

The Solid State Physics lecture cannot be the first lecture (from (v)). If the Classical Mechanics lecture is the first, then the second lecture must be Solid State Physics. This is not possible as Aravind was giving a Robotics lecture at 11:17 AM (as one of the

is not possible as Aravind was giving a Robotics lecture at 11:17 AM (i.e., one of the two lectures before 12:20 PM must be the Robotics lecture). Hence, the Classical Mechanics lecture cannot be the first lecture.

If the Classical Mechanics lecture was the second lecture, the Solid State Physics lecture must be the third. However, this is not possible as the third lecture is Inorganic Chemistry lecture.

Hence, the Classical Mechanics lecture must be the 4th lecture, the Solid State Physics lecture must be the 5th and the Zoology lecture must be the 6th.

The Classical Mechanics lecture must have started at 2:40 PM. The Zoology lecture lasted for less than an hour and the Classical Mechanics lecture lasted for at least one hour. Also, each lecture lasted for at least 45 minutes. Hence, the Zoology lecture could not have started later than 5:15 PM.

Further, the Classical Mechanics lecture could have ended the earliest at 3:40 PM (since Classical Mechanics lecture cannot be less than one hour). Solid State Physics could have started earliest at 3:55 PM and ended at earliest 5:00 pm. Hence, the Zoology lecture could have started earliest at 5:15 PM.

Hence, the Zoology lecture must have started at exactly 5:15 PM. The Solid State Physics lecture started at exactly 3:55 PM and the Classical Mechanics lecture started at exactly 2:40 PM.

From (i), for Aravind to be giving the Robotics lecture at 11:17 AM, he must have given the Geology lecture first and then the Robotics lecture.

The following table provides the updated information:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM	10:55 AM	55	Geology
2	11:10 AM	12:20 PM	70	Robotics
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM	3:40 PM	60	Classical Mechanics
5	3:55 PM	5:00 PM	65	Solid State Physics
6	5:15 PM	6:00 PM	45	Zoology

The shortest lecture that Aravind gave lasted for 45 minutes.

Ans: (45)

undefined

DIRECTIONS for questions 1 to 4: Answer the questions on the basis of the information given below.

On a particular day, Aravind, a lecturer in a college, gave six lectures, each on a different subject among Classical Mechanics, Solid State Physics, Inorganic Chemistry, Zoology, Geology and Robotics.

Each lecture lasted for at least 45 minutes. The first lecture started at 10:00 AM and the last lecture ended at 6:00 PM. Between any two lectures that he gave, there was a break of exactly 15 minutes.

It is also known that

- i. Aravind gave the Classical Mechanics lecture before he gave the Zoology lecture and he was giving the Robotics lecture at 11:17 AM.
- ii. one of the lectures ended at 12:20 PM and another lecture started at 2:40 PM.
- iii. the longest lecture was the Inorganic Chemistry lecture, which lasted for twice as long as the Geology lecture.
- iv. only two lectures lasted for less than an hour and one of the two started before 12 noon, while the other was the lecture that ended at 6:00 PM.

v.

the Solid State Physics lecture lasted for exactly 65 minutes and this started immediately after the Classical Mechanics lecture.

Q4. DIRECTIONS for questions 3 and 4: Type in your answer in the input box provided below the question.

What is the duration (in minutes) of the fourth lecture that he gave?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	3
Avg. time spent on this question by all students	78
Difficulty Level	D
Avg. time spent on this question by students who got this question right	74
% of students who attempted this question	16.87
% of students who got the question right of those who attempted	20.69

[Video Solution](#)

[Text Solution](#)

The total time available for the six lectures between 10:00 AM and 6:00 PM is $8 \times 60 - 75 = 405$ minutes (excluding the breaks between classes).

From (ii), one of the lectures ended at 12:20 PM. This implies that the next lecture would have started at 12:35 PM. Also, one of the lectures started at 2:40 PM. Hence, the previous lecture must have ended at 2:25 PM.

From 12:35 PM to 2:25 PM, if there were 2 lectures, then one of the two lectures must have been for less than 60 minutes. However, from (iv), only two lectures lasted for less than an hour and these two lectures cannot be any of the two lectures between 12:35 PM and 2:25 PM.

Hence, the lecture that started at 12:35 PM must have ended at 2:25 PM. This lecture lasted for 110 minutes.

From (v), the Solid State Physics lecture lasted for 65 minutes. These two lectures account for 175 minutes in total. The remaining 4 lectures must last for $405 - 175 = 230$ minutes.

Of these 4 lectures, two must be for less than 60 minutes and two must be for at least 60 minutes. Since each lecture must be for at least 45 minutes, the longest lecture among these four will be for a duration of $230 - 45 - 45 - 60 = 80$ minutes.

Hence, in any case, the lecture starting from 12:35 PM and ending at 2:25 PM must be the longest lecture. From (iii), this must be the Inorganic Chemistry lecture. Also, the Geology lecture must be for 55 minutes.

Between 10:00 AM and 12:20 PM, there cannot be only 1 lecture (since one lecture which lasts for less than one hour started before 12:00 noon). There cannot be more than 3 lectures because only one lecture which started before 12 noon was for less than 60 minutes. Hence, there must have been 2 lectures between 10:00 AM and 12:20 PM. Since there are 2 lectures before 12:20 PM, there must have been 4 lectures after 12:20. The following table provides the information that we know about the six lectures:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM			
2		12:20 PM		
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM			
5				
6		6:00 PM		

The Solid State Physics lecture cannot be the first lecture (from (v)). If the Classical Mechanics lecture is the first, then the second lecture must be Solid State Physics. This is not possible as Aravind was giving a Robotics lecture at 11:17 AM (i.e., one of the two lectures before 12:20 PM must be the Robotics lecture). Hence, the Classical Mechanics lecture cannot be the first lecture.

If the Classical Mechanics lecture was the second lecture, the Solid State Physics lecture must be the third. However, this is not possible as the third lecture is Inorganic

Chemistry lecture.

Hence, the Classical Mechanics lecture must be the 4th lecture, the Solid State Physics lecture must be the 5th and the Zoology lecture must be the 6th.

The Classical Mechanics lecture must have started at 2:40 PM. The Zoology lecture lasted for less than an hour and the Classical Mechanics lecture lasted for at least one hour. Also, each lecture lasted for at least 45 minutes. Hence, the Zoology lecture could not have started later than 5:15 PM.

Further, the Classical Mechanics lecture could have ended the earliest at 3:40 PM (since Classical Mechanics lecture cannot be less than one hour). Solid State Physics could have started earliest at 3:55 PM and ended at earliest 5:00 pm. Hence, the Zoology lecture could have started earliest at 5:15 PM.

Hence, the Zoology lecture must have started at exactly 5:15 PM. The Solid State Physics lecture started at exactly 3:55 PM and the Classical Mechanics lecture started at exactly 2:40 PM.

From (i), for Aravind to be giving the Robotics lecture at 11:17 AM, he must have given the Geology lecture first and then the Robotics lecture.

The following table provides the updated information:

Lecture	Start Time	End Time	Duration	Subject
1	10:00 AM	10:55 AM	55	Geology
2	11:10 AM	12:20 PM	70	Robotics
3	12:35 PM	2:25 PM	110	Inorganic Chemistry
4	2:40 PM	3:40 PM	60	Classical Mechanics
5	3:55 PM	5:00 PM	65	Solid State Physics
6	5:15 PM	6:00 PM	45	Zoology

The fourth lecture that he gave lasted for 60 minutes.

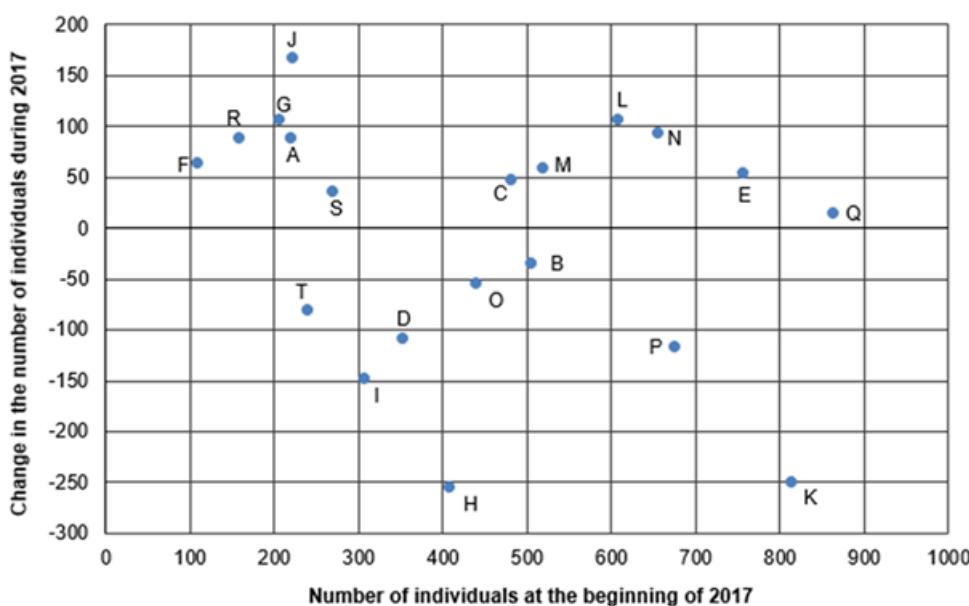
Ans: (60)

undefined

DIRECTIONS for questions 5 to 8: Answer the questions on the basis of the information given below.

In a certain forest reserve, all the species of animals and birds are classified as one of five categories - Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) and Least Concern (LC). All the species in the reserve are categorized at the beginning of each year based on the number of individuals of that species present in the reserve at the beginning of the year.

The scatter graph below provides the number of individuals of twenty different species, A through T, in the reserve at the beginning of 2017 and the change in the number of individuals of each species during 2017. The table below the graph provides, for each category, the number of individuals that needs to be present in any species for that species to be classified as that category.



Category	Number of Individuals
CR	0 - 200
EN	201 - 400
VU	401 - 600
NT	601 - 800
LC	> 800

Q5. DIRECTIONS for questions 5 to 8: Type in your answer in the input box provided below the question.

How many species were categorized as EN in 2018?

You did not answer this question [Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	12
Avg. time spent on this question by all students	334
Difficulty Level	M
Avg. time spent on this question by students who got this question right	362
% of students who attempted this question	29.12
% of students who got the question right of those who attempted	42.51

[Video Solution](#)

[Text Solution](#)

From the graph, we can find the approximate number of individuals of each species at the beginning of 2017 and at the beginning of 2018. Based on this, we can classify them into different categories in 2017 and in 2018.

The table below provides the classification of each species in 2017 and 2018. The number in parenthesis represents the approximate number of individuals of that species in each year.

Category	Species (2017)	Species (2018)
CR	F (110), R (160)	F (170), T (160), I (155), H (155)
EN	G (205), J (220), A (220), T (240), S (270), I (305), D (350)	R (240), G (310), J (380), A (300), S (310), D (240), O (385)
VU	H (405), O (440), C (480), B (510), M (520)	C (530), B (470), M (580), P (560), K (570)
NT	L (610), N (660), P (680), E (760)	L (720), N (750)
LC	K (820), Q (860)	E (820), Q (880)

Seven species, A, D, G, J, O, R and S, are classified as EN in 2018.

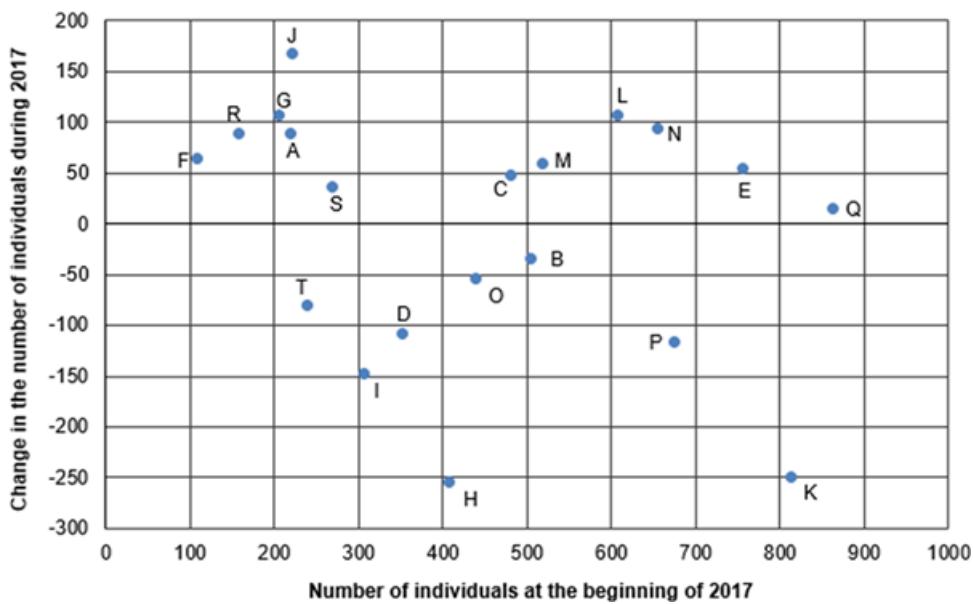
Ans: (7)

undefined

DIRECTIONS for questions 5 to 8: Answer the questions on the basis of the information given below.

In a certain forest reserve, all the species of animals and birds are classified as one of five categories - Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) and Least Concern (LC). All the species in the reserve are categorized at the beginning of each year based on the number of individuals of that species present in the reserve at the beginning of the year.

The scatter graph below provides the number of individuals of twenty different species, A through T, in the reserve at the beginning of 2017 and the change in the number of individuals of each species during 2017. The table below the graph provides, for each category, the number of individuals that needs to be present in any species for that species to be classified as that category.



Category	Number of Individuals
CR	0 - 200
EN	201 - 400
VU	401 - 600
NT	601 - 800
LC	> 800

Q6. DIRECTIONS for questions 5 to 8: Type in your answer in the input box provided below the question.

How many species shifted from one category to another between 2017 and 2018?

You did not answer this question [Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	206
Difficulty Level	M
Avg. time spent on this question by students who got this question right	244
% of students who attempted this question	20.86
% of students who got the question right of those who attempted	28.13

[Video Solution](#)

[Text Solution](#)

From the graph, we can find the approximate number of individuals of each species at the beginning of 2017 and at the beginning of 2018. Based on this, we can classify them into different categories in 2017 and in 2018.

The table below provides the classification of each species in 2017 and 2018. The number in parenthesis represents the approximate number of individuals of that species in each year.

Category	Species (2017)	Species (2018)
CR	F (110), R (160)	F (170), T (160), I (155), H (155)
EN	G (205), J (220), A (220), T (240), S (270), I (305), D (350)	R (240), G (310), J (380), A (300), S (310), D (240), O (385)
VU	H (405), O (440), C (480), B (510), M (520)	C (530), B (470), M (580), P (560), K (570)
NT	L (610), N (660), P (680), E (760)	L (720), N (750)
LC	K (820), Q (860)	E (820), Q (880)

From the above table, we can see that eight species (R, T, I, H, O, P, E and K) shifted categories.

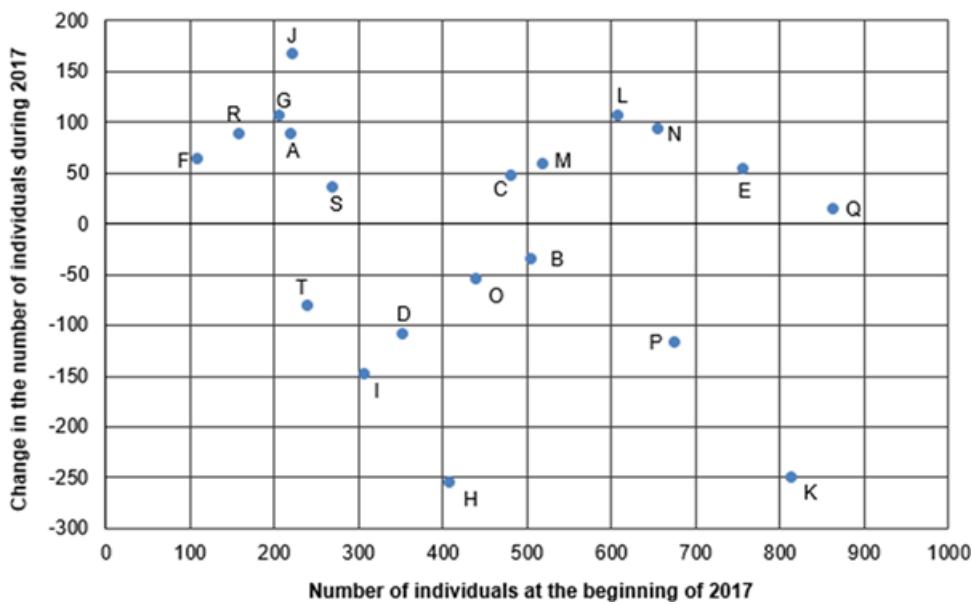
Ans: (8)

undefined

DIRECTIONS for questions 5 to 8: Answer the questions on the basis of the information given below.

