



## Flexi Mock CAT - 07 (2020)

Scorecard (procreview.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

Accuracy (AccSelectGraph.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

Qs Analysis (QsAnalysis.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

Video Attempt (VideoAnalysis.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

Solutions (Solution.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

Bookmarks (Bookmarks.jsp?sid=aaaus-zkGv68x\_q4KWSExWed Feb 17 11:50:09 IST 2021&qsetId=Yqw0JkOEDFU=&qsetName=Flexi Mock CAT - 07 (2020))

VARC

LRDI

QA

## Sec 1

**Direction for questions (1-5):** Read the given passage and answer the questions that follow.

While walking in the shadow of their people's sacred volcano, Maasai villagers in 2006 stumbled across a set of curious footprints. Clearly made by human feet, but set in stone, they appeared to be the enigmatic traces of some long-forgotten journey.

Now scientists have teased out some of story behind those ancient prints and the people who, with some help from the volcano, left them behind. It begins while they were walking through the same area as the Maasai—separated by a span of perhaps 10,000 years. Briana Pobiner and her colleagues, in a study recently published in *Scientific Reports*, suggest that a large collection of the tracks, moving in the same direction at the same pace, were made by a female group that was foraging around what was then on or near a lakeshore. This practice of sexually divided gathering behavior is still seen among living hunter-gather peoples, but no bone or tool would ever be able to reveal whether it was practiced by their predecessors so long ago.

Footprints, however, allow us to quite literally retrace their steps.

In the present case, deposits from the volcano were washed down into a mudflat. After the human group walked across and over the area, creating so many prints that scientists have nicknamed one heavily-trod area "the dance floor," the ashy mud hardened in a matter of days or even hours. Then it was buried by a subsequent sediment flow which preserved it until the actions of erosion brought dozens of prints to light—and the excavations of the team unearthed hundreds more.

Fossil footprints capture behavior in a way that bones and stones cannot. The process of preservation happens over a short period of time. So, while bones around a hearth don't necessarily mean that their owners circled the fire at exactly the same time, fossilized footprints can reveal those kinds of immediate interactions.

"It's a snapshot of life at a moment in time, the interaction of individuals, the interaction of humans with animals that's preserved in no other way. So it's a real boon to behavioral ecology," says Matthew Bennett an expert on ancient footprints at Bournemouth University. Bennett, who wasn't involved in the study, has visited the Engare Sero site.

Fossil footprints are analyzed by size and shape, by the orientation of the foot as it created the print, and by the distances between the prints which, combined with other aspects, can be used to estimate how fast the individual walked or ran. One of the ancient travelers who left a trackway heading in a different direction than the larger group appears to have been passing through the area in a hurry, running at better than six miles per hour. The main group, heading to the southwest, moved at a more leisurely pace.

Fossilized footprints were once thought to be extremely rare, "freaks of geological preservation," Bennett notes. An explosion of fossil footprint discoveries over the past decade suggests they aren't so rare after all. Future finds like this would add to a paleoanthropological line of investigation that is delivering different kinds of results than traditional digs of tools or fossils.

---

#### **Q.1 [11594329]**

Which of the following, if true, would most weaken the scientists' claim that the female group was foraging when they left the footprints?

- 1 ☐ Another set of footprints belonging to a deer and a wild goat has been found near the current footprints.
-

2 ☐ Presence of stains of a buffalo's blood where the footprints begin indicates that the hunter-gatherers had already arranged for some of their food when they began walking.

3 ☐ Scientists have found the gendered grouping, leisurely pace, and the presence of a lake in many instances of bathing by hunter-gatherers.

4 ☐ The group did not have only females; it also had two adult males and a juvenile male.



**Solution:**

**Correct Answer : 3**

**Your Answer : 3**

Answer key/Solution

**3 hints at the possibility that the hunter-gatherers were walking to the lake to bathe and were not foraging at the time. 2 states 'some' of their food, so the hunter-gatherers may still require more food. 4 tries to weaken the argument by saying that it wasn't an all-female group. It doesn't however attack the main idea that the group was foraging. 1 doesn't weaken the argument at all. It might strengthen it by showing the deer and a wild goat as potential food.**

Bookmark

FeedBack

**Direction for questions (1-5):** Read the given passage and answer the questions that follow.

While walking in the shadow of their people's sacred volcano, Maasai villagers in 2006 stumbled across a set of curious footprints. Clearly made by human feet, but set in stone, they appeared to be the enigmatic traces of some long-forgotten journey.

Now scientists have teased out some of story behind those ancient prints and the people who, with some help from the volcano, left them behind. It begins while they were walking through the same area as the Maasai—separated by a span of perhaps 10,000 years. Briana Pobiner and her colleagues, in a study recently published in *Scientific Reports*, suggest that a large collection of the tracks, moving in the same direction at the same pace, were made by a female group that was foraging around what was then on or near a lakeshore. This practice of sexually divided gathering behavior is still seen among living hunter-gather peoples, but no bone or tool would ever be able to reveal whether it was practiced by their predecessors so long ago.

Footprints, however, allow us to quite literally retrace their steps.

In the present case, deposits from the volcano were washed down into a mudflat. After the human group walked across and over the area, creating so many prints that scientists have nicknamed one heavily-trod area "the dance floor," the ashy mud hardened in a matter of days or even hours. Then it was buried by a subsequent sediment flow which preserved it until the actions of erosion brought dozens of prints to light—and the excavations of the team unearthed hundreds more.

Fossil footprints capture behavior in a way that bones and stones cannot. The process of preservation happens over a short period of time. So, while bones around a hearth don't necessarily mean that their owners circled the fire at exactly the same time, fossilized footprints can reveal those kinds of immediate interactions.

"It's a snapshot of life at a moment in time, the interaction of individuals, the interaction of humans with animals that's preserved in no other way. So it's a real boon to behavioral ecology," says Matthew Bennett an expert on ancient footprints at Bournemouth University. Bennett, who wasn't involved in the study, has visited the Engare Sero site.

Fossil footprints are analyzed by size and shape, by the orientation of the foot as it created the print, and by the distances between the prints which, combined with other aspects, can be used to estimate how fast the individual walked or ran. One of the ancient travelers who left a trackway heading in a different direction than the larger group appears to have been passing through the area in a hurry, running at better than six miles per hour. The main group, heading to the southwest, moved at a more leisurely pace.

Fossilized footprints were once thought to be extremely rare, "freaks of geological preservation," Bennett notes. An explosion of fossil footprint discoveries over the past decade suggests they aren't so rare after all. Future finds like this would add to a paleoanthropological line of investigation that is delivering different kinds of results than traditional digs of tools or fossils.

---

## Q.2 [11594329]

It can be inferred that the term "dance floor", as used in the passage, refers to:

- 
- 1 ☐ Sediment layer formed near the lakeshore and walked upon by hunter-gatherers.
- 
- 2 ☐ The mudflat where the Maasai villagers walked and discovered footprints under discussion.
-

3 ☐ The area formed thousands of years ago by the hardened deposit of the volcano.

4 ☐ A portion of the area where the footprints under discussion have been found.



**Solution:**

**Correct Answer : 4**

**Your Answer : 4**

 Answer key/Solution

**This is an easy question. Para 5 says that “the scientists have nicknamed one heavily-trod area “the dance floor”, indicating that it is a portion of the larger area having footprints that they have found. That is what makes 4 correct and 2 incorrect. 1 and 3 are factually incorrect as per the passage.**

Bookmark

FeedBack

**Direction for questions (1-5):** Read the given passage and answer the questions that follow.

While walking in the shadow of their people's sacred volcano, Maasai villagers in 2006 stumbled across a set of curious footprints. Clearly made by human feet, but set in stone, they appeared to be the enigmatic traces of some long-forgotten journey.

Now scientists have teased out some of story behind those ancient prints and the people who, with some help from the volcano, left them behind. It begins while they were walking through the same area as the Maasai—separated by a span of perhaps 10,000 years. Briana Pobiner and her colleagues, in a study recently published in *Scientific Reports*, suggest that a large collection of the tracks, moving in the same direction at the same pace, were made by a female group that was foraging around what was then on or near a lakeshore. This practice of sexually divided gathering behavior is still seen among living hunter-gather peoples, but no bone or tool would ever be able to reveal whether it was practiced by their predecessors so long ago.

Footprints, however, allow us to quite literally retrace their steps.

In the present case, deposits from the volcano were washed down into a mudflat. After the human group walked across and over the area, creating so many prints that scientists have nicknamed one heavily-trod area “the dance floor,” the ashy mud hardened in a matter of days or even hours. Then it was buried by a subsequent sediment flow which preserved it until the actions of erosion brought dozens of prints to light—and the excavations of the team unearthed hundreds more.

Fossil footprints capture behavior in a way that bones and stones cannot. The process of preservation happens over a short period of time. So, while bones around a hearth don't necessarily mean that their owners circled the fire at exactly the same time, fossilized footprints can reveal those kinds of immediate interactions.

“It's a snapshot of life at a moment in time, the interaction of individuals, the interaction of humans with animals that's preserved in no other way. So it's a real boon to behavioral ecology,” says Matthew Bennett an expert on ancient footprints at Bournemouth University. Bennett, who wasn't involved in the study, has visited the Engare Sero site.

Fossil footprints are analyzed by size and shape, by the orientation of the foot as it created the print, and by the distances between the prints which, combined with other aspects, can be used to estimate how fast the individual walked or ran. One of the ancient travelers who left a trackway heading in a different direction than the larger group appears to have been passing through the area in a hurry, running at better than six miles per hour. The main group, heading to the southwest, moved at a more leisurely pace.

Fossilized footprints were once thought to be extremely rare, “freaks of geological preservation,” Bennett notes. An explosion of fossil footprint discoveries over the past decade suggests they aren't so rare after all. Future finds like this would add to a paleoanthropological line of investigation that is delivering different kinds of results than traditional digs of tools or fossils.

---

### Q.3 [11594329]

Which of the following facts would support the idea that fossilised human footprints are not “freaks of geological preservation” when compared with bones?

- 1 ☐ As human beings, while interacting with each other, can leave several footprints together in a short span, footprints reveal immediate interactions that bones can't.

2 ☐ As a human being makes millions of footprints in a lifetime, but has only 206 bones, the chances of a footprint getting fossilised are more than that of a bone.

3 ☐ Footprints can give information about anatomy and group dynamics that bones can't.

4 ☐ As the footprints of many primates can be confused with those of humans, it is not unusual to discover them in large numbers when compared with bones.



**Solution:**

**Correct Answer : 2**

**Your Answer : 2**

[🔍 Answer key/Solution](#)

**By calling footprints "freaks of geological observation", the author means that they are rare. 1 and 3 talk about the benefits of footprints, but they don't establish that they aren't rare. 4 gives rise to the possibility that a significant portion of the footprints found in large numbers belong to primates, thus leaving human fossilised footprints to be rare. 2, on the other hand, taking the help of probability, establishes that the likelihood of a footprint fossilising is way more than that of a bone, thus making them more common than bones.**

Bookmark

FeedBack

**Direction for questions (1-5):** Read the given passage and answer the questions that follow.

While walking in the shadow of their people's sacred volcano, Maasai villagers in 2006 stumbled across a set of curious footprints. Clearly made by human feet, but set in stone, they appeared to be the enigmatic traces of some long-forgotten journey.