In a certain forest reserve, all the species of animals and birds are classified as one of five categories - Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) and Least Concern (LC). All the species in the reserve are categorized at the beginning of each year based on the number of individuals of that species present in the reserve at the beginning of the year.

The scatter graph below provides the number of individuals of twenty different species, A through T, in the reserve at the beginning of 2017 and the change in the number of individuals of each species during 2017. The table below the graph provides, for each category, the number of individuals that needs to be present in any species for that species to be classified as that category.



Category	Number of Individuals
CR	0 - 200
EN	201 - 400
VU	401 - 600
NT	601 - 800
LC	> 800

Q7. DIRECTIONS for questions 5 to 8: Type in your answer in the input box provided below the question.

Considering only the species with more than 500 individuals at the beginning of 2018, how many species were classified as VU in that year?

You did not answer this question Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	103
Difficulty Level	M
Avg. time spent on this question by students who got this question right	116
% of students who attempted this question	23.03
% of students who got the question right of those who attempted	35.33

[Video Solution](#)

[Text Solution](#)

From the graph, we can find the approximate number of individuals of each species at the beginning of 2017 and at the beginning of 2018. Based on this, we can classify them into different categories in 2017 and in 2018.

The table below provides the classification of each species in 2017 and 2018. The number in parenthesis represents the approximate number of individuals of that species in each year.

Category	Species (2017)	Species (2018)
CR	F (110), R (160)	F (170), T (160), I (155), H (155)
EN	G (205), J (220), A (220), T (240), S (270), I (305), D (350)	R (240), G (310), J (380), A (300), S (310), D (240), O (385)
VU	H (405), O (440), C (480), B (510), M (520)	C (530), B (470), M (580), P (560), K (570)
NT	L (610), N (660), P (680), E (760)	L (720), N (750)
LC	K (820), Q (860)	E (820), Q (880)

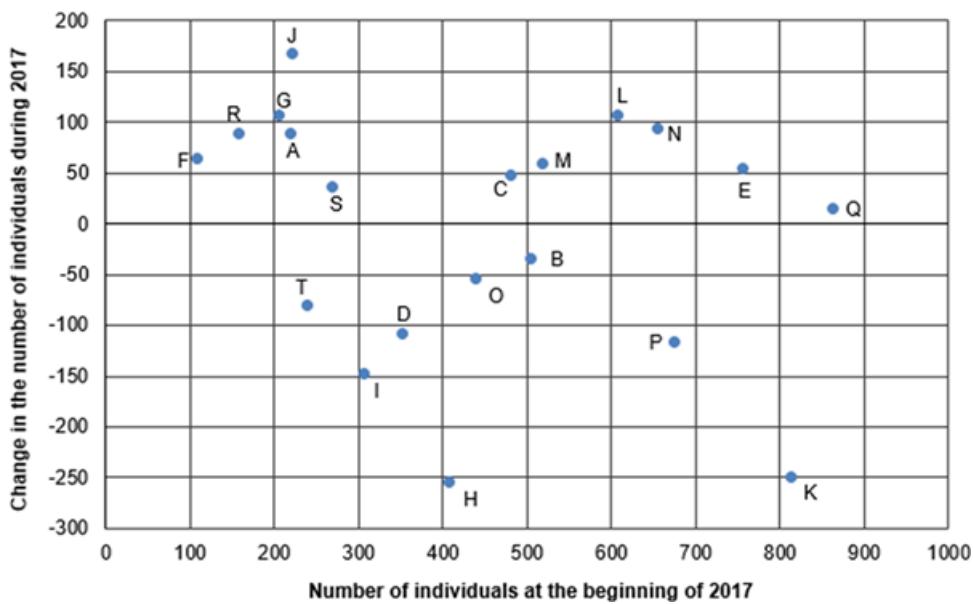
Four species (C, M, P and K) have more than 500 individuals and were classified as VU in 2018.
Ans: (4)

undefined

DIRECTIONS for questions 5 to 8: Answer the questions on the basis of the information given below.

In a certain forest reserve, all the species of animals and birds are classified as one of five categories - Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) and Least Concern (LC). All the species in the reserve are categorized at the beginning of each year based on the number of individuals of that species present in the reserve at the beginning of the year.

The scatter graph below provides the number of individuals of twenty different species, A through T, in the reserve at the beginning of 2017 and the change in the number of individuals of each species during 2017. The table below the graph provides, for each category, the number of individuals that needs to be present in any species for that species to be classified as that category.



Category	Number of Individuals
CR	0 - 200
EN	201 - 400
VU	401 - 600
NT	601 - 800
LC	> 800

Q8.

DIRECTIONS for questions 5 to 8: Type in your answer in the input box provided below the question. Among the species for which the number of individuals in 2018 differed by at least 100 from that in 2017, how many species did not shift from one category to another between 2017 and 2018?

You did not answer this question Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	120
Difficulty Level	M
Avg. time spent on this question by students who got this question right	144
% of students who attempted this question	17.52
% of students who got the question right of those who attempted	33.74

[Video Solution](#)

[Text Solution](#)

From the graph, we can find the approximate number of individuals of each species at the beginning of 2017 and at the beginning of 2018. Based on this, we can classify them into different categories in 2017 and in 2018.

The table below provides the classification of each species in 2017 and 2018. The number in parenthesis represents the approximate number of individuals of that species in each year.

Category	Species (2017)	Species (2018)
CR	F (110), R (160)	F (170), T (160), I (155), H (155)
EN	G (205), J (220), A (220), T (240), S (270), I (305), D (350)	R (240), G (310), J (380), A (300), S (310), D (240), O (385)
VU	H (405), O (440), C (480), B (510), M (520)	C (530), B (470), M (580), P (560), K (570)
NT	L (610), N (660), P (680), E (760)	L (720), N (750)
LC	K (820), Q (860)	E (820), Q (880)

The species whose numbers changed by at least 100 are G, L, J, D, P, I, H and K. Among these species, four species, G, L, J and D, did not change categories.

Ans: (4)

undefined

DIRECTIONS for questions 9 to 12: Answer the questions on the basis of the information given below.

Each of six persons, Bruce, Loki, Okoye, Peter, Stephen and Tony, has a different crystal among Mind crystal, Power crystal, Reality crystal, Space crystal, Soul crystal and Time crystal, not necessarily in the same order. Each crystal is of a different colour among Blue, Black, Purple, Green, Red and Yellow. Further, each person lives in a different city among New York, Asgard, Wakanda, San Francisco, Detroit and Los Angeles.

On a particular day, Thanos, a mutual acquaintance of the six persons, decided to steal the crystals from the six persons. However, he only had the following information about the colours of the crystals, the persons who have the crystals and the cities in which they live:

- i. Bruce does not have the Black coloured crystal, while Okoye does not have the Purple coloured crystal.
- ii. The person living in San Francisco has the Blue coloured crystal.
- iii. The person living in Wakanda has the Time crystal, while Peter does not live in Los Angeles.
- iv. The person living in Asgard has the Purple coloured crystal, while Okoye does not live in Wakanda.

- v. Bruce, who lives in New York, has the Space crystal, while the person living in Detroit has the Yellow coloured crystal.
- vi. Loki, who lives in San Francisco, has the Reality crystal, while the person living in Los Angeles does not have the Black crystal.
- vii. Stephen has the Power crystal, while Peter has the Mind crystal, which is not Purple.

Q9. DIRECTIONS for questions 9 to 12: Select the correct alternative from the given choices.

In which city is the Soul crystal?

- a) Wakanda
- b) Detroit
- c) Asgard
- d) Los Angeles Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	784
Avg. time spent on this question by all students	681
Difficulty Level	M
Avg. time spent on this question by students who got this question right	691
% of students who attempted this question	38.25
% of students who got the question right of those who attempted	73.2

[Video Solution](#)

[Text Solution](#)

From (ii), the person living in San Francisco has the Blue coloured crystal. From (iii), the person in Wakanda has the Time crystal. From (iv), the person in Asgard has the Purple coloured crystal.

From (v), Bruce lives in New York and has the Space crystal. Also, the person in Detroit has the yellow crystal.

From (vi), Loki lives in San Francisco and has the Reality crystal.

From (i), Bruce (who lives in New York) does not have the Black coloured crystal. From (vi), the person in Los Angeles does not have the Black crystal. Hence, the person in Wakanda must have the Black coloured crystal.

The person in New York and the person in Los Angeles must have the Green and Red crystals in any order.

From (iii), Peter does not live in Los Angeles. From (vii), Peter has the Mind crystal and it is not Purple. Hence, Peter must be from Detroit.

From (iv), Okoye does not live in Wakanda. From (i), Okoye does not have the Purple coloured crystal. Hence, Okoye does not live in Asgard as well. Hence, Okoye must be in Los Angeles.

From (vii), Stephen has the Power crystal and he can only be in Asgard.

Okoye must have the Soul crystal and Tony must be in Wakanda.

The following table provides this information:

City	Person	Crystal	Colour
New York	Bruce	Space	Green/Red
Asgard	Stephen	Power	Purple
Wakanda	Tony	Time	Black
San Francisco	Loki	Reality	Blue
Detroit	Peter	Mind	Yellow
Los Angeles	Okoye	Soul	Red/Green

The Soul crystal is in Los Angeles.

Choice (D)

undefined

DIRECTIONS for questions 9 to 12: Answer the questions on the basis of the information given below.

Each of six persons, Bruce, Loki, Okoye, Peter, Stephen and Tony, has a different crystal among Mind crystal, Power crystal, Reality crystal, Space crystal, Soul crystal and Time crystal, not necessarily in the same order. Each crystal is of a different colour among Blue, Black, Purple, Green, Red and Yellow. Further, each person lives in a different city among New

York, Asgard, Wakanda, San Francisco, Detroit and Los Angeles.

On a particular day, Thanos, a mutual acquaintance of the six persons, decided to steal the crystals from the six persons. However, he only had the following information about the colours of the crystals, the persons who have the crystals and the cities in which they live:

- i. Bruce does not have the Black coloured crystal, while Okoye does not have the Purple coloured crystal.
- ii. The person living in San Fransisco has the Blue coloured crystal.
- iii. The person living in Wakanda has the Time crystal, while Peter does not live in Los Angeles.
- iv. The person living in Asgard has the Purple coloured crystal, while Okoye does not live in Wakanda.
- v. Bruce, who lives in New York, has the Space crystal, while the person living in Detroit has the Yellow coloured crystal.
- vi. Loki, who lives in San Fransisco, has the Reality crystal, while the person living in Los Angeles does not have the Black crystal.
- vii. Stephen has the Power crystal, while Peter has the Mind crystal, which is not Purple.

Q10. DIRECTIONS for questions 9 to 12: Select the correct alternative from the given choices.

Who has the Purple coloured crystal?

- a) Tony
- b) Stephen Your answer is correct
- c) Bruce
- d) Okoye

Time spent / Accuracy Analysis

Time taken by you to answer this question	29
Avg. time spent on this question by all students	71
Difficulty Level	M
Avg. time spent on this question by students who got this question right	59
% of students who attempted this question	39
% of students who got the question right of those who attempted	78.07

[Video Solution](#)

[Text Solution](#)

From (ii), the person living in San Francisco has the Blue coloured crystal. From (iii), the person in Wakanda has the Time crystal. From (iv), the person in Asgard has the Purple coloured crystal.

From (v), Bruce lives in New York and has the Space crystal. Also, the person in Detroit has the yellow crystal.

From (vi), Loki lives in San Francisco and has the Reality crystal.

From (i), Bruce (who lives in New York) does not have the Black coloured crystal. From (vi), the person in Los Angeles does not have the Black crystal. Hence, the person in Wakanda must have the Black coloured crystal.

The person in New York and the person in Los Angeles must have the Green and Red crystals in any order.

From (iii), Peter does not live in Los Angeles. From (vii), Peter has the Mind crystal and it is not Purple. Hence, Peter must be from Detroit.

From (iv), Okoye does not live in Wakanda. From (i), Okoye does not have the Purple coloured crystal. Hence, Okoye does not live in Asgard as well. Hence, Okoye must be in Los Angeles.

From (vii), Stephen has the Power crystal and he can only be in Asgard.

Okoye must have the Soul crystal and Tony must be in Wakanda.

The following table provides this information:

City	Person	Crystal	Colour
New York	Bruce	Space	Green/Red
Asgard	Stephen	Power	Purple
Wakanda	Tony	Time	Black
San Francisco	Loki	Reality	Blue
Detroit	Peter	Mind	Yellow
Los Angeles	Okoye	Soul	Red/Green

Stephen has the Purple coloured crystal.

Choice (B)

undefined

DIRECTIONS for questions 9 to 12: Answer the questions on the basis of the information given below.

Each of six persons, Bruce, Loki, Okoye, Peter, Stephen and Tony, has a different crystal among Mind crystal, Power crystal, Reality crystal, Space crystal, Soul crystal and Time crystal, not necessarily in the same order. Each crystal is of a different colour among Blue, Black, Purple, Green, Red and Yellow. Further, each person lives in a different city among New York, Asgard, Wakanda, San Francisco, Detroit and Los Angeles.

On a particular day, Thanos, a mutual acquaintance of the six persons, decided to steal the crystals from the six persons. However, he only had the following information about the colours of the crystals, the persons who have the crystals and the cities in which they live:

- i.
Bruce does not have the Black coloured crystal, while Okoye does not have the Purple coloured crystal.
- ii.
The person living in San Francisco has the Blue coloured crystal.
- iii.
The person living in Wakanda has the Time crystal, while Peter does not live in Los Angeles.
- iv.
The person living in Asgard has the Purple coloured crystal, while Okoye does not live in Wakanda.

- v. Bruce, who lives in New York, has the Space crystal, while the person living in Detroit has the Yellow coloured crystal.
- vi. Loki, who lives in San Fransisco, has the Reality crystal, while the person living in Los Angeles does not have the Black crystal.
- vii. Stephen has the Power crystal, while Peter has the Mind crystal, which is not Purple.

Q11. DIRECTIONS for questions 9 to 12: Select the correct alternative from the given choices.

What is the colour of the Time crystal?

- a) **Purple**
- b) **Yellow**
- c) **Black** Your answer is correct
- d) **Green**

Time spent / Accuracy Analysis

Time taken by you to answer this question	7
Avg. time spent on this question by all students	59
Difficulty Level	E
Avg. time spent on this question by students who got this question right	54
% of students who attempted this question	37.46
% of students who got the question right of those who attempted	77.54

[Video Solution](#)

[Text Solution](#)

From (ii), the person living in San Francisco has the Blue coloured crystal. From (iii), the person in Wakanda has the Time crystal. From (iv), the person in Asgard has the Purple coloured crystal.

From (v), Bruce lives in New York and has the Space crystal. Also, the person in Detroit has the yellow crystal.

From (vi), Loki lives in San Francisco and has the Reality crystal.

From (i), Bruce (who lives in New York) does not have the Black coloured crystal. From (vi), the person in Los Angeles does not have the Black crystal. Hence, the person in Wakanda must have the Black coloured crystal.

The person in New York and the person in Los Angeles must have the Green and Red crystals in any order.

From (iii), Peter does not live in Los Angeles. From (vii), Peter has the Mind crystal and it is not Purple. Hence, Peter must be from Detroit.

From (iv), Okoye does not live in Wakanda. From (i), Okoye does not have the Purple coloured crystal. Hence, Okoye does not live in Asgard as well. Hence, Okoye must be in Los Angeles.

From (vii), Stephen has the Power crystal and he can only be in Asgard.

Okoye must have the Soul crystal and Tony must be in Wakanda.

The following table provides this information:

City	Person	Crystal	Colour
New York	Bruce	Space	Green/Red
Asgard	Stephen	Power	Purple
Wakanda	Tony	Time	Black
San Francisco	Loki	Reality	Blue
Detroit	Peter	Mind	Yellow
Los Angeles	Okoye	Soul	Red/Green

The Time crystal is Black.

Choice (C)

undefined

DIRECTIONS for questions 9 to 12: Answer the questions on the basis of the information given below.

Each of six persons, Bruce, Loki, Okoye, Peter, Stephen and Tony, has a different crystal among Mind crystal, Power crystal, Reality crystal, Space crystal, Soul crystal and Time crystal, not necessarily in the same order. Each crystal is of a

different colour among Blue, Black, Purple, Green, Red and Yellow. Further, each person lives in a different city among New York, Asgard, Wakanda, San Francisco, Detroit and Los Angeles.