Now scientists have teased out some of story behind those ancient prints and the people who, with some help from the volcano, left them behind. It begins while they were walking through the same area as the Maasai—separated by a span of perhaps 10,000 years. Briana Pobiner and her colleagues, in a study recently published in *Scientific Reports*, suggest that a large collection of the tracks, moving in the same direction at the same pace, were made by a female group that was foraging around what was then on or near a lakeshore. This practice of sexually divided gathering behavior is still seen among living hunter-gather peoples, but no bone or tool would ever be able to reveal whether it was practiced by their predecessors so long ago.

Footprints, however, allow us to quite literally retrace their steps.

In the present case, deposits from the volcano were washed down into a mudflat. After the human group walked across and over the area, creating so many prints that scientists have nicknamed one heavily-trod area "the dance floor," the ashy mud hardened in a matter of days or even hours. Then it was buried by a subsequent sediment flow which preserved it until the actions of erosion brought dozens of prints to light—and the excavations of the team unearthed hundreds more.

Fossil footprints capture behavior in a way that bones and stones cannot. The process of preservation happens over a short period of time. So, while bones around a hearth don't necessarily mean that their owners circled the fire at exactly the same time, fossilized footprints can reveal those kinds of immediate interactions.

"It's a snapshot of life at a moment in time, the interaction of individuals, the interaction of humans with animals that's preserved in no other way. So it's a real boon to behavioral ecology," says Matthew Bennett an expert on ancient footprints at Bournemouth University. Bennett, who wasn't involved in the study, has visited the Engare Sero site.

Fossil footprints are analyzed by size and shape, by the orientation of the foot as it created the print, and by the distances between the prints which, combined with other aspects, can be used to estimate how fast the individual walked or ran. One of the ancient travelers who left a trackway heading in a different direction than the larger group appears to have been passing through the area in a hurry, running at better than six miles per hour. The main group, heading to the southwest, moved at a more leisurely pace.

Fossilized footprints were once thought to be extremely rare, "freaks of geological preservation," Bennett notes. An explosion of fossil footprint discoveries over the past decade suggests they aren't so rare after all. Future finds like this would add to a paleoanthropological line of investigation that is delivering different kinds of results than traditional digs of tools or fossils.

---

#### **Q.4 [11594329]**

Why does Matthew Bennett refer to fossilised footprints as "a real boon to behavioural ecology"?

- 1 ☐ Because while other evidences only reveal physical traits of humans, footprints reveal important information about their behaviour.



2 ☐ Because they preserve immediate group interactions among humans that are not preserved in any other way.

3 ☐ Because they reveal information about human behaviour that bones and stones can't.

4 ☐ Because they are unique in preserving a moment of the interactions of humans and of humans and animals.



**Solution:**

**Correct Answer : 4**

**Your Answer : 4**

[🔍 Answer key/Solution](#)

**Refer to Matthew Bennett's statement. He doesn't make a specific comparison between fossil footprints and bones and stones. So, 3 is rejected. 1 is not supported by the passage in saying that other evidences reveal only physical traits. 2 and 4 are close. 2 is incomplete in the sense that it doesn't talk about the interaction of humans with animals. Hence, 4.**

Bookmark

FeedBack

**Direction for questions (1-5):** Read the given passage and answer the questions that follow.

While walking in the shadow of their people's sacred volcano, Maasai villagers in 2006 stumbled across a set of curious footprints. Clearly made by human feet, but set in stone, they appeared to be the enigmatic traces of some long-forgotten journey.

Now scientists have teased out some of story behind those ancient prints and the people who, with some help from the volcano, left them behind. It begins while they were walking through the same area as the Maasai—separated by a span of perhaps 10,000 years. Briana Pobiner and her colleagues, in a study recently published in *Scientific Reports*, suggest that a large collection of the tracks, moving in the same direction at the same pace, were made by a female group that was foraging around what was then on or near a lakeshore. This practice of sexually divided gathering behavior is still seen among living hunter-gather peoples, but no bone or tool would ever be able to reveal whether it was practiced by their predecessors so long ago.

Footprints, however, allow us to quite literally retrace their steps.

In the present case, deposits from the volcano were washed down into a mudflat. After the human group walked across and over the area, creating so many prints that scientists have nicknamed one heavily-trod area "the dance floor," the ashy mud hardened in a matter of days or even hours. Then it was buried by a subsequent sediment flow which preserved it until the actions of erosion brought dozens of prints to light—and the excavations of the team unearthed hundreds more.

Fossil footprints capture behavior in a way that bones and stones cannot. The process of preservation happens over a short period of time. So, while bones around a hearth don't necessarily mean that their owners circled the fire at exactly the same time, fossilized footprints can reveal those kinds of immediate interactions.

"It's a snapshot of life at a moment in time, the interaction of individuals, the interaction of humans with animals that's preserved in no other way. So it's a real boon to behavioral ecology," says Matthew Bennett an expert on ancient footprints at Bournemouth University. Bennett, who wasn't involved in the study, has visited the Engare Sero site.

Fossil footprints are analyzed by size and shape, by the orientation of the foot as it created the print, and by the distances between the prints which, combined with other aspects, can be used to estimate how fast the individual walked or ran. One of the ancient travelers who left a trackway heading in a different direction than the larger group appears to have been passing through the area in a hurry, running at better than six miles per hour. The main group, heading to the southwest, moved at a more leisurely pace.

Fossilized footprints were once thought to be extremely rare, "freaks of geological preservation," Bennett notes. An explosion of fossil footprint discoveries over the past decade suggests they aren't so rare after all. Future finds like this would add to a paleoanthropological line of investigation that is delivering different kinds of results than traditional digs of tools or fossils.

---

#### **Q.5 [11594329]**

"The main group, heading to the southwest, moved at a more leisurely pace." According to the passage, which of the following may not have helped the scientists in determining the pace of the group?

---

1 ☐ The size and shape of the foot joint

2 ☐ Orientation of the foot while forming the print

---

3 ☐ The magnitude of the footprint

4 ☐ Distances between the footprints



**Solution:**

**Correct Answer : 1**

**Your Answer : 1**

**This is a direct question. 2, 3, and 4 have been mentioned in para 7. 1 talks about foot joints. This information may not be available unless fossils of the foragers are found.**

 Answer key/Solution

Bookmark

FeedBack

**Direction for questions (6-10):** Read the given passage and answer the questions that follow.

One day you wake early, walk into town, and a large advertising billboard attracts your attention. The image on the poster is mysterious but appears to depict a ceremony in a forest. *You didn't choose to come into this world*, says the text across the middle, *but you can choose how you leave*. To the bottom right of the poster is a company name, *Designer Endings*, and contact details. You call the number and confirm that what is being offered is indeed the chance to die in just the way you would like.

The description is fiction – there aren't currently any designer euthanasia organisations or companies – but it's worth wondering why it isn't yet fact. Many people no longer hold the kind of religious views according to which our time of death is not allowed to be of our choosing. There are an increasing number of countries where physician-assisted suicide and euthanasia is permitted in a medical context. But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds? Why don't we have the right to end our lives not just when we want to but to also do so in style?

The word 'euthanasia' comes from the Greek for a 'good death'. However, this idea of a positively good death can easily be lost in contemporary debates over euthanasia where the emphasis is typically on the rights of a person in very dire health. I will touch on the familiar questions of medical ethics in what follows. But my larger goal is to liberate discussion of the right to die from the medical settings in which it is now most familiar. To do so allows us to think about euthanasia – a good death – in less bleak circumstances.

We don't ever, strictly speaking, get to experience death, as death is the end of experience. As the Austrian philosopher Ludwig Wittgenstein wrote, death is not an event in life. But there's no reason why death couldn't be an event in the sense that a wedding is an event. You could decide the date and make extensive arrangements for the location and the nature of the ceremony. You could draw up a guest list. You might plan for friends to read farewells and lines of verse. You could give a speech of your own or, for the karaoke-inclined, sing 'My Way'.

You might not have many family or friends – or not want them there in any case. No doubt a company such as my fictitious 'Designer Endings' could provide staff for the ceremony you have in mind. This could cause controversy: no doubt some people's visions for their death ceremony would be bacchanalian and orgiastic. You can imagine the many corny ideas about how to go not with a whimper but with a bang. People might look for inspiration from pagan festivals such as Burning Man in Nevada. Others would no doubt look to film and literature in designing the stage for their exit. Tastes, especially once allowed to flourish, would vary: we differ in how we want to leave as much as in how we want to live. Some want the intensity of chemsex, others want the calm of a cup of tea. The very wealthy might try to hire singers such as Lana Del Rey for their goodbye ceremony. Others might opt for a death metal band.[...]

---

### Q.6 [11594329]

What is the purpose of the author behind writing the first paragraph?

- 
- 1 ☐ To use the imagery of a designer euthanasia organisation to begin a discussion on euthanasia as a way of dying.
- 
- 2 ☐ To paint the image of a designer euthanasia organisation to build his argument of people's right to decide the way they wish to die.
- 
- 3 ☐ To capture the attention of the reader with an image of an imaginary designer euthanasia organisation.
-

4 ○ To make the reader visualise how a designer euthanasia organisation would function and argue that they would allow people to choose the manner of their death.



**Solution:**

**Correct Answer : 2**

**Your Answer : 2**

 Answer key/Solution

In the passage, the author wishes to “liberate discussion of the right to die from the medical settings in which it is now most familiar”. The image of Designer Endings painted by him is to raise the question that why such organisations shouldn’t be a reality. In other words, why shouldn’t people be able to choose the way they wish to die. Hence, 2. 1 is rejected as the author’s purpose is not to begin a general discussion on Euthanasia. 3 is superficial in that it doesn’t connect the first paragraph to the flow of argument in the passage. 4 distorts the author’s argument by its choice of words ‘manner of death’ which has a legal connotation different from ‘the way a person wishes to die’.

Bookmark

FeedBack

**Direction for questions (6-10):** Read the given passage and answer the questions that follow.

One day you wake early, walk into town, and a large advertising billboard attracts your attention. The image on the poster is mysterious but appears to depict a ceremony in a forest. *You didn't choose to come into this world*, says the text across the middle, *but you can choose how you leave*. To the bottom right of the poster is a company name, *Designer Endings*, and contact details. You call the number and confirm that what is being offered is indeed the chance to die in just the way you would like.

The description is fiction – there aren't currently any designer euthanasia organisations or companies – but it's worth wondering why it isn't yet fact. Many people no longer hold the kind of religious views according to which our time of death is not allowed to be of our choosing. There are an increasing number of countries where physician-assisted suicide and euthanasia is permitted in a medical context. But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds? Why don't we have the right to end our lives not just when we want to but to also do so in style?