On a particular day, Thanos, a mutual acquaintance of the six persons, decided to steal the crystals from the six persons. However, he only had the following information about the colours of the crystals, the persons who have the crystals and the cities in which they live:

- i. Bruce does not have the Black coloured crystal, while Okoye does not have the Purple coloured crystal.
- ii. The person living in San Francisco has the Blue coloured crystal.
- iii. The person living in Wakanda has the Time crystal, while Peter does not live in Los Angeles.
- iv. The person living in Asgard has the Purple coloured crystal, while Okoye does not live in Wakanda.
- v. Bruce, who lives in New York, has the Space crystal, while the person living in Detroit has the Yellow coloured crystal.
- vi. Loki, who lives in San Francisco, has the Reality crystal, while the person living in Los Angeles does not have the Black crystal.
- vii. Stephen has the Power crystal, while Peter has the Mind crystal, which is not Purple.

Q12. DIRECTIONS for questions 9 to 12: Select the correct alternative from the given choices.

Which crystal does the person living in Detroit have?

a) Mind Your answer is correct

b) Soul

c) Power

d) Cannot be determined

Time spent / Accuracy Analysis

Time taken by you to answer this question **21**

Avg. time spent on this question by all students **33**

Difficulty Level **M**

Avg. time spent on this question by students who got this question right **26**

% of students who attempted this question **38.53**

% of students who got the question right of those who attempted **71.98**

[Video Solution](#)

[Text Solution](#)

From (ii), the person living in San Francisco has the Blue coloured crystal. From (iii), the person in Wakanda has the Time crystal. From (iv), the person in Asgard has the Purple coloured crystal.

From (v), Bruce lives in New York and has the Space crystal. Also, the person in Detroit has the yellow crystal.

From (vi), Loki lives in San Francisco and has the Reality crystal.

From (i), Bruce (who lives in New York) does not have the Black coloured crystal. From (vi), the person in Los Angeles does not have the Black crystal. Hence, the person in Wakanda must have the Black coloured crystal.

The person in New York and the person in Los Angeles must have the Green and Red crystals in any order.

From (iii), Peter does not live in Los Angeles. From (vii), Peter has the Mind crystal and it is not Purple. Hence, Peter must be from Detroit.

From (iv), Okoye does not live in Wakanda. From (i), Okoye does not have the Purple coloured crystal. Hence, Okoye does not live in Asgard as well. Hence, Okoye must be in Los Angeles.

From (vii), Stephen has the Power crystal and he can only be in Asgard.

Okoye must have the Soul crystal and Tony must be in Wakanda.

The following table provides this information:

City	Person	Crystal	Colour
New York	Bruce	Space	Green/Red
Asgard	Stephen	Power	Purple
Wakanda	Tony	Time	Black
San Francisco	Loki	Reality	Blue
Detroit	Peter	Mind	Yellow
Los Angeles	Okoye	Soul	Red/Green

The person living in Detroit has the Mind crystal.

Choice (A)

undefined

DIRECTIONS for questions 13 to 16: Answer the questions on the basis of the information given below.

Tetra is a company that manufactures and sells chairs. At the beginning of each month, the stock of chairs in the inventory is calculated. The stock at the beginning of any month is calculated as follows:

$$\begin{aligned} \text{Stock at the beginning of a month} \\ &= \text{Stock at the beginning of the previous month} \\ &+ \text{Number of chairs manufactured during the previous month} \\ &- \text{Number of chairs sold during the previous month} \end{aligned}$$

The table below provides the stock of chairs at the beginning of each month in 2017.

It is also known that, in any month, the number of chairs manufactured was either half the number of chairs sold or thrice the number of chairs sold. There was no stock left in the inventory at the end of the year.

Month	Stock (in '000)
January	100
February	130
March	80
April	130
May	150
June	90
July	75
August	60
September	100
October	50
November	90
December	30

Q13. DIRECTIONS for questions 13 to 16: Select the correct alternative from the given choices.

In how many months during the year were more than 50000 chairs sold?

- a) 4
- b) 5
- c) 6
- d) Cannot be determined

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	14
Avg. time spent on this question by all students	356
Difficulty Level	E
Avg. time spent on this question by students who got this question right	422
% of students who attempted this question	18.02
% of students who got the question right of those who attempted	28.08

[Video Solution](#)

[Text Solution](#)

If the stock has increased in a month as compared to the previous month, then the number of chairs manufactured must have been more than the number of chairs sold. In this case, from the given condition, the number of chairs manufactured must be thrice the number of chairs sold.

Similarly, if the stock has decreased in a month as compared to the previous month, the number of chairs manufactured must have been less than the number of chairs sold. In this case, the number of chairs manufactured must be half the number of chairs sold.

From January to February, the stock increased. Hence, the number of chairs manufactured in January must have been more than the number of chairs sold. Let $3x$ be the number of chairs manufactured and x be the number of chairs sold.

$$100 + 3x - x = 130 \Rightarrow x = 15$$

Hence, 45000 chairs were manufactured in January, while 15000 were sold.

From February to March, the stock decreased. Hence, the number of chairs sold must have been more.

Let $2x$ be the number of chairs sold and x be the number of chairs manufactured.

$$130 + x - 2x = 80 \Rightarrow x = 50$$

Hence, 50000 chairs were manufactured and 100000 chairs were sold.

Similarly, we can calculate the number of chairs manufactured and sold in each month. This is provided in the following table:

Month	Stock (in '000)	Manufactured (in '000)	Sold (in '000)
January	100	45	15
February	130	50	100
March	80	75	25
April	130	30	10
May	150	60	120
June	90	15	30
July	75	15	30
August	60	60	20
September	100	50	100
October	50	60	20
November	90	60	120
December	30	30	60

More than 50000 chairs were sold in five months.

Choice (B)

undefined

DIRECTIONS for questions 13 to 16: Answer the questions on the basis of the information given below.

Tetra is a company that manufactures and sells chairs. At the beginning of each month, the stock of chairs in the inventory is calculated. The stock at the beginning of any month is calculated as follows:

Stock at the beginning of a month

= Stock at the beginning of the previous month

+ Number of chairs manufactured during the previous month

- Number of chairs sold during the previous month

The table below provides the stock of chairs at the beginning of each month in 2017.

It is also known that, in any month, the number of chairs manufactured was either half the number of chairs sold or thrice the number of chairs sold. There was no stock left in the inventory at the end of the year.

Month	Stock (in '000)
January	100
February	130
March	80
April	130
May	150
June	90
July	75
August	60
September	100
October	50
November	90
December	30

Q14. DIRECTIONS for questions 13 to 16: Select the correct alternative from the given choices.

In which month during the year were the highest number of chairs manufactured?

- a) **March**
- b) **April**
- c) **May**
- d) **August**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	83
Difficulty Level	E
Avg. time spent on this question by students who got this question right	86
% of students who attempted this question	18.84
% of students who got the question right of those who attempted	39.92

[Video Solution](#)

[Text Solution](#)

If the stock has increased in a month as compared to the previous month, then the number of chairs manufactured must have been more than the number of chairs sold. In this case, from the given condition, the number of chairs manufactured must be thrice the number of chairs sold.

Similarly, if the stock has decreased in a month as compared to the previous month, the number of chairs manufactured must have been less than the number of chairs sold. In this case, the number of chairs manufactured must be half the number of chairs sold.

From January to February, the stock increased. Hence, the number of chairs manufactured in January must have been more than the number of chairs sold. Let $3x$ be the number of chairs manufactured and x be the number of chairs sold.

$$100 + 3x - x = 130 \Rightarrow x = 15$$

Hence, 45000 chairs were manufactured in January, while 15000 were sold.

From February to March, the stock decreased. Hence, the number of chairs sold must have been more.

Let $2x$ be the number of chairs sold and x be the number of chairs manufactured.

$$130 + x - 2x = 80 \Rightarrow x = 50$$

Hence, 50000 chairs were manufactured and 100000 chairs were sold.

Similarly, we can calculate the number of chairs manufactured and sold in each month. This is provided in the following table:

Month	Stock (in '000)	Manufactured (in '000)	Sold (in '000)
January	100	45	15
February	130	50	100
March	80	75	25
April	130	30	10
May	150	60	120
June	90	15	30
July	75	15	30
August	60	60	20
September	100	50	100
October	50	60	20
November	90	60	120
December	30	30	60

The highest number of chairs were manufactured in March.

Choice (A)

undefined

DIRECTIONS for questions 13 to 16: Answer the questions on the basis of the information given below.

Tetra is a company that manufactures and sells chairs. At the beginning of each month, the stock of chairs in the inventory is calculated. The stock at the beginning of any month is calculated as follows:

Stock at the beginning of a month

$$\begin{aligned} &= \text{Stock at the beginning of the previous month} \\ &+ \text{Number of chairs manufactured during the previous month} \\ &- \text{Number of chairs sold during the previous month} \end{aligned}$$

The table below provides the stock of chairs at the beginning of each month in 2017.

It is also known that, in any month, the number of chairs manufactured was either half the number of chairs sold or thrice the number of chairs sold. There was no stock left in the inventory at the end of the year.

Month	Stock (in '000)
January	100
February	130
March	80
April	130
May	150
June	90
July	75
August	60
September	100
October	50
November	90
December	30

Q15. DIRECTIONS for questions 13 to 16: Select the correct alternative from the given choices.

What is the average number of chairs sold per month (approximately) during the year?

- a) **53333**
- b) **53667**
- c) **54167**
- d) **57333**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	111
Difficulty Level	E
Avg. time spent on this question by students who got this question right	103
% of students who attempted this question	8.78
% of students who got the question right of those who attempted	44.34

[Video Solution](#)

[Text Solution](#)

If the stock has increased in a month as compared to the previous month, then the number of chairs manufactured must have been more than the number of chairs sold. In this case, from the given condition, the number of chairs manufactured must be thrice the number of chairs sold.

Similarly, if the stock has decreased in a month as compared to the previous month, the number of chairs manufactured must have been less than the number of chairs sold. In this case, the number of chairs manufactured must be half the number of chairs sold.

From January to February, the stock increased. Hence, the number of chairs manufactured in January must have been more than the number of chairs sold. Let $3x$ be the number of chairs manufactured and x be the number of chairs sold.

$$100 + 3x - x = 130 \Rightarrow x = 15$$

Hence, 45000 chairs were manufactured in January, while 15000 were sold.

From February to March, the stock decreased. Hence, the number of chairs sold must have been more.

Let $2x$ be the number of chairs sold and x be the number of chairs manufactured.

$$130 + x - 2x = 80 \Rightarrow x = 50$$

Hence, 50000 chairs were manufactured and 100000 chairs were sold.

Similarly, we can calculate the number of chairs manufactured and sold in each month. This is provided in the following table:

Month	Stock (in '000)	Manufactured (in '000)	Sold (in '000)
January	100	45	15
February	130	50	100
March	80	75	25
April	130	30	10
May	150	60	120
June	90	15	30
July	75	15	30
August	60	60	20
September	100	50	100
October	50	60	20
November	90	60	120
December	30	30	60

Average number of chairs sold per month = $650000/12 = 54166.67$

Choice (C)

undefined

DIRECTIONS for questions 13 to 16: Answer the questions on the basis of the information given below.

Tetra is a company that manufactures and sells chairs. At the beginning of each month, the stock of chairs in the inventory is calculated. The stock at the beginning of any month is calculated as follows:

Stock at the beginning of a month

$$\begin{aligned} &= \text{Stock at the beginning of the previous month} \\ &+ \text{Number of chairs manufactured during the previous month} \\ &- \text{Number of chairs sold during the previous month} \end{aligned}$$

The table below provides the stock of chairs at the beginning of each month in 2017.

It is also known that, in any month, the number of chairs manufactured was either half the number of chairs sold or thrice the number of chairs sold. There was no stock left in the inventory at the end of the year.

Month	Stock (in '000)
January	100
February	130
March	80
April	130
May	150
June	90
July	75
August	60
September	100
October	50
November	90
December	30

Q16. DIRECTIONS for questions 13 to 16: Select the correct alternative from the given choices.

In which of the following months was the percentage increase in the number of chairs sold as compared to the previous month the highest?

- a) November
- b) September
- c) July
- d) February

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	99
Difficulty Level	E
Avg. time spent on this question by students who got this question right	107
% of students who attempted this question	12.87
% of students who got the question right of those who attempted	40.73

[Video Solution](#)

[Text Solution](#)

If the stock has increased in a month as compared to the previous month, then the number of chairs manufactured must have been more than the number of chairs sold. In this case, from the given condition, the number of chairs manufactured must be thrice the number of chairs sold.

Similarly, if the stock has decreased in a month as compared to the previous month, the number of chairs manufactured must have been less than the number of chairs sold. In this case, the number of chairs manufactured must be half the number of chairs sold.

From January to February, the stock increased. Hence, the number of chairs manufactured in January must have been more than the number of chairs sold. Let $3x$ be the number of chairs manufactured and x be the number of chairs sold.

$$100 + 3x - x = 130 \Rightarrow x = 15$$

Hence, 45000 chairs were manufactured in January, while 15000 were sold.

From February to March, the stock decreased. Hence, the number of chairs sold must have been more.

Let $2x$ be the number of chairs sold and x be the number of chairs manufactured.

$$130 + x - 2x = 80 \Rightarrow x = 50$$

Hence, 50000 chairs were manufactured and 100000 chairs were sold.

Similarly, we can calculate the number of chairs manufactured and sold in each month. This is provided in the following table:

Month	Stock (in '000)	Manufactured (in '000)	Sold (in '000)
January	100	45	15
February	130	50	100
March	80	75	25
April	130	30	10
May	150	60	120
June	90	15	30
July	75	15	30
August	60	60	20
September	100	50	100
October	50	60	20
November	90	60	120
December	30	30	60

The percentage increase in the number of chairs sold is the highest in the month of February, among the given months.

Choice (D)

undefined

DIRECTIONS for questions 17 to 20: Answer the questions on the basis of the information given below.

Seven persons, A through G, were writing an exam, sitting in seven chairs arranged in a line, from left to right, facing the same direction. Among the seven persons, four were left-handed, while three were right-handed.

It is also known that

- i. among the persons sitting to the left of B, two were right-handed, while, among the persons sitting to the right of D, two were left-handed.
- ii. at least one person sitting adjacent to E was not of the same handedness as E.

iii.

G, who was left-handed, was not sitting at any end, while A was sitting to the immediate left of a left-handed person.

iv.

C, who was sitting adjacent to a right-handed person and a left-handed person, was three places to the right of B.

Q17. DIRECTIONS for question 17: Select the correct alternative from the given choices.

How many persons sitting to the right of G are right-handed?

- a) 0
- b) 1
- c) 2
- d) 3

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	8
Avg. time spent on this question by all students	537
Difficulty Level	E
Avg. time spent on this question by students who got this question right	565
% of students who attempted this question	32.7
% of students who got the question right of those who attempted	70.33

[Video Solution](#)

[Text Solution](#)

Let 1 to 7 represent the seven positions from left to right in that order.

From (i), there must be at least two persons to the left of B. B cannot be in 1 or 2.

Similarly from (i), D cannot be at 6 or 7.

From (iv), C was three places to the right of B. If B is at 3, C must be at 6. OR if B is at 4, C must be at 7. However, C cannot be at 7 because C was sitting adjacent to two different persons from (iv).

Hence, B must be at 3 and C must be at 6.

Since B is at 3, the persons at 1 and 2 must be right-handed. One person sitting adjacent to C must be right-handed. These are the three persons who are right-handed. All the others must be left-handed. Hence, B and the person sitting at 4 must both be left-handed. C must also be left-handed.

Since there must be two left-handed persons to the right of D, D can be at 4 or 5.

Consider D is at 4. From (iii), G must be at 5 and he is left-handed. Hence, the person at 7 must be right-handed.

From (iii), A must be to the immediate left of B. From (ii), E must be at 7. Hence, F must be at 1.

Consider D is at 5. From (iii), G must be at 4. A must be at 2 and E must be at 7. F must be at 1. In this case, there cannot be two left-handers to the right of D. Hence, this case is not possible.

The following table provides the only possible case:

Order	1	2	3	4	5	6	7
Person	F	A	B	D	G	C	E
Hand	R	R	L	L	L	L	R

There is only one person to the right of G who is right-handed (E).

Choice (B)

undefined

DIRECTIONS for questions 17 to 20: Answer the questions on the basis of the information given below.

Seven persons, A through G, were writing an exam, sitting in seven chairs arranged in a line, from left to right, facing the same direction. Among the seven persons, four were left-handed, while three were right-handed.

It is also known that

- i. among the persons sitting to the left of B, two were right-handed, while, among the persons sitting to the right of D, two were left-handed.
- ii. at least one person sitting adjacent to E was not of the same handedness as E.
- iii. G, who was left-handed, was not sitting at any end, while A was sitting to the immediate left of a left-handed person.
- iv. C, who was sitting adjacent to a right-handed person and a left-handed person, was three places to the right of B.

Q18. DIRECTIONS for question 18: Type in your answer in the input box provided below the question.

For how many persons can it be said that none of the persons sitting adjacent to him are right-handed?

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	65
Difficulty Level	E
Avg. time spent on this question by students who got this question right	70
% of students who attempted this question	32.13
% of students who got the question right of those who attempted	15.61

[Video Solution](#)

[Text Solution](#)

Let 1 to 7 represent the seven positions from left to right in that order.