The word 'euthanasia' comes from the Greek for a 'good death'. However, this idea of a positively good death can easily be lost in contemporary debates over euthanasia where the emphasis is typically on the rights of a person in very dire health. I will touch on the familiar questions of medical ethics in what follows. But my larger goal is to liberate discussion of the right to die from the medical settings in which it is now most familiar. To do so allows us to think about euthanasia – a good death – in less bleak circumstances.

We don't ever, strictly speaking, get to experience death, as death is the end of experience. As the Austrian philosopher Ludwig Wittgenstein wrote, death is not an event in life. But there's no reason why death couldn't be an event in the sense that a wedding is an event. You could decide the date and make extensive arrangements for the location and the nature of the ceremony. You could draw up a guest list. You might plan for friends to read farewells and lines of verse. You could give a speech of your own or, for the karaoke-inclined, sing 'My Way'.

You might not have many family or friends – or not want them there in any case. No doubt a company such as my fictitious 'Designer Endings' could provide staff for the ceremony you have in mind. This could cause controversy: no doubt some people's visions for their death ceremony would be bacchanalian and orgiastic. You can imagine the many corny ideas about how to go not with a whimper but with a bang. People might look for inspiration from pagan festivals such as Burning Man in Nevada. Others would no doubt look to film and literature in designing the stage for their exit. Tastes, especially once allowed to flourish, would vary: we differ in how we want to leave as much as in how we want to live. Some want the intensity of chemsex, others want the calm of a cup of tea. The very wealthy might try to hire singers such as Lana Del Rey for their goodbye ceremony. Others might opt for a death metal band.[...]

---

### Q.7 [11594329]

Which of the following is consistent with the first two sentences of Para 4?

- 1 ☐ Death is so natural and inevitable that it doesn't qualify to be called an 'event'.
- 2 ☐ Death is not an event, but a process that keeps going on through a person's life.
- 3 ☐ Strictly speaking, a person cannot both experience death and live to recount it to others at the same time.
- 4 ☐ For a person, the end of life is a pre-requisite for death to happen.



**Solution:**

**Correct Answer : 4**

**Your Answer : 4**

 Answer key/Solution

**Refer this phrase coupled with the sentence prior to it in Para 4. Ludwig**

**Wittgenstein wants to say that death can't happen in a person's lifetime. This helps us in eliminating 1 and 2.**

**Between 3 and 4, 3 is rejected because it admits the possibility of a person experiencing death, by saying that one can either experience it or live but can't do both. However, the opening line of para 4 says that "we don't ever get to experience death". 4 is consistent with the idea conveyed by the sentences that death marks the end of experience, something that happens when we are alive, and thus can't happen in a person's lifetime.**

Bookmark

FeedBack

**Direction for questions (6-10):** Read the given passage and answer the questions that follow.

One day you wake early, walk into town, and a large advertising billboard attracts your attention. The image on the poster is mysterious but appears to depict a ceremony in a forest. *You didn't choose to come into this world* , says the text across the middle, *but you can choose how you leave* . To the bottom right of the poster is a company name, *Designer Endings* , and contact details. You call the number and confirm that what is being offered is indeed the chance to die in just the way you would like.

The description is fiction – there aren't currently any designer euthanasia organisations or companies – but it's worth wondering why it isn't yet fact. Many people no longer hold the kind of religious views according to which our time of death is not allowed to be of our choosing. There are an increasing number of countries where physician-assisted suicide and euthanasia is permitted in a medical context. But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds? Why don't we have the right to end our lives not just when we want to but to also do so in style?

The word 'euthanasia' comes from the Greek for a 'good death'. However, this idea of a positively good death can easily be lost in contemporary debates over euthanasia where the emphasis is typically on the rights of a person in very dire health. I will touch on the familiar questions of medical ethics in what follows. But my larger goal is to liberate discussion of the right to die from the medical settings in which it is now most familiar. To do so allows us to think about euthanasia – a good death – in less bleak circumstances.

We don't ever, strictly speaking, get to experience death, as death is the end of experience. As the Austrian philosopher Ludwig Wittgenstein wrote, death is not an event in life. But there's no reason why death couldn't be an event in the sense that a wedding is an event. You could decide the date and make extensive arrangements for the location and the nature of the ceremony. You could draw up a guest list. You might plan for friends to read farewells and lines of verse. You could give a speech of your own or, for the karaoke-inclined, sing 'My Way'.

You might not have many family or friends – or not want them there in any case. No doubt a company such as my fictitious 'Designer Endings' could provide staff for the ceremony you have in mind. This could cause controversy: no doubt some people's visions for their death ceremony would be bacchanalian and orgiastic. You can imagine the many corny ideas about how to go not with a whimper but with a bang. People might look for inspiration from pagan festivals such as Burning Man in Nevada. Others would no doubt look to film and literature in designing the stage for their exit. Tastes, especially once allowed to flourish, would vary: we differ in how we want to leave as much as in how we want to live. Some want the intensity of chemsex, others want the calm of a cup of tea. The very wealthy might try to hire singers such as Lana Del Rey for their goodbye ceremony. Others might opt for a death metal band.[...]

---

**Q.8 [11594329]**

The author mentions all of the following from which an inspiration for one's death ceremony could be taken EXCEPT:

---

1 ☐ Literature

---

2 ☐ Pagan festivals

---

3 ☐ Music

---



---

4 ○ Films

---



**Solution:**

**Correct Answer : 3**

**Your Answer : 3**

 Answer key/Solution

**Refer the last paragraph. It mentions 1, 2 and 4. The singer Lana Del Ray and a death metal band have been talked about as part of who the people want to hire for their death ceremony, and not as a source of inspiration. Hence, 3.**

Bookmark

FeedBack

**Direction for questions (6-10):** Read the given passage and answer the questions that follow.

One day you wake early, walk into town, and a large advertising billboard attracts your attention. The image on the poster is mysterious but appears to depict a ceremony in a forest. *You didn't choose to come into this world*, says the text across the middle, *but you can choose how you leave*. To the bottom right of the poster is a company name, *Designer Endings*, and contact details. You call the number and confirm that what is being offered is indeed the chance to die in just the way you would like.

The description is fiction – there aren't currently any designer euthanasia organisations or companies – but it's worth wondering why it isn't yet fact. Many people no longer hold the kind of religious views according to which our time of death is not allowed to be of our choosing. There are an increasing number of countries where physician-assisted suicide and euthanasia is permitted in a medical context. But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds? Why don't we have the right to end our lives not just when we want to but to also do so in style?

The word 'euthanasia' comes from the Greek for a 'good death'. However, this idea of a positively good death can easily be lost in contemporary debates over euthanasia where the emphasis is typically on the rights of a person in very dire health. I will touch on the familiar questions of medical ethics in what follows. But my larger goal is to liberate discussion of the right to die from the medical settings in which it is now most familiar. To do so allows us to think about euthanasia – a good death – in less bleak circumstances.

We don't ever, strictly speaking, get to experience death, as death is the end of experience. As the Austrian philosopher Ludwig Wittgenstein wrote, death is not an event in life. But there's no reason why death couldn't be an event in the sense that a wedding is an event. You could decide the date and make extensive arrangements for the location and the nature of the ceremony. You could draw up a guest list. You might plan for friends to read farewells and lines of verse. You could give a speech of your own or, for the karaoke-inclined, sing 'My Way'.

You might not have many family or friends – or not want them there in any case. No doubt a company such as my fictitious 'Designer Endings' could provide staff for the ceremony you have in mind. This could cause controversy: no doubt some people's visions for their death ceremony would be bacchanalian and orgiastic. You can imagine the many corny ideas about how to go not with a whimper but with a bang. People might look for inspiration from pagan festivals such as Burning Man in Nevada. Others would no doubt look to film and literature in designing the stage for their exit. Tastes, especially once allowed to flourish, would vary: we differ in how we want to leave as much as in how we want to live. Some want the intensity of chemsex, others want the calm of a cup of tea. The very wealthy might try to hire singers such as Lana Del Rey for their goodbye ceremony. Others might opt for a death metal band.[...]

---

**Q.9 [11594329]**

Which one of the following sequences best captures the flow of the arguments in the passage?

- 
- 1 ☐ Designer euthanasia organisations—right to choose one's ending—euthanasia beyond the medical context—death like an event like wedding—different plans for the death ceremony
- 
- 2 ☐ Designer euthanasia organisations—right to die—euthanasia in the medical context—death like an event like wedding—different plans for different people to celebrate the event
-

3 ☐ Designer Endings—euthanasia—going beyond the medical context—death as an experience—plans to enjoy the experience

4 ☐ Designer Endings—fiction, not fact—circumstances of euthanasia—death like a wedding—plans for the ceremony



**Solution:**

**Correct Answer : 1**

**Your Answer : 1**

 Answer key/Solution

**Designer Endings has only been presented as an example of designer euthanasia organisations in Para 1 to further come to the larger point of the right to choose the way one wishes to die in Para 2. In Para 3 the author stresses that her larger goal is to liberate the discussion of Euthanasia from the medical context. Para 4 says that death can be treated like an event for which one plans a ceremony and Para 5 gives varied examples to state that different people could go for different things according to how they wish to die. Hence, 1.**

Bookmark

FeedBack

**Direction for questions (6-10):** Read the given passage and answer the questions that follow.

One day you wake early, walk into town, and a large advertising billboard attracts your attention. The image on the poster is mysterious but appears to depict a ceremony in a forest. *You didn't choose to come into this world* , says the text across the middle, *but you can choose how you leave* . To the bottom right of the poster is a company name, *Designer Endings* , and contact details. You call the number and confirm that what is being offered is indeed the chance to die in just the way you would like.

The description is fiction – there aren't currently any designer euthanasia organisations or companies – but it's worth wondering why it isn't yet fact. Many people no longer hold the kind of religious views according to which our time of death is not allowed to be of our choosing. There are an increasing number of countries where physician-assisted suicide and euthanasia is permitted in a medical context. But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds? Why don't we have the right to end our lives not just when we want to but to also do so in style?

The word 'euthanasia' comes from the Greek for a 'good death'. However, this idea of a positively good death can easily be lost in contemporary debates over euthanasia where the emphasis is typically on the rights of a person in very dire health. I will touch on the familiar questions of medical ethics in what follows. But my larger goal is to liberate discussion of the right to die from the medical settings in which it is now most familiar. To do so allows us to think about euthanasia – a good death – in less bleak circumstances.

We don't ever, strictly speaking, get to experience death, as death is the end of experience. As the Austrian philosopher Ludwig Wittgenstein wrote, death is not an event in life. But there's no reason why death couldn't be an event in the sense that a wedding is an event. You could decide the date and make extensive arrangements for the location and the nature of the ceremony. You could draw up a guest list. You might plan for friends to read farewells and lines of verse. You could give a speech of your own or, for the karaoke-inclined, sing 'My Way'.