From (i), there must be at least two persons to the left of B. B cannot be in 1 or 2.

Similarly from (i), D cannot be at 6 or 7.

From (iv), C was three places to the right of B. If B is at 3, C must be at 6. OR if B is at 4, C must be at 7. However, C cannot be at 7 because C was sitting adjacent to two different persons from (iv).

Hence, B must be at 3 and C must be at 6.

Since B is at 3, the persons at 1 and 2 must be right-handed. One person sitting adjacent to C must be right-handed. These are the three persons who are right-handed. All the others must be left-handed. Hence, B and the person sitting at 4 must both be left-handed. C must also be left-handed.

Since there must be two left-handed persons to the right of D, D can be at 4 or 5.

Consider D is at 4. From (iii), G must be at 5 and he is left-handed. Hence, the person at 7 must be right-handed.

From (iii), A must be to the immediate left of B. From (ii), E must be at 7. Hence, F must be at 1.

Consider D is at 5. From (iii), G must be at 4. A must be at 2 and E must be at 7. F must be at 1. In this case, there cannot be two left-handers to the right of D. Hence, this case is not possible.

The following table provides the only possible case:

Order	1	2	3	4	5	6	7
Person	F	A	B	D	G	C	E
Hand	R	R	L	L	L	L	R

For three persons (G, D and E), it can be said that none of the persons sitting adjacent to them are right-handed.

Ans: (3)

undefined

DIRECTIONS for questions 17 to 20: Answer the questions on the basis of the information given below.

Seven persons, A through G, were writing an exam, sitting in seven chairs arranged in a line, from left to right, facing the same direction. Among the seven persons, four were left-handed, while three were right-handed.

It is also known that

- i. among the persons sitting to the left of B, two were right-handed, while, among the persons sitting to the right of D, two were left-handed.
- ii. at least one person sitting adjacent to E was not of the same handedness as E.

iii.

G, who was left-handed, was not sitting at any end, while A was sitting to the immediate left of a left-handed person.

iv.

C, who was sitting adjacent to a right-handed person and a left-handed person, was three places to the right of B.

Q19. DIRECTIONS for questions 19 and 20: Select the correct alternative from the given choices.

Who among the following is sitting adjacent to G?

- a) A
- b) B
- c) E
- d) D

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	39
Difficulty Level	E
Avg. time spent on this question by students who got this question right	33
% of students who attempted this question	30.62
% of students who got the question right of those who attempted	55.1

[Video Solution](#)

[Text Solution](#)

Let 1 to 7 represent the seven positions from left to right in that order.

From (i), there must be at least two persons to the left of B. B cannot be in 1 or 2.

Similarly from (i), D cannot be at 6 or 7.

From (iv), C was three places to the right of B. If B is at 3, C must be at 6. OR if B is at 4, C must be at 7. However, C cannot be at 7 because C was sitting adjacent to two different persons from (iv).

Hence, B must be at 3 and C must be at 6.

Since B is at 3, the persons at 1 and 2 must be right-handed. One person sitting adjacent to C must be right-handed. These are the three persons who are right-handed. All the others must be left-handed. Hence, B and the person sitting at 4 must both be left-handed. C must also be left-handed.

Since there must be two left-handed persons to the right of D, D can be at 4 or 5.

Consider D is at 4. From (iii), G must be at 5 and he is left-handed. Hence, the person at 7 must be right-handed.

From (iii), A must be to the immediate left of B. From (ii), E must be at 7. Hence, F must be at 1.

Consider D is at 5. From (iii), G must be at 4. A must be at 2 and E must be at 7. F must be at 1. In this case, there cannot be two left-handers to the right of D. Hence, this case is not possible.

The following table provides the only possible case:

Order	1	2	3	4	5	6	7
Person	F	A	B	D	G	C	E
Hand	R	R	L	L	L	L	R

D is sitting adjacent to G.

Choice (D)

undefined

DIRECTIONS for questions 17 to 20: Answer the questions on the basis of the information given below.

Seven persons, A through G, were writing an exam, sitting in seven chairs arranged in a line, from left to right, facing the same direction. Among the seven persons, four were left-handed, while three were right-handed.

It is also known that

- i. among the persons sitting to the left of B, two were right-handed, while, among the persons sitting to the right of D, two were left-handed.
- ii. at least one person sitting adjacent to E was not of the same handedness as E.
- iii. G, who was left-handed, was not sitting at any end, while A was sitting to the immediate left of a left-handed person.
- iv. C, who was sitting adjacent to a right-handed person and a left-handed person, was three places to the right of B.

Q20. DIRECTIONS for questions 19 and 20: Select the correct alternative from the given choices.

How many persons sitting between A and E are left-handed?

- a) 4
- b) 3
- c) 2
- d) **None of the above**

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	35
Difficulty Level	E
Avg. time spent on this question by students who got this question right	32
% of students who attempted this question	28.94
% of students who got the question right of those who attempted	43.91

[Video Solution](#)

[Text Solution](#)

Let 1 to 7 represent the seven positions from left to right in that order.

From (i), there must be at least two persons to the left of B. B cannot be in 1 or 2.

Similarly from (i), D cannot be at 6 or 7.

From (iv), C was three places to the right of B. If B is at 3, C must be at 6. OR if B is at 4, C must be at 7. However, C cannot be at 7 because C was sitting adjacent to two different persons from (iv).

Hence, B must be at 3 and C must be at 6.

Since B is at 3, the persons at 1 and 2 must be right-handed. One person sitting adjacent to C must be right-handed. These are the three persons who are right-handed. All the others must be left-handed. Hence, B and the person sitting at 4 must both be left-handed. C must also be left-handed.

Since there must be two left-handed persons to the right of D, D can be at 4 or 5.

Consider D is at 4. From (iii), G must be at 5 and he is left-handed. Hence, the person at 7 must be right-handed.

From (iii), A must be to the immediate left of B. From (ii), E must be at 7. Hence, F must be at 1.

Consider D is at 5. From (iii), G must be at 4. A must be at 2 and E must be at 7. F must be at 1. In this case, there cannot be two left-handers to the right of D. Hence, this case is not possible.

The following table provides the only possible case:

Order	1	2	3	4	5	6	7
Person	F	A	B	D	G	C	E
Hand	R	R	L	L	L	L	R

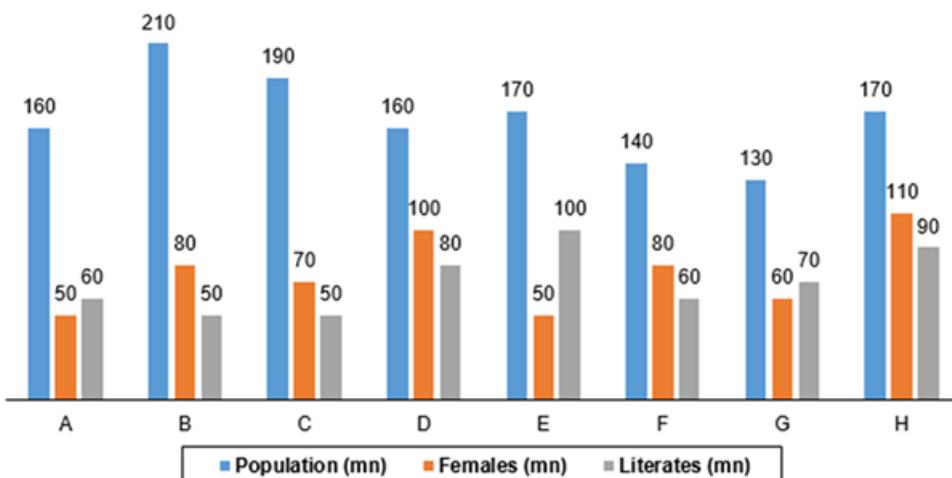
All the four persons sitting between A and E are left-handed.

Choice (A)

undefined

DIRECTIONS for questions 21 to 24: Answer the questions on the basis of the information given below.

The following bar graph provides the total population, the total number of females and the total number of literates in eight countries, A through H:



Q21. DIRECTIONS for question 21: Type in your answer in the input box provided below the question.

In how many countries is the total number of illiterates greater than the number of males?

Your Answer:5 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	54
Avg. time spent on this question by all students	200
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	213
% of students who attempted this question	43.88
% of students who got the question right of those who attempted	55.59

[Video Solution](#)

[**Text Solution**](#)

The following table provides the number of males, females, literates and illiterates in the eight countries:

Country	Population (mn)	Females (mn)	Males (mn)	Literates (mn)	Illiterates (mn)
A	160	50	110	60	100
B	210	80	130	50	160
C	190	70	120	50	140
D	160	100	60	80	80
E	170	50	120	100	70
F	140	80	60	60	80
G	130	60	70	70	60
H	170	110	60	90	80

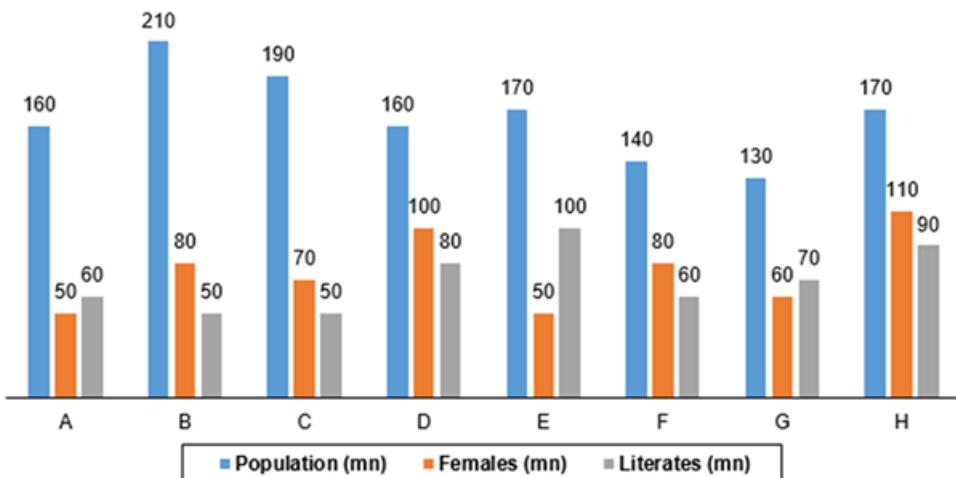
In five countries, (B, C, D, F and H) the number of illiterates is greater than the number of males.

Ans: (5)

undefined

DIRECTIONS for questions 21 to 24: Answer the questions on the basis of the information given below.

The following bar graph provides the total population, the total number of females and the total number of literates in eight countries, A through H:



Q22. DIRECTIONS for questions 22 to 24: Select the correct alternative from the given choices.

In how many countries are the percentage of males and the percentage of illiterates both greater than 60%?

a) 3 Your answer is correct

b) 4

c) 5

d) 6

Time spent / Accuracy Analysis

Time taken by you to answer this question	463
Avg. time spent on this question by all students	192
Difficulty Level	E
Avg. time spent on this question by students who got this question right	195
% of students who attempted this question	36.17
% of students who got the question right of those who attempted	84.09

[Video Solution](#)

[Text Solution](#)

The following table provides the number of males, females, literates and illiterates in the eight countries:

Country	Population (mn)	Females (mn)	Males (mn)	Literates (mn)	Illiterates (mn)
A	160	50	110	60	100
B	210	80	130	50	160
C	190	70	120	50	140
D	160	100	60	80	80
E	170	50	120	100	70
F	140	80	60	60	80
G	130	60	70	70	60
H	170	110	60	90	80

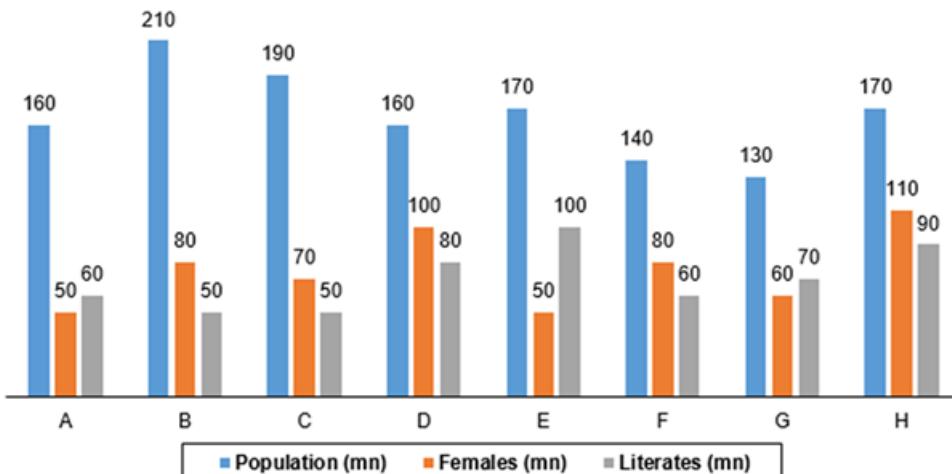
In three countries, A, B and C, the given condition is satisfied.

Choice (A)

undefined

DIRECTIONS for questions 21 to 24: Answer the questions on the basis of the information given below.

The following bar graph provides the total population, the total number of females and the total number of literates in eight countries, A through H:



Q23. DIRECTIONS for questions 22 to 24: Select the correct alternative from the given choices.

The minimum number of literate females in any country is at most

- a) **20 mn.**
- b) **25 mn.**
- c) **30 mn.**
- d) **0.**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	55
Avg. time spent on this question by all students	122
Difficulty Level	M
Avg. time spent on this question by students who got this question right	132
% of students who attempted this question	27.29
% of students who got the question right of those who attempted	39.55

[Video Solution](#)

[Text Solution](#)

The following table provides the number of males, females, literates and illiterates in the eight countries:

Country	Population (mn)	Females (mn)	Males (mn)	Literates (mn)	Illiterates (mn)
A	160	50	110	60	100
B	210	80	130	50	160
C	190	70	120	50	140
D	160	100	60	80	80
E	170	50	120	100	70
F	140	80	60	60	80
G	130	60	70	70	60
H	170	110	60	90	80

In country A, there are 60 mn literates and 110 mn males. Hence, all the literates can be males and the minimum number of literate females in this country is 0.

Similarly, in countries B, C, E, F and G, the number of literate females can be 0.

However, in country D, the number of literates are 80 mn and the number of males are 60 mn. Even if all the males are literates, there must be at least 20 mn literate females.

In country H, the number of literates are 90 mn and the number of males are 60 mn, Even if all the males are literates, there must be at least 30 mn literate females.

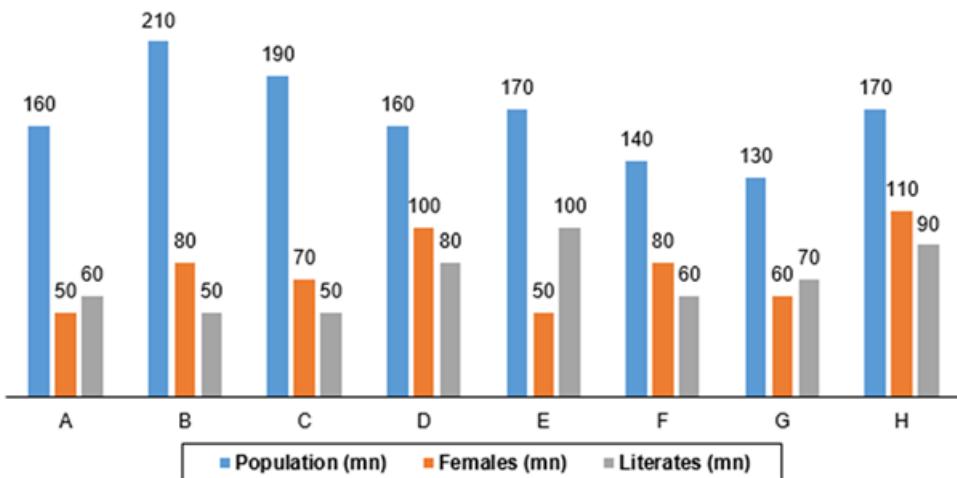
Hence, the minimum number of literate females in any country is at most 30 mn.

Choice (C)

undefined

DIRECTIONS for questions 21 to 24: Answer the questions on the basis of the information given below.

The following bar graph provides the total population, the total number of females and the total number of literates in eight countries, A through H:



Q24. DIRECTIONS for questions 22 to 24: Select the correct alternative from the given choices.

The minimum number of illiterate males in any country is at most

- a) **50 mn.**
- b) **60 mn.**
- c) **90 mn.**
- d) **80 mn.**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	6
Avg. time spent on this question by all students	96
Difficulty Level	M
Avg. time spent on this question by students who got this question right	116
% of students who attempted this question	23.42
% of students who got the question right of those who attempted	34.94

[Video Solution](#)

[Text Solution](#)

The following table provides the number of males, females, literates and illiterates in the eight countries:

Country	Population (mn)	Females (mn)	Males (mn)	Literates (mn)	Illiterates (mn)
A	160	50	110	60	100
B	210	80	130	50	160
C	190	70	120	50	140
D	160	100	60	80	80
E	170	50	120	100	70
F	140	80	60	60	80
G	130	60	70	70	60
H	170	110	60	90	80

In country A, there are 100 mn illiterates and 50 mn females. Even if all the females are illiterates, there must be at least 50 mn illiterate males.

Similarly, in country B, there must be at least 80 mn illiterate males.

In country C, there must be at least 70 mn illiterate males.

In Country D, there can be no illiterate male.

In country E, there must be at least 20 mn illiterate males.

In country F, there can be no illiterate male.

In country G, there can be no illiterate male.

In country H, there can be no illiterate male.

Hence, the minimum number of illiterate males in any country is at most 80 mn.

Choice (D)

undefined

DIRECTIONS for questions 25 to 28: Answer the questions on the basis of the information given below.

Exactly five teams, A through E, participated in a hockey tournament, in which each team played against each of the other four teams exactly once. In any match, the winning team was awarded 3 points, while the losing team was not awarded any points. In case of a draw, the two teams are awarded 1 point each.

The following table provides, for only four of the five teams, partial information about the number of matches won, lost and drawn by each team and the number of points awarded to each team at the end of the tournament:

Team	Wins	Losses	Draws	Points
A				7
B			0	6
C				8
D		2		6

Q25. DIRECTIONS for questions 25 to 28: Select the correct alternative from the given choices.

How many points did E score in the tournament?

- a) **0**
- b) **1**
- c) **2**
- d) **4**

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	6
Avg. time spent on this question by all students	350
Difficulty Level	M
Avg. time spent on this question by students who got this question right	382
% of students who attempted this question	18.32
% of students who got the question right of those who attempted	53.38

[Video Solution](#)

[Text Solution](#)

Since A scored 7 points, A must have won 2 matches and drawn 1 match.
 Since B scored 6 points with no draws, B must have won 2 matches and lost 2 matches.
 Since C scored 8 points, C must have won 2 matches and drawn 2 matches.
 Since D scored 6 points with 2 losses, D must have won 2 matches and lost 2 matches.
 This information is presented in the table below:

Team	Wins	Losses	Draws	Points
A	2	1	1	7
B	2	2	0	6
C	2	0	2	8
D	2	2	0	6

In the match played between B and C, C could not have lost (since C has no losses) and C could not have drawn (since B has no draws). Hence, C must have won this match.

Similarly, C must also have won the match against D.

Since C won the matches against B and D, it must have drawn the matches against A and E.

Hence, E has drawn 1 match definitely.

Also, the total number of wins by the four teams is 8. The total number of losses by the 4 teams is 5. However, across the five teams, the total number of wins must be the same as the total number of losses. Hence, E must have lost 3 matches. Therefore, E must have scored only 1 point.

Since E drew against C, E must have lost against A, B and D.

In the remaining matches, if A won against B, B must have won against D. D must have won against A.

If B won against A, A must have won against D and D must have won against B.

The following tables provide the two possible cases (a '-' represents a draw):

Case 1					
	A	B	C	D	E
A	X	A	-	D	A
B	A	X	C	B	B
C	-	C	X	C	-
D	D	B	C	X	D
E	A	B	-	D	X

E scored only one point in the tournament.

Case 2					
	A	B	C	D	E
A	X	B	-	A	A
B	B	X	C	D	B
C	-	C	X	C	-
D	A	D	C	X	D
E	A	B	-	D	X

Choice (B)

DIRECTIONS for questions 25 to 28: Answer the questions on the basis of the information given below.

Exactly five teams, A through E, participated in a hockey tournament, in which each team played against each of the other four teams exactly once. In any match, the winning team was awarded 3 points, while the losing team was not awarded any points. In case of a draw, the two teams are awarded 1 point each.

The following table provides, for only four of the five teams, partial information about the number of matches won, lost and drawn by each team and the number of points awarded to each team at the end of the tournament:

Team	Wins	Losses	Draws	Points
A				7
B			0	6
C				8
D		2		6

Q26. DIRECTIONS for questions 25 to 28: Select the correct alternative from the given choices.

If B won the match against A, which of the following teams did D win against?

- a) A
- b) C
- c) B
- d) More than one of the above

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	2
Avg. time spent on this question by all students	90
Difficulty Level	M
Avg. time spent on this question by students who got this question right	101
% of students who attempted this question	18.7
% of students who got the question right of those who attempted	48.8

[Video Solution](#)

[Text Solution](#)

Since A scored 7 points, A must have won 2 matches and drawn 1 match.

Since B scored 6 points with no draws, B must have won 2 matches and lost 2 matches.

Since C scored 8 points, C must have won 2 matches and drawn 2 matches.

Since D scored 6 points with 2 losses, D must have won 2 matches and lost 2 matches.

This information is presented in the table below:

Team	Wins	Losses	Draws	Points
A	2	1	1	7
B	2	2	0	6
C	2	0	2	8
D	2	2	0	6

In the match played between B and C, C could not have lost (since C has no losses) and C could not have drawn (since B has no draws). Hence, C must have won this match.

Similarly, C must also have won the match against D.

Since C won the matches against B and D, it must have drawn the matches against A and E.

Hence, E has drawn 1 match definitely.

Also, the total number of wins by the four teams is 8. The total number of losses by the 4 teams is 5. However, across the five teams, the total number of wins must be the same as the total number of losses. Hence, E must have lost 3 matches. Therefore, E must have scored only 1 point.

Since E drew against C, E must have lost against A, B and D.

In the remaining matches, if A won against B, B must have won against D. D must have won against A.

If B won against A, A must have won against D and D must have won against B.

The following tables provide the two possible cases (a '-' represents a draw):

Case 1				
	A	B	C	D
A	X	A	-	D
B	A	X	C	B
C	-	C	X	C
D	D	B	C	X
E	A	B	-	D

Case 2				
	A	B	C	D
A	X	B	-	A
B	B	X	C	D
C	-	C	X	C
D	A	D	C	X
E	A	B	-	D

This refers to Case 2. D won against B.

Choice (C)

undefined

DIRECTIONS for questions 25 to 28: Answer the questions on the basis of the information given below.

Exactly five teams, A through E, participated in a hockey tournament, in which each team played against each of the other four teams exactly once. In any match, the winning team was awarded 3 points, while the losing team was not awarded any points. In case of a draw, the two teams are awarded 1 point each.

The following table provides, for only four of the five teams, partial information about the number of matches won, lost and drawn by each team and the number of points awarded to each team at the end of the tournament:

Team	Wins	Losses	Draws	Points
A				7
B			0	6
C				8
D		2		6

Q27. DIRECTIONS for questions 25 to 28: Select the correct alternative from the given choices.

Any match that A won was played before any match that B won, which, in turn, was played before any match that C won, which in turn, was played before any match that D won, which, in turn, was played before any match that E won, which, in turn, was played before any match that was a draw.

What is the maximum number of consecutive matches in the tournament that any team could have played?

- a) 4
- b) 3
- c) 5
- d) 2

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	110
Difficulty Level	D
Avg. time spent on this question by students who got this question right	111
% of students who attempted this question	8.79
% of students who got the question right of those who attempted	31.92

[Video Solution](#)

[Text Solution](#)

Since A scored 7 points, A must have won 2 matches and drawn 1 match.
 Since B scored 6 points with no draws, B must have won 2 matches and lost 2 matches.
 Since C scored 8 points, C must have won 2 matches and drawn 2 matches.
 Since D scored 6 points with 2 losses, D must have won 2 matches and lost 2 matches.
 This information is presented in the table below:

Team	Wins	Losses	Draws	Points
A	2	1	1	7
B	2	2	0	6
C	2	0	2	8
D	2	2	0	6

In the match played between B and C, C could not have lost (since C has no losses) and C could not have drawn (since B has no draws). Hence, C must have won this match.

Similarly, C must also have won the match against D.

Since C won the matches against B and D, it must have drawn the matches against A and E.

Hence, E has drawn 1 match definitely.

Also, the total number of wins by the four teams is 8. The total number of losses by the 4 teams is 5. However, across the five teams, the total number of wins must be the same as the total number of losses. Hence, E must have lost 3 matches. Therefore, E must have scored only 1 point.

Since E drew against C, E must have lost against A, B and D.

In the remaining matches, if A won against B, B must have won against D. D must have won against A.

If B won against A, A must have won against D and D must have won against B.

The following tables provide the two possible cases (a ‘-’ represents a draw):

Case 1					
	A	B	C	D	E
A	X	A	-	D	A
B	A	X	C	B	B
C	-	C	X	C	-
D	D	B	C	X	D
E	A	B	-	D	X

Case 2					
	A	B	C	D	E
A	X	B	-	A	A
B	B	X	C	D	B
C	-	C	X	C	-
D	A	D	C	X	D
E	A	B	-	D	X

From the given information, we get different orders for the two cases.

For Case 1, the matches A – B and A – E were played before B – D and B – E, which were played before C – B and C – D, which were played before D – A and D – E, which were played before A – C and C – E.

For Case 2, the matches A – D and A – E (in any order) were played before B – A and B – E, which were played before C – B and C – D, which were played before D – B and D – E, which were played before A – C and C – E.

In Case 1, a maximum of 4 matches can be played by a team consecutively. B could have played A – B followed by B – D, followed by B – E followed by C – B.

In Case 2, a maximum of 3 matches can be played by a team consecutively. There are multiple instances of this, one of which is if A – D, A – E and B – A were played consecutively.

Hence, the maximum number of matches that any team could have played consecutively is 4.

Choice (A)

undefined

DIRECTIONS for questions 25 to 28: Answer the questions on the basis of the information given below.

Exactly five teams, A through E, participated in a hockey tournament, in which each team played against each of the other four teams exactly once. In any match, the winning team was awarded 3 points, while the losing team was not awarded any points. In case of a draw, the two teams are awarded 1 point each.

The following table provides, for only four of the five teams, partial information about the number of matches won, lost and drawn by each team and the number of points awarded to each team at the end of the tournament:

Team	Wins	Losses	Draws	Points
A				7
B			0	6
C				8
D		2		6

Q28. DIRECTIONS for questions 25 to 28: Select the correct alternative from the given choices.

Any match that A won was played before any match that B won, which, in turn, was played before any match that C won, which in turn, was played before any match that D won, which, in turn, was played before any match that E won, which, in turn, was played before any match that was a draw.

Which of the following matches was definitely either the 7th or 8th match to be played in the tournament?

- a) The match between B and D
- b) The match between C and E
- c) The match between D and E
- d) The match between A and E

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	0
Avg. time spent on this question by all students	88
Difficulty Level	D
Avg. time spent on this question by students who got this question right	92
% of students who attempted this question	6.54
% of students who got the question right of those who attempted	43.48

[Video Solution](#)

[Text Solution](#)

Since A scored 7 points, A must have won 2 matches and drawn 1 match.
 Since B scored 6 points with no draws, B must have won 2 matches and lost 2 matches.
 Since C scored 8 points, C must have won 2 matches and drawn 2 matches.
 Since D scored 6 points with 2 losses, D must have won 2 matches and lost 2 matches.
 This information is presented in the table below:

Team	Wins	Losses	Draws	Points
A	2	1	1	7
B	2	2	0	6
C	2	0	2	8
D	2	2	0	6

In the match played between B and C, C could not have lost (since C has no losses) and C could not have drawn (since B has no draws). Hence, C must have won this match.

Similarly, C must also have won the match against D.

Since C won the matches against B and D, it must have drawn the matches against A and E.

Hence, E has drawn 1 match definitely.

Also, the total number of wins by the four teams is 8. The total number of losses by the 4 teams is 5. However, across the five teams, the total number of wins must be the same as the total number of losses. Hence, E must have lost 3 matches. Therefore, E must have scored only 1 point.

Since E drew against C, E must have lost against A, B and D.

In the remaining matches, if A won against B, B must have won against D. D must have won against A.

If B won against A, A must have won against D and D must have won against B.

The following tables provide the two possible cases (a '-' represents a draw):

Case 1						Case 2					
	A	B	C	D	E		A	B	C	D	E
A	X	A	-	D	A	A	X	B	-	A	A
B	A	X	C	B	B	B	B	X	C	D	B
C	-	C	X	C	-	C	-	C	X	C	-
D	D	B	C	X	D	D	A	D	C	X	D
E	A	B	-	D	X	E	A	B	-	D	X

From the given information, we get different orders for the two cases.

For Case 1, the matches A – B and A – E were played before B – D and B – E, which were played before C – B and C – D, which were played before D – A and D – E, which were played before A – C and C – E.

For Case 2, the matches A – D and A – E (in any order) were played before B – A and B – E, which were played before C – B and C – D, which were played before D – B and D – E, which were played before A – C and C – E.

In either of the two cases, the match between D and E must be the 7th or the 8th match to be played.

Choice (C)

undefined

DIRECTIONS for questions 29 to 32: Answer the questions on the basis of the information given below.

Each of three friends, Barry, Bruce and Clark, went on a vacation to a different country among Spain, Italy and Germany. Each friend purchased a different memento among Pen, Tie and Wallet while on the vacation.

Each of the three friends is either a truth teller, who always tells the truth, or a liar, who always lies, or an alternator, who alternates between telling the truth and a lie, in any order.

They made the following statements when asked about their vacations:

Barry:

I went to Italy.

Bruce purchased the Tie.

I did not purchase the Wallet.

Bruce:

I did not go to Germany.

The person who went to Spain purchased the Pen.

Clark went to Italy.

Clark:

Bruce went to Spain.

Barry did not purchase the Tie.

I am an alternator.

Q29. DIRECTIONS for questions 29 to 32: Select the correct alternative from the given choices.

Who among the following is definitely a liar?

a) **Bruce** **Your answer is incorrect**

b) **Clark**

c) **Barry**

d) **More than one of the above**

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question **542**

Avg. time spent on this question by all students **338**

Difficulty Level **M**

Avg. time spent on this question by students who got this question right **359**

% of students who attempted this question **25.51**

% of students who got the question right of those who attempted **17.1**

[Video Solution](#)

[Text Solution](#)

From Clark's third statement, he must be an alternator or a liar. A truth teller will not declare that he is an alternator. Also, if Clark is an alternator, his last statement must be true. Hence, his first statement is true and second statement must be false. Consider that Clark is an alternator.

From Clark's first statement, Bruce went to Spain. Since Clark's second statement is false, Barry must have purchased a Tie.

Barry's second statement must be false, since Bruce could not have purchased the Tie. Barry's third statement is true (since Barry purchases the Tie). Hence, Barry must be an alternator and his first statement must be true. Barry went to Italy. Since Bruce went to Spain, Clark must have gone to Germany.

Bruce's first statement is true. However, Bruce's third statement is false. This implies that Bruce cannot be a truth teller or a liar or an alternator.

Hence, this case is not possible.

Consider that Clark is a liar.

From Clark's first statement, Bruce did not go to Spain. From his second statement, Barry purchased the Tie.

Barry's second statement is false and his third statement is true. Hence, Barry must be an alternator. Barry's first statement must be true. Hence, Barry went to Italy. Since Bruce did not go to Spain, he must have gone to Germany. Clark must have gone to Spain.

Bruce's first statement is false. His last statement is also false.

His second statement can be true or false depending on whether he is an alternator or a liar.

Hence, the following cases are possible:

Person	Type	Country	Memento
Barry	Alternator	Italy	Tie
Bruce	Alternator/Liar	Germany	Pen/Wallet
Clark	Liar	Spain	Wallet/Pen

Clark is definitely a liar.

Choice (B)

undefined

DIRECTIONS for questions 29 to 32: Answer the questions on the basis of the information given below.

Each of three friends, Barry, Bruce and Clark, went on a vacation to a different country among Spain, Italy and Germany. Each friend purchased a different memento among Pen, Tie and Wallet while on the vacation.

Each of the three friends is either a truth teller, who always tells the truth, or a liar, who always lies, or an alternator, who alternates between telling the truth and a lie, in any order.

They made the following statements when asked about their vacations:

Barry:

I went to Italy.

Bruce purchased the Tie.

I did not purchase the Wallet.

Bruce:

I did not go to Germany.

The person who went to Spain purchased the Pen.

Clark went to Italy.

Clark:

Bruce went to Spain.

Barry did not purchase the Tie.

I am an alternator.

Q30. DIRECTIONS for questions 29 to 32: Select the correct alternative from the given choices.

How many of the three persons are truth tellers?

- a) **0**
- b) **2**
- c) **1** Your answer is incorrect
- d) **Cannot be determined**

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	139
Avg. time spent on this question by all students	46
Difficulty Level	M
Avg. time spent on this question by students who got this question right	65
% of students who attempted this question	24.06
% of students who got the question right of those who attempted	10.31

[Video Solution](#)

[Text Solution](#)

From Clark's third statement, he must be an alternator or a liar. A truth teller will not declare that he is an alternator. Also, if Clark is an alternator, his last statement must be true. Hence, his first statement is true and second statement must be false.

Consider that Clark is an alternator.