You might not have many family or friends – or not want them there in any case. No doubt a company such as my fictitious 'Designer Endings' could provide staff for the ceremony you have in mind. This could cause controversy: no doubt some people's visions for their death ceremony would be bacchanalian and orgiastic. You can imagine the many corny ideas about how to go not with a whimper but with a bang. People might look for inspiration from pagan festivals such as Burning Man in Nevada. Others would no doubt look to film and literature in designing the stage for their exit. Tastes, especially once allowed to flourish, would vary: we differ in how we want to leave as much as in how we want to live. Some want the intensity of chemsex, others want the calm of a cup of tea. The very wealthy might try to hire singers such as Lana Del Rey for their goodbye ceremony. Others might opt for a death metal band.[...]

---

#### **Q.10 [11594329]**

"But why think that the right to choose our ending is given legitimacy only, if at all, on health grounds?" People who oppose giving legitimacy to this right beyond health grounds are LEAST likely to cite which of the following?

- 
- 1 ☐ Most of the choices of a person in their life aren't truly their own and are affected by social conditioning.
- 
- 2 ☐ In some cases that go beyond the health grounds, it can be difficult to objectively determine the choice of a person in the matter of death.
-

3 ☐ A person must be given the freedom to do what they wish with their life in any circumstance.

4 ☐ Extending such a right beyond health grounds is highly likely to infringe upon the rights of dependants related to the individual making the choice to die.



**Solution:**

**Correct Answer : 3**

**Your Answer : 3**

 Answer key/Solution

**This is an easy question if one properly understands the question stem. A person who opposes extending the right to die beyond health grounds, will certainly not state 3, as 3 would go in favour of extending the right beyond health grounds. 1 is rejected because it goes on to hint to a flaw in the concept of 'choice' in this right to choose an ending, indicating that extending it may not be the right thing to do.**

Bookmark

FeedBack

**Direction for questions (11-14):** Read the given passage and answer the questions that follow.

Why do I find myself flicking through Twitter in the evening, alternately looking at tables of COVID-19 death rates and bidet memes? How can I find something so scary one minute so funny the next? And what is it about this crisis in particular that has spawned such an industrial output of humor? Is this some kind of hysteria?

The *why* of humor has long been a mystery. For ancient Greek philosophers such as Plato and Aristotle, it was a dangerous phenomenon, something that had the potential to undermine authority and the good order of society. Laughing at those in charge was a serious issue then (and still remains the case in more autocratic parts of the world). Today, in democratic societies, we know the importance of mocking those with power, and we celebrate it, on *Saturday Night Live* in the United States and *Have I Got News for You* in Britain. In a typically provocative essay for *Vanity Fair*, the late Christopher Hitchens expanded on the link between power and laughter by arguing that humor was “part of the armor-plate” of humanity, protecting us from life’s grim reality—that, ultimately, death wins out. How’s that for an LOL. We joke because if we didn’t, we’d cry.

Tim Minchin, the British Australian comedian, actor, and composer, opined “We don’t laugh at scary things because we don’t understand their seriousness,” he told me. “We laugh *because* they’re serious. Making jokes gives us a sense of power over the threat.” In fact, Minchin rejected the notion that joking about serious issues was somehow inappropriate.

That said, humor is more than thumbing our noses at power. The late Robert R. Provine, a professor at the University of Maryland who became one of the world’s leading experts on laughter, came to the conclusion, after a decade of studying how and why people laugh, that it was actually a way of bonding. “Most people think of laughter as a simple response to comedy, or a cathartic mood-lifter,” he wrote. “Instead ... I concluded that laughter is primarily a social vocalization that binds people together.” We laugh *with* others to give us “the pleasure of acceptance,” Provine argued—to show that we are the same. Simon Stuart, a clinical psychologist in Britain, told me that, from an evolutionary perspective, laughter is rooted in this ability to connect. It is a shared social signal.

We laugh, then, to take back control and to connect—two things we have lost in our fight against the coronavirus. Not only are we unable to stop the tidal wave of infection washing over us, but we are being forced to endure this reality alone in our own home. Powerless and isolated, we’re finding that the joke is now our most reliable shield—and our warmest comfort blanket.

#### Q.11 [11594329]

What does the author imply when they say, “We joke because if we didn’t, we’d cry.”

- 1 ☐ For many people, joking is a mechanism to vent their negative feelings about life and death.
- 2 ☐ Joking acts a defence mechanism for us against the more powerful forces, some of which are beyond our control.
- 3 ☐ If we didn’t joke, the more powerful people and entities in our life would make us cry.
- 4 ☐ Joking helps us in escaping unhurt from the more powerful forces, some of which are beyond our control.



**Solution:****Correct Answer : 2****Your Answer : 3**[🔍 Answer key/Solution](#)

**The author makes this statement after quoting Christopher Hitchens who calls humour a part of the armour plate of humanity, something that protects or defends us from the harsh reality that death, which is beyond our control, ultimately wins out.**

[Bookmark](#)[FeedBack](#)

**Direction for questions (11-14):** Read the given passage and answer the questions that follow.

Why do I find myself flicking through Twitter in the evening, alternately looking at tables of COVID-19 death rates and bidet memes? How can I find something so scary one minute so funny the next? And what is it about this crisis in particular that has spawned such an industrial output of humor? Is this some kind of hysteria?

The *why* of humor has long been a mystery. For ancient Greek philosophers such as Plato and Aristotle, it was a dangerous phenomenon, something that had the potential to undermine authority and the good order of society. Laughing at those in charge was a serious issue then (and still remains the case in more autocratic parts of the world). Today, in democratic societies, we know the importance of mocking those with power, and we celebrate it, on *Saturday Night Live* in the United States and *Have I Got News for You* in Britain. In a typically provocative essay for *Vanity Fair*, the late Christopher Hitchens expanded on the link between power and laughter by arguing that humor was “part of the armor-plate” of humanity, protecting us from life’s grim reality—that, ultimately, death wins out. How’s that for an LOL. We joke because if we didn’t, we’d cry.