From Clark's first statement, Bruce went to Spain. Since Clark's second statement is false, Barry must have purchased a Tie.

Barry's second statement must be false, since Bruce could not have purchased the Tie. Barry's third statement is true (since Barry purchases the Tie). Hence, Barry must be an alternator and his first statement must be true. Barry went to Italy. Since Bruce went to Spain, Clark must have gone to Germany.

Bruce's first statement is true. However, Bruce's third statement is false. This implies that Bruce cannot be a truth teller or a liar or an alternator.

Hence, this case is not possible.

Consider that Clark is a liar.

From Clark's first statement, Bruce did not go to Spain. From his second statement, Barry purchased the Tie.

Barry's second statement is false and his third statement is true. Hence, Barry must be an alternator. Barry's first statement must be true. Hence, Barry went to Italy. Since Bruce did not go to Spain, he must have gone to Germany. Clark must have gone to Spain.

Bruce's first statement is false. His last statement is also false.

His second statement can be true or false depending on whether he is an alternator or a liar.

Hence, the following cases are possible:

Person	Type	Country	Memento
Barry	Alternator	Italy	Tie
Bruce	Alternator/Liar	Germany	Pen/Wallet
Clark	Liar	Spain	Wallet/Pen

There are no truth tellers among the three.

Choice (A)

undefined

DIRECTIONS for questions 29 to 32: Answer the questions on the basis of the information given below.

Each of three friends, Barry, Bruce and Clark, went on a vacation to a different country among Spain, Italy and Germany. Each friend purchased a different memento among Pen, Tie and Wallet while on the vacation.

Each of the three friends is either a truth teller, who always tells the truth, or a liar, who always lies, or an alternator, who alternates between telling the truth and a lie, in any order.

They made the following statements when asked about their vacations:

Barry:

I went to Italy.

Bruce purchased the Tie.

I did not purchase the Wallet.

Bruce:

I did not go to Germany.

The person who went to Spain purchased the Pen.

Clark went to Italy.

Clark:

Bruce went to Spain.

Barry did not purchase the Tie.

I am an alternator.

Q31. DIRECTIONS for questions 29 to 32: Select the correct alternative from the given choices.

Who among the following visited Germany?

- a) **Bruce**
- b) **Barry**
- c) **Clark** Your answer is incorrect
- d) **Cannot be determined**

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	51
Avg. time spent on this question by all students	41
Difficulty Level	M
Avg. time spent on this question by students who got this question right	41
% of students who attempted this question	22.96
% of students who got the question right of those who attempted	23.84

[Video Solution](#)

[Text Solution](#)

From Clark's third statement, he must be an alternator or a liar. A truth teller will not declare that he is an alternator. Also, if Clark is an alternator, his last statement must be true. Hence, his first statement is true and second statement must be false. Consider that Clark is an alternator.

From Clark's first statement, Bruce went to Spain. Since Clark's second statement is false, Barry must have purchased a Tie.

Barry's second statement must be false, since Bruce could not have purchased the Tie. Barry's third statement is true (since Barry purchases the Tie). Hence, Barry must be an alternator and his first statement must be true. Barry went to Italy. Since Bruce went to Spain, Clark must have gone to Germany.

Bruce's first statement is true. However, Bruce's third statement is false. This implies that Bruce cannot be a truth teller or a liar or an alternator.

Hence, this case is not possible.

Consider that Clark is a liar.

From Clark's first statement, Bruce did not go to Spain. From his second statement, Barry purchased the Tie.

Barry's second statement is false and his third statement is true. Hence, Barry must be an alternator. Barry's first statement must be true. Hence, Barry went to Italy. Since Bruce did not go to Spain, he must have gone to Germany. Clark must have gone to Spain.

Bruce's first statement is false. His last statement is also false.

His second statement can be true or false depending on whether he is an alternator or a liar.

Hence, the following cases are possible:

Person	Type	Country	Memento
Barry	Alternator	Italy	Tie
Bruce	Alternator/Liar	Germany	Pen/Wallet
Clark	Liar	Spain	Wallet/Pen

Bruce visited Germany.

Choice (A)

undefined

DIRECTIONS for questions 29 to 32: Answer the questions on the basis of the information given below.

Each of three friends, Barry, Bruce and Clark, went on a vacation to a different country among Spain, Italy and Germany. Each friend purchased a different memento among Pen, Tie and Wallet while on the vacation.

Each of the three friends is either a truth teller, who always tells the truth, or a liar, who always lies, or an alternator, who

alternates between telling the truth and a lie, in any order.

They made the following statements when asked about their vacations:

Barry:

I went to Italy.

Bruce purchased the Tie.

I did not purchase the Wallet.

Bruce:

I did not go to Germany.

The person who went to Spain purchased the Pen.

Clark went to Italy.

Clark:

Bruce went to Spain.

Barry did not purchase the Tie.

I am an alternator.

Q32. DIRECTIONS for questions 29 to 32: Select the correct alternative from the given choices.

If the three of them together made at least three true statements, who among the following purchased the Pen?

- a) **Bruce**
- b) **Clark**
- c) **Barry** Your answer is incorrect
- d) **Cannot be determined**

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	99
Avg. time spent on this question by all students	138
Difficulty Level	M
Avg. time spent on this question by students who got this question right	144
% of students who attempted this question	19.72
% of students who got the question right of those who attempted	11.68

[Video Solution](#)

[Text Solution](#)

From Clark's third statement, he must be an alternator or a liar. A truth teller will not declare that he is an alternator. Also, if Clark is an alternator, his last statement must be true. Hence, his first statement is true and second statement must be false.

Consider that Clark is an alternator.

From Clark's first statement, Bruce went to Spain. Since Clark's second statement is false, Barry must have purchased a Tie.

Barry's second statement must be false, since Bruce could not have purchased the Tie. Barry's third statement is true (since Barry purchases the Tie). Hence, Barry must be an alternator and his first statement must be true. Barry went to Italy. Since Bruce went to Spain, Clark must have gone to Germany.

Bruce's first statement is true. However, Bruce's third statement is false. This implies that Bruce cannot be a truth teller or a liar or an alternator.

Hence, this case is not possible.

Consider that Clark is a liar.

From Clark's first statement, Bruce did not go to Spain. From his second statement, Barry purchased the Tie.

Barry's second statement is false and his third statement is true. Hence, Barry must be an alternator. Barry's first statement must be true. Hence, Barry went to Italy. Since Bruce did not go to Spain, he must have gone to Germany. Clark must have gone to Spain.

Bruce's first statement is false. His last statement is also false.

His second statement can be true or false depending on whether he is an alternator or a liar.

Hence, the following cases are possible:

Person	Type	Country	Memento
Barry	Alternator	Italy	Tie
Bruce	Alternator/Liar	Germany	Pen/Wallet
Clark	Liar	Spain	Wallet/Pen

For the given condition, Bruce has to be an alternator. Hence, Clark would have purchased the Pen.

Choice (B)

undefined

Q1. DIRECTIONS for questions 1 to 5: Select the correct alternative from the given choices.

To complete a certain job, P, working alone, takes twice as long as Q and R together take, whereas Q, working alone, takes 11 times as long as P and R together take. If all the three of them together can complete the job in four days, find the time taken by Q, working alone, to complete the job.

- a) 24
- b) 36
- c) 48
- d) 64

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	233
Avg. time spent on this question by all students	252
Difficulty Level	E
Avg. time spent on this question by students who got this question right	240
% of students who attempted this question	16.62
% of students who got the question right of those who attempted	66.24

[Video Solution](#)

[Text Solution](#)

If Q takes 11 times the time taken by P and R together, it means that Q takes 12 times the time taken by P, Q and R together. Given all three of them can do the work in 4 days, Q will take $12 \times 4 = 48$ days.

Alternative Solution:

Let the respective efficiencies be P, Q and R.

$$\Rightarrow P = \frac{Q+R}{2} \text{ and } Q = \frac{P+R}{11}$$

$$\Rightarrow Q = \frac{\left(\frac{Q+R}{2}\right) + R}{11}$$

$$\Rightarrow R = 7Q \text{ and } P = 4Q.$$

Now, if P, Q and R (i.e., 4Q, Q and 7Q) together take 4 days, then Q alone will take

$$\frac{(4Q+Q+7Q)}{Q} \times 4 = 48 \text{ days.} \quad \text{Choice (C)}$$

undefined

Q2. DIRECTIONS for questions 1 to 5: Select the correct alternative from the given choices.

The set S_x is defined as $(x, x + 1, x + 2, x + 3, x + 4)$, for $x = 1, 2, 3, \dots, 50$. How many of these sets contain a multiple of five or a multiple of seven but not both?

- a) 15 Your answer is correct
- b) 14
- c) 13
- d) 12

Time spent / Accuracy Analysis

Time taken by you to answer this question	319
Avg. time spent on this question by all students	245
Difficulty Level	M
Avg. time spent on this question by students who got this question right	253
% of students who attempted this question	20.1
% of students who got the question right of those who attempted	56.85

[Video Solution](#)

Text Solution

There will always be at least one multiple of 5 in $x, x + 1, x + 2, x + 3$ and $x + 4$
⇒ none of them should be divisible by 7
⇒ x has to be of form $7k + 1$ or $7k + 2$, for $K = 0, 1, 2, 3, \dots$.
∴ The number of numbers of the form $7k + 1$ or $7k + 2$ that are less than or equal to 50
is 15. Choice (A)

undefined

Q3. DIRECTIONS for questions 1 to 5: Select the correct alternative from the given choices.

Farooq purchases two watermelons, one weighing 20% more than the other. However, due to the summer heat, the combined weight of the two watermelons reduces by one-fourth. If the weight of the heavier watermelon reduces to 75% of its initial weight, then the lighter watermelon incurs a weight loss of

- a) **20%**.
- b) **25%**. Your answer is correct
- c) **5%**.
- d) **22.5%**.

Time spent / Accuracy Analysis

Time taken by you to answer this question	93
Avg. time spent on this question by all students	175
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	167
% of students who attempted this question	37.66
% of students who got the question right of those who attempted	81.89

Video Solution

Text Solution

Since the overall weight loss is 25% and the heavier watermelon incurs a weight loss of 25%, the lighter watermelon also incurs a weight loss of 25% Choice (B)

undefined

Q4. DIRECTIONS for questions 1 to 5: Select the correct alternative from the given choices.

A vessel contains 20 litres of pure alcohol. Five litres of the alcohol is first replaced with water and then four litres of the diluted alcohol is again replaced with water. What is the ratio of alcohol and water in the vessel now?

- a) **7 : 5**
- b) **5 : 4**
- c) **4 : 3**
- d) **3 : 2** Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	130
Avg. time spent on this question by all students	145
Difficulty Level	E
Avg. time spent on this question by students who got this question right	137
% of students who attempted this question	33.3
% of students who got the question right of those who attempted	68.3

[Video Solution](#)

Text Solution

The ratio of alcohol to water after 5 litres of alcohol is replaced with water = $(20 - 5) : 5 = 3 : 1$.

The number of litres of alcohol removed along with the four litres of diluted alcohol (that was replaced) = $\left(\frac{3}{3+1}\right)(4)$
= 3 litres.
 \therefore The required ratio = $(15 - 3) : (20 - (15 - 3))$
 $= 12 : 8 = 3 : 2$.

Choice (D)

undefined

Q5. DIRECTIONS for questions 1 to 5: Select the correct alternative from the given choices.

The ratio of the number of chocolates with A and B is 3 : 4. If A gives four chocolates to B, then the ratio of the number of chocolates with A and B will become 1 : 2. Find the total number of chocolates with them.

- a) **70**
- b) **56**
- c) **42** Your answer is correct
- d) **126**

Time spent / Accuracy Analysis

Time taken by you to answer this question	80
Avg. time spent on this question by all students	124
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	118
% of students who attempted this question	47.8
% of students who got the question right of those who attempted	91.29

[Video Solution](#)

Text Solution

Let the number of chocolates with A be $3x$.

\Rightarrow the number of chocolates with B is $4x$.

$$\Rightarrow 2(3x - 4) = 4x + 4$$

$$\Rightarrow 2x = 12$$

$$\therefore x = 6.$$

$$\text{The total number of chocolates with them} = 3x + 4x = 7(6) = 42.$$

Choice (C)

undefined

Q6. DIRECTIONS for question 6: Type in your answer in the input box provided below the question.

Sirisha deposits four amounts, that are in the ratio 3 : 2 : 5 : 4, in four banks, P, Q, R, S, respectively. If the interest rates offered by P, Q, R, S are 5%, 5.5%, 8% and 7% per annum respectively, and the total interest accrued after one year is Rs.94000, find the interest (in Rs.) obtained from bank R.

Your Answer:40000 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	193
Avg. time spent on this question by all students	216
Difficulty Level	E
Avg. time spent on this question by students who got this question right	197
% of students who attempted this question	32.5
% of students who got the question right of those who attempted	57.79

[Video Solution](#)

[Text Solution](#)

Let the amounts be $3x$, $2x$, $5x$ and $4x$.

$$\text{Interest accrued on } 3x = 3x \times \frac{5}{100} = \frac{15x}{100}$$

Similarly, the interest accrued on $2x$, $5x$ and $4x$ will be $\frac{11x}{100}$, $\frac{40x}{100}$ and $\frac{28x}{100}$.

Total interest accrued = 94000

$$\Rightarrow \frac{1}{100} (15x + 11x + 40x + 28x) = 94000$$

$$\Rightarrow x = 100000$$

$$\therefore \text{Interest on } 5x \text{ is } \frac{40x}{100} = 40,000.$$

Ans: (40000)

undefined

Q7. DIRECTIONS for questions 7 to 11: Select the correct alternative from the given choices.

$\log_{36}(8x + 5) < \log_6 x + \log_6 2$, if and only if $x >$

a)

$\frac{3}{2}$

b) 2.

c)

$\frac{5}{2}$

Your answer is correct

- d) 3.

Time spent / Accuracy Analysis

Time taken by you to answer this question	178
Avg. time spent on this question by all students	146
Difficulty Level	M
Avg. time spent on this question by students who got this question right	148
% of students who attempted this question	15.52
% of students who got the question right of those who attempted	69.46

[Video Solution](#)

Text Solution

Given $\log_{10} (8x + 5) < \log_{10} x + \log_{10} 2$

$$\Rightarrow \frac{1}{2} \log_{10} (8x + 5) < \log_{10} 2x$$

$$\Rightarrow 8x + 5 < (2x)^2$$

$$\Rightarrow 4x^2 - 8x - 5 > 0$$

$$\Rightarrow (2x - 5) \times (2x + 1) > 0$$

$$\Rightarrow x < -\frac{1}{2} \text{ or } x > \frac{5}{2}$$

But $\log_{10} x$ is not defined for $x < \frac{-1}{2}$.

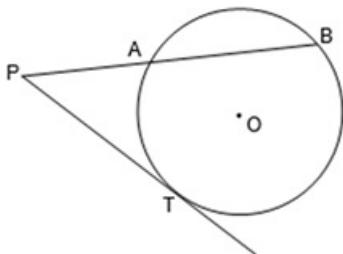
$$\Rightarrow x > \frac{5}{2}.$$

Choice (C)

undefined

Q8. DIRECTIONS for questions 7 to 11: Select the correct alternative from the given choices.

In the given figure, PT is a tangent to the circle with centre O. If $\overline{PT} = 8\sqrt{14}$ cm and $\overline{PB} = 56$ cm, find the length of \overline{PA} .



- a) 8 cm
 b) 10 cm
 c) 12 cm
 d) 16 cm Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	162
Avg. time spent on this question by all students	101

Time spent / Accuracy Analysis

Difficulty Level	E
Avg. time spent on this question by students who got this question right	85
% of students who attempted this question	20.77
% of students who got the question right of those who attempted	78.17

[Video Solution](#)

[Text Solution](#)

$$\begin{aligned}\overline{PT}^2 &= \overline{PA} \cdot \overline{PB} \\ (8\sqrt{14})^2 &= \overline{PA} \cdot 56 \\ \Rightarrow \overline{PA} &= \frac{64 \times 14}{56} = 16.\end{aligned}$$

Choice (D)

undefined

Q9. DIRECTIONS for questions 7 to 11: Select the correct alternative from the given choices.

If x and y are non-negative integers and $5x + 4y$ when divided by 9 leaves a remainder of 2, find the remainder when $x - y$ is divided by 9.

- a) 4
- b) 6
- c) 8
- d) Cannot be determined Your answer is incorrect

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	287
Avg. time spent on this question by all students	153
Difficulty Level	D
Avg. time spent on this question by students who got this question right	165
% of students who attempted this question	26.12
% of students who got the question right of those who attempted	46.9

[Video Solution](#)

[Text Solution](#)

Given $5x + 4y = 9k + 2$ (i.e., $5x + 4y$ leaves a remainder of 2 when divided by 9)
 $\Rightarrow (9x - 4x) + 4y = 9k + 2$
 $\Rightarrow 9x - 4(x - y) = 9k + 2$
 $\Rightarrow 4(x - y) = 9k_1 - 2$, (where $k_1 = x - k$)
Hence, 4 times the remainder(r) of $(x - y)$ divided by 9 leaves a remainder of '-2' (i.e., 7) when again divided by 9.
 $\Rightarrow 4r = 9k_2 + 7$ and $r < 9$ Only $r = 4$ satisfies.

Alternative Solution 1:

Since $5x + 4y$ leaves a remainder of 2 when divided by 9 and $9(x + y)$ is divisible by 9, it follows that $9(x + y) - (5x + 4y) = (4x + 5y)$ will leave a remainder of $9 - 2 = 7$, when divided by 9.

Now $(5x + 4y) - (4x + 5y) = (x - y)$ will leave a remainder of $2 - 7 = -5$, i.e., 4.

Alternative Solution 2:

If $x = 0$, $y = 5$ satisfies and if $y = 0$, $x = 4$ satisfies. Further $x = 9$, $y = 5$ and $y = 9$, $x = 4$ will also satisfy. Now, by observation, in each of the above four cases the remainder of $x - y = 4$. Hence choice (A). Choice (A)

undefined

Q10. DIRECTIONS for questions 7 to 11: Select the correct alternative from the given choices.

How many ordered pairs of integers (x, y) satisfy the equation $\frac{1}{x} + \frac{1}{y} = \frac{1}{7}$?

- a) 2
- b) 4
- c) 6
- d) 5

You did not answer this question Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	121
Avg. time spent on this question by all students	121
Difficulty Level	M
Avg. time spent on this question by students who got this question right	129
% of students who attempted this question	13.76
% of students who got the question right of those who attempted	12.4

[Video Solution](#)

Text Solution

$$\frac{1}{x} + \frac{1}{y} = \frac{1}{7}$$

$$7x + 7y = xy$$

$$7x + 7y - xy = 0$$

$$(x - 7)(7 - y) = -49$$

$$(x - 7)(y - 7) = 49$$

∴ The possible ordered pairs of (x, y) are $(0, 0)$, $(6, -42)$, $(-42, 6)$, $(8, 56)$, $(56, 8)$ and $(14, 14)$.

However, $(0, 0)$ cannot be considered. Hence, five ordered pairs are possible.

Choice (D)

undefined

Q11. DIRECTIONS for questions 7 to 11: Select the correct alternative from the given choices.

If $\log_3 |a^3 + b^3| - \log_3 |a^2 - ab + b^2| - \log_3 |a^3 - b^3| + \log_3 |a^2 + ab + b^2| = 2$, then find the value of $\log_3 \left| \frac{a^2 + b^2}{a^2 - b^2} \right|$.

- a) **log₃41 - 2**
- b) **log₃41 - 3**
- c) **log₃43 - 1**
- d) **log₃43 - 2**

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	45
Avg. time spent on this question by all students	167
Difficulty Level	M
Avg. time spent on this question by students who got this question right	192
% of students who attempted this question	6.46
% of students who got the question right of those who attempted	62.31

[Video Solution](#)

Text Solution

$$\begin{aligned}
& \log_3 |a^3 + b^3| - \log_3 |a^2 - ab + b^2| - \log_3 |a^3 - b^3| \\
& + \log_3 |a^2 + ab + b^2| \\
& = \log_3 \left| \frac{a^3 + b^3}{a^2 - ab + b^2} \right| + \log_3 \left| \frac{a^2 + ab + b^2}{a^3 - b^3} \right| \\
& = \log_3 |a+b| + \log_3 \left| \frac{1}{a-b} \right| \\
& = \log_3 \left| \frac{a+b}{a-b} \right| \\
& \therefore \log^3 \left| \frac{a+b}{a-b} \right| = 2
\end{aligned}$$

By applying compendo and dividend, we get

$$\Rightarrow \frac{a}{b} = \frac{9+1}{9-1} = \frac{5}{4} \quad (\text{or } \frac{b}{a} = \frac{5}{4}, \text{ if we consider the negative sign while removing the modulus})$$

$$\therefore \text{The required value} = \log_3 \left| \frac{a^2 + b^2}{a^2 - b^2} \right| = \log_3 \left| \frac{\left(\frac{a}{b} \right)^2 + 1}{\left(\frac{a}{b} \right)^2 - 1} \right|$$

$$= \log_3 \left| \frac{\left(\frac{5}{4} \right)^2 + 1}{\left(\frac{5}{4} \right)^2 - 1} \right| = \log_3 \left| \frac{41}{9} \right| \text{ (OR)}$$

$$\log_3 \left| \frac{41}{9} \right|, \text{ if we consider } \frac{b}{a} = \frac{5}{4}.$$

$$= \log_3 41 - \log_3 9 = \log_3 41 - 2.$$

Choice (A)

undefined

Q12. DIRECTIONS for question 12: Type in your answer in the input box provided below the question.

How many times does the digit 6 appear in the first 1000 natural numbers?

Your Answer:300 **Your answer is correct**

Time spent / Accuracy Analysis

Time taken by you to answer this question **159**

Avg. time spent on this question by all students **175**

Time spent / Accuracy Analysis

Difficulty Level	M
Avg. time spent on this question by students who got this question right	177
% of students who attempted this question	36.56
% of students who got the question right of those who attempted	19.14

[Video Solution](#)

[Text Solution](#)

The number of numbers less than 1000 in which 6 will appear only once = (3) (9) (9) = 243.

The number of numbers less than 1000 in which 6 will appear exactly twice = (3) (9) = 27.

The number of three-digit numbers in which 6 will appear exactly thrice = 1.

∴ The required value = 1(243) + 2(27) + 3(1) = 300.

Alternative Solution:

The number of times the digit '6' appears in units place = $10 \times 10 = 100$ (since other two digits can be chosen in 10×10 ways).

Similarly, the digit 6 appears 100 times in the tens place and 100 times in the hundreds place. Hence, 6 appears a total of 300 times. Ans: (300)

undefined

Q13. DIRECTIONS for questions 13 and 14: Select the correct alternative from the given choices.

Rajesh and Ramesh are running on two different circular tracks. Both of them took the same time to complete one round each on their respective tracks. Then they interchanged their tracks and Rajesh completed two rounds in the time in which Ramesh completed one round. Find the ratio of the speeds of Rajesh and Ramesh.

- a) $\sqrt{2} : 1$ Your answer is correct
- b) 2 : 1
- c) 1 : $\sqrt{2}$
- d) 1 : 2

Time spent / Accuracy Analysis

Time taken by you to answer this question	161
Avg. time spent on this question by all students	138
Difficulty Level	E
Avg. time spent on this question by students who got this question right	166
% of students who attempted this question	35.07
% of students who got the question right of those who attempted	36.13

[Video Solution](#)

[Text Solution](#)

Let the length of the track on which Rajesh ran first be L_1 and that of the other track be L_2 . Ratio of the speeds of Rajesh and Ramesh is the ratio of the distances covered, i.e.

$L_1 : L_2$

The ratio after interchanging the tracks is $2L_2 : L_1$

As the ratio of speeds remain the same, $\frac{L_1}{L_2} = \frac{2(L_2)}{L_1}$

$$\Rightarrow \frac{L_1}{L_2} = \frac{\sqrt{2}}{1}$$

Thus the ratio of speeds is $\sqrt{2} : 1$

Choice (A)

undefined

Q14. DIRECTIONS for questions 13 and 14: Select the correct alternative from the given choices.

If p , q and r are integers such that $p^2 + q^2 = 221$ and $q^2 + r^2 = 125$, then how many ordered triplets (p, q, r) are possible?

- a) 0
- b) 3 Your answer is incorrect
- c) 12
- d) 24

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	87
Avg. time spent on this question by all students	164
Difficulty Level	D
Avg. time spent on this question by students who got this question right	193
% of students who attempted this question	15.99
% of students who got the question right of those who attempted	10.05

[Video Solution](#)

[Text Solution](#)

$$p^2 + q^2 = 221$$

$$q^2 + r^2 = 125$$

$$p^2 - r^2 = 96$$

$$(p+r)(p-r) = 96$$

For p and r to be integers, we need to factorize 96 such that both the factors are either odd or even.

96 can be factorized as (1, 96), (2, 48), (3, 32), (4, 24), (6, 16), (8, 12).

$$(p+r)(p-r) = (48). (2)$$

$$\Rightarrow p = 25, r = 23$$

$p^2 + q^2 \neq 221$ so, not possible.

$$(p+r)(p-r) = (24). (4) \Rightarrow p = 14, r = 10$$

$$q^2 + r^2 = 125 \Rightarrow q = 5, (p, q, r) = (14, 5, 10)$$

$$(p+r)(p-r) = (16). (6) \Rightarrow p = 11, r = 5$$

$$q^2 + r^2 = 125 \Rightarrow q = 10, (p, q, r) = (11, 10, 5)$$

$$(p+r)(p-r) = (12). (8) \Rightarrow p = 10, r = 2$$

$$q^2 + r^2 = 125 \Rightarrow q = 11, (p, q, r) = (10, 11, 2)$$

The possible sets of (p, q, r) are (14, 5, 10), (10, 11, 2), (11, 10, 5).

As the integers can be both positive & negative each set can have 8 combinations

$$\therefore \text{Total number of possible sets} = 3 \times 8 = 24$$

Alternative solution 1:

$$p^2 + q^2 = 221 \quad \underline{\hspace{2cm}} \quad (1)$$

$$q^2 + r^2 = 125 \quad \underline{\hspace{2cm}} \quad (2)$$

$$\text{Taking } q^2 + r^2 = 125$$

By trial & error.

$$(q, r) = (10, 5), (5, 10), (11, 2), (2, 11)$$

Substituting the value of q in (1)

We can get the value of p as

$$p = 11, 14, 10.$$

$$\text{The possible sets of } (p, q, r) \text{ are } (14, 5, 10), (11, 10, 5), (10, 11, 2)$$

As the values can be positive (or) negative, there can be 8 possible combinations for each set.

$$\therefore \text{Total number of possible sets of values } (p, q, r)$$

$$= 3 \times 8 = 24.$$

Alternative Solution 2:

By observation $(p, q, r) = (11, 10, 5)$ satisfies, i.e., there is at least one triplet. Also, for any triplet, there will be 8 cases (i.e., 2^3) with each variable taking either positive or negative sign. Hence, the answer will be a multiple of 8, greater than zero. Only choice (D) satisfies.

Choice (D)

undefined

Q15. DIRECTIONS for questions 15 to 17: Type in your answer in the input box provided below the question.

What is the value of $\left(\frac{1728}{729}\right)^{\frac{2}{3}} \times \left(\frac{9}{1024}\right)^{-\frac{1}{2}} \div \left(\frac{16}{324}\right)?$

Your Answer:384 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	287
Avg. time spent on this question by all students	230
Difficulty Level	E
Avg. time spent on this question by students who got this question right	216
% of students who attempted this question	29.74
% of students who got the question right of those who attempted	55.36

[Video Solution](#)

[Text Solution](#)

$$\begin{aligned} & \left(\frac{1728}{729} \right)^{2/3} \times \left(\frac{9}{1024} \right)^{-1/2} \div \left(\frac{16}{324} \right) \\ &= \left(\frac{(12)^3}{9^3} \right)^{2/3} \times \left(\frac{1024}{9} \right)^{1/2} \times \left(\frac{324}{16} \right) \\ &= \left(\frac{12}{9} \right)^{3 \times \frac{2}{3}} \times \left(\frac{32}{3} \right)^{2 \times \frac{1}{2}} \times \left(\frac{324}{16} \right) \\ &= \left(\frac{4}{3} \right)^2 \times \frac{32}{3} \times \frac{324}{16} \\ &= \frac{16 \times 32 \times 324}{9 \times 3 \times 16} = 32 \times 12 = 384 \end{aligned}$$

Ans: (384)

undefined

Q16. DIRECTIONS for questions 15 to 17: Type in your answer in the input box provided below the question.

Gabbar sold his gun at a loss of 10% and his horse at a profit of 20% and incurred an overall loss of Rs.2000. Had he sold the gun at a loss of 5%, instead of 10%, he would have made an overall profit of Rs.2500. Find the price (in Rs.) at which Gabbar sold his horse. Rs.

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	12
Avg. time spent on this question by all students	244
Difficulty Level	E
Avg. time spent on this question by students who got this question right	249
% of students who attempted this question	23.74
% of students who got the question right of those who attempted	28.9

[Video Solution](#)

[Text Solution](#)

Let the cost prices of gun and horse be g and h respectively.

Given,

$$0.9g - g + 1.2h - h = -2,000$$

$$\Rightarrow 0.1g - 0.2h = 2,000. \quad \dots \dots (1)$$

$$0.95g - g + 1.2h - h = 2,500$$

$$-0.05g + 0.2h = 2,500. \quad \dots \dots (2)$$

Solving (1) and (2), we get the cost price of the gun and horse is ₹90,000 and ₹35,000.

∴ The price at which Gabbar sold his horse is

$$35000 \left(1 + \frac{20}{100}\right) = ₹42,000.$$

Ans: (42000)

undefined

Q17. DIRECTIONS for questions 15 to 17: Type in your answer in the input box provided below the question.

What is the product of the HCF and the LCM of 96, 216, 432?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	12
Avg. time spent on this question by all students	198
Difficulty Level	E
Avg. time spent on this question by students who got this question right	202
% of students who attempted this question	35.02
% of students who got the question right of those who attempted	41.61

[Video Solution](#)

[Text Solution](#)

$$\begin{aligned} 96 &= 24 \times 4 \\ 216 &= 24 \times 9 \\ 432 &= 24 \times 18 \\ \text{HCF}(96, 216, 432) &= 24 \times \text{HCF}(4, 9, 18) \\ &= 24 \\ \text{LCM}(96, 216, 432) &= 24 \times \text{LCM}(4, 9, 18) \\ &= 24 \times 36 \\ &= 864 \\ \text{HCF} \times \text{LCM} &= 24 \times 864 \\ &= 20,736 \end{aligned}$$

Ans: (20736)

undefined

Q18. DIRECTIONS for question 18: Select the correct alternative from the given choices.

Rajan's monthly telephone bill consists of a fixed amount towards monthly rent and a variable amount that varies directly

with the number of units of calls made during the month. If Rajan made 100 units of calls in a certain month and 150 units of calls in another month, and received bills of Rs.500 and Rs.650 for the two months respectively, find the number of units of calls made by Raju in another month, for which he received a bill of Rs.950.

- a) 200
- b) 250
- c) 300
- d) 350

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	7
Avg. time spent on this question by all students	132
Difficulty Level	E
Avg. time spent on this question by students who got this question right	126
% of students who attempted this question	31.28
% of students who got the question right of those who attempted	87.45

[Video Solution](#)

[Text Solution](#)

Let ₹F be the fixed monthly rent and ₹x be the money charged for each call.

$$F + 100x = 500$$

$$F + 150x = 650$$

Solving the equations, we get F = 200 and x = 3.

Let y be the number of units of call made by Raju when bill = ₹950

$$\Rightarrow 200 + 3y = 950.$$

$$\Rightarrow y = 250.$$

Choice (B)

undefined

Q19. DIRECTIONS for question 19: Type in your answer in the input box provided below the question.

If $a * b = \frac{a+b}{a-b}$, find the value of $(18 * 12) * (6 * 3)$.

Your Answer:4 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	44
Avg. time spent on this question by all students	65
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	56
% of students who attempted this question	44.83
% of students who got the question right of those who attempted	75.49

[Video Solution](#)

[Text Solution](#)

$$a * b = \frac{a+b}{a-b}$$

$$18 * 12 = \frac{18+12}{18-12}$$

$$= \frac{30}{6} = 5$$

$$6 * 3 = \frac{6+3}{6-3} = \frac{9}{3} = 3$$

$$(18 * 12) * (6 * 3) = 5 * 3$$

$$= \frac{5+3}{5-3} = \frac{8}{2} = 4$$

Ans: (4)

undefined

Q20. DIRECTIONS for question 20: Select the correct alternative from the given choices.

If the surface area of a sphere increases by 96%, find the percentage increase in the volume of the sphere.

- a) **274.4%**
- b) **174.4%**
- c) **42%**
- d) **142%**

You did not answer this question

[Show Correct Answer](#)

Time spent / Accuracy Analysis

Time taken by you to answer this question	11
Avg. time spent on this question by all students	123
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	126
% of students who attempted this question	17.46
% of students who got the question right of those who attempted	59.32

[Video Solution](#)

[Text Solution](#)

Surface area of a sphere \propto radius² and volume \propto radius³

	Initial	Final
Surface area	100	196
Radius	10	14
Volume	10^3	14^3

$$\therefore \text{Volume increases by } \frac{14^3}{10^3} - 1 = 174.4\%$$

Choice (B)

undefined

Q21. DIRECTIONS for questions 21 to 23: Type in your answer in the input box provided below the question.

Eight years ago, Surya's age was three times his son's age. If the sum of their present ages is 64, after how many years from now will the age of Surya be twice the age of his son?

Your Answer:4 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	105
Avg. time spent on this question by all students	176
Difficulty Level	E
Avg. time spent on this question by students who got this question right	163
% of students who attempted this question	40.08
% of students who got the question right of those who attempted	73.04

[Video Solution](#)

[Text Solution](#)

Let the present age of Surya be x years.

\Rightarrow the present age of Surya's son is $64 - x$ years.

$$x - 8 = 3[(64 - x) - 8] \Rightarrow 4x = 176$$

$$\therefore x = 44.$$

\Rightarrow The present age of Surya's son is $64 - 44 = 20$ years.

Let y be the number of years after which Surya's age will be twice the age of his son.

$$\therefore 44 + y = 2(20 + y)$$

$$\Rightarrow y = 4.$$

Ans: (4)

undefined

Q22. DIRECTIONS for questions 21 to 23: Type in your answer in the input box provided below the question.

A train travels $2x$ km at 40 km/hr and another $3x$ km at 60 km/hr. Find its average speed (in km/hr) for the entire distance.

Your Answer:50 Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	91
Avg. time spent on this question by all students	96
Difficulty Level	VE
Avg. time spent on this question by students who got this question right	93
% of students who attempted this question	38.72
% of students who got the question right of those who attempted	64.55

[Video Solution](#)

[Text Solution](#)

The average speed = $\frac{\text{Total distance travelled}}{\text{Total time taken}}$

$$= \frac{2x + 3x}{\left(\frac{2x}{40} + \frac{3x}{60}\right)} = \frac{5x}{\left(\frac{x}{20} + \frac{x}{20}\right)} = 50 \text{ km/hr}$$

Ans: (50)

undefined

Q23. DIRECTIONS for questions 21 to 23: Type in your answer in the input box provided below the question.

Let α and β be the roots of the equation $x^2 - ax - b = 0$, where $\alpha < \beta$. If $\alpha + \beta = 3$ and $\frac{1}{\alpha} + \frac{1}{\beta} = -\frac{1}{60}$, then what is the value of $9a + b$?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	25
Avg. time spent on this question by all students	131
Difficulty Level	M
Avg. time spent on this question by students who got this question right	123
% of students who attempted this question	19.32
% of students who got the question right of those who attempted	58.16

[Video Solution](#)

[Text Solution](#)

α and β are roots of the equation $x^2 - ax - b = 0$

$$\alpha + \beta = a$$

$$\alpha\beta = -b$$

Given that

$$\alpha + \beta = 3, \frac{1}{\alpha} + \frac{1}{\beta} = -\frac{1}{60}$$

$$\therefore a = 3, \frac{\alpha + \beta}{\alpha\beta} = -\frac{1}{60}$$

$$\Rightarrow \frac{a}{-b} = \frac{-1}{60}$$

$$\Rightarrow b = 60a = 180$$

$$\therefore 9a + b = 9(3) + 180 = 207$$

Ans: (207)

undefined

Q24. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

The sum of the first 30 terms of an arithmetic progression equals twice the sum of the first 20 terms. Find the ratio of the sum of the first 32 terms to the sum of the first 42 terms of the same progression.

- a) $\frac{8}{21}$
- b) $\frac{16}{21}$
- c) $\frac{8}{13}$ Your answer is correct
- d) Cannot be determined

Time spent / Accuracy Analysis

Time taken by you to answer this question	190
Avg. time spent on this question by all students	168
Difficulty Level	M
Avg. time spent on this question by students who got this question right	198
% of students who attempted this question	15.29
% of students who got the question right of those who attempted	55.64

[Video Solution](#)

[Text Solution](#)

It is given that $S_{30} = 2 S_{20}$
Considering the first term as a and the common difference as d , we get

$$\begin{aligned}\frac{30}{2}[2a+29d] &= 2\left(\frac{20}{2}\right)[2a+19d] \\ \Rightarrow 15[2a+29d] &= 20[2a+19d] \\ \Rightarrow 10a + 55d &\Rightarrow 2a = 11d \\ \text{Now } \frac{S_{32}}{S_{42}} &= \frac{32/2[2a+31d]}{42/2[2a+41d]} \\ &= \frac{32[11d+31d]}{42[11d+41d]} = \frac{32[42d]}{42[52d]} = \frac{8}{13}\end{aligned}$$

Choice (C)

undefined

Q25. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

The average of a set comprising the first $2n$ natural numbers is A. If all the odd numbers in the list are doubled and all the even numbers are halved, the average of the $2n$ numbers becomes B. If the difference of A and B is 6, find the sum of the first n natural numbers.

- a) 210
- b) 325
- c) 406
- d) 496

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	11
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Time spent / Accuracy Analysis

Avg. time spent on this question by all students	147
Difficulty Level	D
Avg. time spent on this question by students who got this question right	185
% of students who attempted this question	3.78
% of students who got the question right of those who attempted	39.44

[Video Solution](#)**Text Solution**

The sum of the first $2n$ natural numbers can be split up and written as the sum of the first n even numbers and the first n odd numbers.

$$\Rightarrow \text{Initial sum} = \sum_{1}^n (2n - 1) + \sum_{1}^n 2n$$

$$\begin{aligned} \text{Now, if } \sum n &= S, \text{ then we get Initial sum} = 2S - n + 2S \\ &= 4S - n. \end{aligned}$$

Now, after odd numbers are doubled and even numbers are halved, final sum $n =$

$$\sum_{1}^n [(2n - 1) \times 2] + \sum_{1}^n \frac{(2n)}{2}$$

$$= 4S - 2n + S$$

$$= 5S - 2n$$

$$\text{Given } |A - B| = 6$$

$$\Rightarrow (5S - 2n) - (4S - n) = 6 \times 2n$$

(since both A and B are averages of $2n$ numbers each)

$$\Rightarrow S - n = 12n$$

$$\Rightarrow S = 13n$$

$$\Rightarrow \frac{n(n+1)}{2} = 13n, \text{ i.e., } n = 25$$

$$\text{and } \sum n = 13n, \text{ i.e., } 13 \times 25 = 325$$

Choice (B)

undefined

Q26. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

If all the letters of the word SPOON are permuted in all possible ways and the words thus obtained are arranged alphabetically as in a dictionary, then what is the rank of the word OSOPN?

- a) 34
- b) 33
- c) 32
- d) 35

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	4
Avg. time spent on this question by all students	148
Difficulty Level	D
Avg. time spent on this question by students who got this question right	165
% of students who attempted this question	12.8
% of students who got the question right of those who attempted	45.97

[Video Solution](#)

Text Solution

The given letters in alphabetical order are N, O, O, P, S. The words that begin with N, ON, OO, OP, OSN, will precede the word OSOPN.

The number of words that begin with N is $\frac{4!}{2}$.

The number of words that begin with each of ON, OO and OP is 3!.

The number of words that begin with each of OSN is 2!.

There is one more word OSOPN before we reach OSOPN.

Hence $\frac{4!}{2} + 3(3!) + 2! + 1 = 12 + 18 + 2 + 1 = 33$ words precede OSOPN. Hence the rank of OSOPN is 34.

Choice (A)

undefined

Q27. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

At the start of a party, a basket, placed at the centre of the room, contained 1000 fruits, exactly 99% of which were apples. By the end of the party, the percentage of apples in the basket fell to exactly 98%. If it is known that all the guests ate only apples, how many apples did they eat?

- a) 10 Your answer is incorrect
- b) 20
- c) 50
- d) 500

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	76
Avg. time spent on this question by all students	115
Difficulty Level	E
Avg. time spent on this question by students who got this question right	138
% of students who attempted this question	32.24
% of students who got the question right of those who attempted	31.14

Video Solution

Text Solution

There are 1000 fruits and 99% of them are apples, i.e., out of the 1000 fruits, 990 are apples.

Let the guests eat x apples.

Now, the remaining fruits will be $(1000 - x)$ and apples will be $(990 - x)$.

$$\Rightarrow \frac{990 - x}{1000 - x} \times 100 = 98$$

$$\Rightarrow 99000 - 100x = 98000 - 98x \quad 1000 = 2x$$

$$\Rightarrow x = 500$$

∴ The guests must eat 500 apples, so as to reduce the percentage of apples from 99% to 98%.

Alternative Solution:

If the guests ate only apples, then the number of non-apple fruits became remained constant. But they were 1% of total earlier, and because 2% of total later, i.e., doubled as a percentage.

Hence, the new total must be half of the initial.

Hence, new total = 500, which means $1000 - 500 = 500$ apples were eaten.

Choice (D)

undefined

Q28. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

What is the largest power of 2 in $(5! + 6! + 7! + 8!)$?

- a) 3
- b) 4
- c) 5
- d) None of the above Your answer is incorrect

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	174
Avg. time spent on this question by all students	92
Difficulty Level	E
Avg. time spent on this question by students who got this question right	94
% of students who attempted this question	27.18
% of students who got the question right of those who attempted	48.63

[Video Solution](#)

Text Solution

$$\begin{aligned}
 & 5! + 6! + 7! + 8! \\
 &= 5!(1 + 6 + 6.7 + 6.7.8) \\
 &= 5![\text{odd}] \\
 &= 120[\text{odd}] \\
 &= 8.15.[\text{odd}] \\
 &= 2^3[\text{odd}] \\
 \therefore & \text{ Highest Power of 2 in the sum is 3.}
 \end{aligned}$$

Choice (A)

undefined

Q29. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

A square well is dug in a rectangular field of length 20 m and breadth 15 m. If the well, when filled to the brim, can hold 7,20,000 litres of water, 10% of which can cover the remaining field upto a height 0.3 m, then the depth, D, of the well, lies in which of the following ranges? ($1 \text{ m}^3 = 1000 \text{ litres}$)

- a) $6 \text{ m} \leq D < 9 \text{ m}$
- b) $9 \text{ m} \leq D < 12 \text{ m}$
- c) $12 \text{ m} \leq D < 15 \text{ m}$
- d) $15 \text{ m} \leq D < 18 \text{ m}$

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	9
Avg. time spent on this question by all students	144
Difficulty Level	M
Avg. time spent on this question by students who got this question right	150
% of students who attempted this question	4.5
% of students who got the question right of those who attempted	45.89

Video Solution

Text Solution

As the well can hold 7,20,000 litres of water, the volume of well is $7,20,000/1,000 = 720 \text{ m}^3$.

10% of the water (i.e., 72 m^3) can fill the remaining area upto 0.3 m.

Thus remaining area $\times 0.3 = 72$

\Rightarrow Remaining area = 240 m^2

The area of the field (including well) = $20 \times 15 = 300 \text{ m}^2$

Area used for construction of well = $300 - 240 = 60 \text{ m}^2$

Volume of the well = Area \times Depth

$\Rightarrow 720 = 60 \times D \Rightarrow D = 12 \text{ m}$

Choice (C)

undefined

Q30. DIRECTIONS for questions 24 to 30: Select the correct alternative from the given choices.

If $x = \frac{a+b}{a}$, $y = \frac{b+c}{b}$, $z = \frac{c+a}{c}$, what is the value of $xy + yz + zx$, given that a , b and c are all distinct two-digit numbers.

$$a-b, b-c, c-a$$

- a) -1
- b) 0
- c) 1
- d) **None of the above**

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	26
Avg. time spent on this question by all students	126
Difficulty Level	E
Avg. time spent on this question by students who got this question right	139
% of students who attempted this question	15.32
% of students who got the question right of those who attempted	38.07

[Video Solution](#)

[Text Solution](#)

We can simplify the expression by substituting $a = 10$, $b = 11$, $c = 12$.

We get $x = -21$, $y = -23$ and $z = 11$

$$\therefore xy + yz + zx = (-21)(-23) + (-23)(11) + (-21)(11) = -1$$

Choice (A)

undefined

Q31. DIRECTIONS for questions 31 and 32: Type in your answer in the input box provided below the question.

In a district, there are exactly 15 towns, grouped into five zones, with three towns in each zone. All the possible pairs of towns in the district are now connected with telephone lines, such that any two towns are connected with four direct lines, if they belong to the same zone and with only one direct line, if they belong to different zones. How many direct telephone lines are required in all?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	36
Avg. time spent on this question by all students	140
Difficulty Level	M
Avg. time spent on this question by students who got this question right	183
% of students who attempted this question	10.37
% of students who got the question right of those who attempted	15.61

[Video Solution](#)

[Text Solution](#)

Consider the five zones, Z_1 , Z_2 , Z_3 , Z_4 and Z_5 . Four lines are required to connect the towns in the same zone and each zone contains 3 towns. The number of lines required to connect the pairs of towns in any one zone is 3C_2 (4) = 12. The number of lines required to connect pairs of towns in all the five zones = 5(12) = 60.

The number of lines required for one town in zone Z_1 to be connected with any town from the remaining zones is 1. Since zone Z_1 contains three towns, the number of lines required to connect all towns of zone Z_1 to all the towns in the remaining zones is 3(12) = 36. Similarly all the towns in Z_2 will be connected with all the towns in Z_3 , Z_4 , Z_5 , with 3(9) or 27 lines.

Similarly towns in Z_3 are connected with the towns in the remaining zones using 18 lines and towns in Z_4 are connected with the town in the remaining zones (i.e. Z_5) using 9 lines. Hence the number of lines required to connect all the towns in one zone to all other towns in the other zones is 36 + 27 + 18 + 9 = 90

Hence the total number of direct lines required
= 60 + 90 = 150

Ans: (150)

undefined

Q32. DIRECTIONS for questions 31 and 32: Type in your answer in the input box provided below the question.

There are n students in a class, having roll numbers from 1 to n . Each student calculated the sum of the roll numbers of all the other students in the class. If the average of the sums calculated by all students is 161.5, then how many students are there in the class?

You did not answer this question

Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	26
Avg. time spent on this question by all students	146
Difficulty Level	M
Avg. time spent on this question by students who got this question right	174
% of students who attempted this question	12.02
% of students who got the question right of those who attempted	34.96

[Video Solution](#)

[Text Solution](#)

The sum of all the sum's will be exactly $(n - 1)$ times the sum of the first n natural numbers. This is since, each of the n students calculated the sum of the roll numbers of all the students, except his own.

Now, the average of the sums = n .

$$\begin{aligned}\therefore \frac{(n-1)\sum n}{n} &= 161.5 \\ \Rightarrow \frac{(n-1)(n)(n+1)}{n} &= 161.5 \\ \Rightarrow n^2 - 1 &= 323 \\ \Rightarrow n^2 &= 324 \\ \text{i.e., } n &= 18.\end{aligned}$$

Ans: (18)

undefined

Q33. DIRECTIONS for question 33: Select the correct alternative from the given choices.

Find the value of k , for which the simultaneous equations $(\frac{k}{2} + 7)x + 9y = 2$ and $3kx + ky = 6$ have infinite solutions.

- a) 0
- b) 40
- c) 56
- d) No such value exists Your answer is correct

Time spent / Accuracy Analysis

Time taken by you to answer this question	195
Avg. time spent on this question by all students	110
Difficulty Level	M
Avg. time spent on this question by students who got this question right	114
% of students who attempted this question	17.34
% of students who got the question right of those who attempted	64.32

[Video Solution](#)

[Text Solution](#)

As the system has infinite solutions, both equations should represent the same line, i.e.,

$$\text{their coefficients would be proportional i.e. } \frac{\left(\frac{k}{2} + 7\right)}{3k} = \frac{9}{k} = \frac{2}{6}.$$

Solving $\frac{\left(\frac{k}{2} + 7\right)}{3k} = \frac{9}{k}$, we get $k = 0$ or 40 . If $k = 0$, the second equation becomes inconsistent.

Now, solving $\frac{9}{k} = \frac{2}{6}$, we get $k = 27$, which is inconsistent with $k = 40$.

∴ There exists no value of k for which the system has infinite solutions.

Choice (D)

undefined

Q34. DIRECTIONS for question 34: Type in your answer in the input box provided below the question.

Find number of terms common to the progression 1, 7, 13, 19...601 and the progression 6, 11, 16, 21...601.

You did not answer this question Show Correct Answer

Time spent / Accuracy Analysis

Time taken by you to answer this question	11
Avg. time spent on this question by all students	172
Difficulty Level	M
Avg. time spent on this question by students who got this question right	177
% of students who attempted this question	15.55
% of students who got the question right of those who attempted	36.61

[Video Solution](#)

Text Solution

Both progressions are A.P's with common differences of 6 and 5 respectively.
The series of common terms of two A.P, is also an A.P with common difference equal to the LCM of common difference of the two series.
First common term of the progression is 31 (by observation)
The N^{th} common term of the two progressions
 $= 31 + (N - 1) \text{ LCM of } (6, 5)$
 $= 31 + (N - 1) 30$
This has to less than or equal to 601
 $31 + (N - 1)30 \leq 601$
 $(N - 1)30 \leq 570$
 $N - 1 \leq 19$
 $\Rightarrow N = 20$
 \therefore There are 20 common terms.

Ans: (20)