Tim Minchin, the British Australian comedian, actor, and composer, opined “We don’t laugh at scary things because we don’t understand their seriousness,” he told me. “We laugh *because* they’re serious. Making jokes gives us a sense of power over the threat.” In fact, Minchin rejected the notion that joking about serious issues was somehow inappropriate.

That said, humor is more than thumbing our noses at power. The late Robert R. Provine, a professor at the University of Maryland who became one of the world’s leading experts on laughter, came to the conclusion, after a decade of studying how and why people laugh, that it was actually a way of bonding. “Most people think of laughter as a simple response to comedy, or a cathartic mood-lifter,” he wrote. “Instead ... I concluded that laughter is primarily a social vocalization that binds people together.” We laugh *with* others to give us “the pleasure of acceptance,” Provine argued—to show that we are the same. Simon Stuart, a clinical psychologist in Britain, told me that, from an evolutionary perspective, laughter is rooted in this ability to connect. It is a shared social signal.

We laugh, then, to take back control and to connect—two things we have lost in our fight against the coronavirus. Not only are we unable to stop the tidal wave of infection washing over us, but we are being forced to endure this reality alone in our own home. Powerless and isolated, we’re finding that the joke is now our most reliable shield—and our warmest comfort blanket.

### **Q.12 [11594329]**

According to Robert R. Provine, what is the function served by laughter?

- 1 ☐ It serves as a natural response to humour.
- 2 ☐ It is a shared experience that binds people together.
- 3 ☐ It gives us the pleasure of acceptance in our own eyes.
- 4 ☐ It helps us to express our emotions such that we feel better.



**Solution:**

**Correct Answer : 2**

**Your Answer : 2**

**Refer the part "Most people think...together." This is Robert R. Provine's view on why people laugh and it makes 2 the correct answer choice. 1 and 4 reflect the thinking of "most people" not Robert R Provine. 3 is distorted because of the phrase 'in our own eyes'.**

 Answer key/Solution

Bookmark

FeedBack



**Direction for questions (11-14):** Read the given passage and answer the questions that follow.

Why do I find myself flicking through Twitter in the evening, alternately looking at tables of COVID-19 death rates and bidet memes? How can I find something so scary one minute so funny the next? And what is it about this crisis in particular that has spawned such an industrial output of humor? Is this some kind of hysteria?

The *why* of humor has long been a mystery. For ancient Greek philosophers such as Plato and Aristotle, it was a dangerous phenomenon, something that had the potential to undermine authority and the good order of society. Laughing at those in charge was a serious issue then (and still remains the case in more autocratic parts of the world). Today, in democratic societies, we know the importance of mocking those with power, and we celebrate it, on *Saturday Night Live* in the United States and *Have I Got News for You* in Britain. In a typically provocative essay for *Vanity Fair*, the late Christopher Hitchens expanded on the link between power and laughter by arguing that humor was “part of the armor-plate” of humanity, protecting us from life’s grim reality—that, ultimately, death wins out. How’s that for an LOL. We joke because if we didn’t, we’d cry.

Tim Minchin, the British Australian comedian, actor, and composer, opined “We don’t laugh at scary things because we don’t understand their seriousness,” he told me. “We laugh *because* they’re serious. Making jokes gives us a sense of power over the threat.” In fact, Minchin rejected the notion that joking about serious issues was somehow inappropriate.

That said, humor is more than thumbing our noses at power. The late Robert R. Provine, a professor at the University of Maryland who became one of the world’s leading experts on laughter, came to the conclusion, after a decade of studying how and why people laugh, that it was actually a way of bonding. “Most people think of laughter as a simple response to comedy, or a cathartic mood-lifter,” he wrote. “Instead ... I concluded that laughter is primarily a social vocalization that binds people together.” We laugh *with* others to give us “the pleasure of acceptance,” Provine argued—to show that we are the same. Simon Stuart, a clinical psychologist in Britain, told me that, from an evolutionary perspective, laughter is rooted in this ability to connect. It is a shared social signal.

We laugh, then, to take back control and to connect—two things we have lost in our fight against the coronavirus. Not only are we unable to stop the tidal wave of infection washing over us, but we are being forced to endure this reality alone in our own home. Powerless and isolated, we’re finding that the joke is now our most reliable shield—and our warmest comfort blanket.

---

**Q.13 [11594329]**

Which of the following, if true, would most weaken Tim Minchin’s argument that joking about serious issues is not inappropriate?

- 1 ☐ How any subject is treated varies widely depending upon the comedian’s sensitivity.
  - 2 ☐ Many established comedians hold views opposite to those of Tim Minchin and strongly believe that certain issues are out of the bounds of humour.
  - 3 ☐ Joking on serious issues such as domestic violence, child abuse, etc. greatly normalises and furthers the harm to their victims.
  - 4 ☐ Joking on many serious issues like Nazism, racism, can cause one to face severe legal action.
-



**Solution:**

**Correct Answer : 3**

**Your Answer : 3**

 Answer key/Solution

**3, by presenting a strong demerit of joking about serious issues weakens Tim Minchin's argument. 2 is an example of a logical fallacy called 'appeal to authority'. It proceeds by saying that because an established authority believes or says something, what it believes or says must be right. So, 2 doesn't weaken the argument. 4 simply talks about the possibility of a legal action; it doesn't discuss the appropriateness or inappropriateness of joking on the serious issues. 1 implies that joking about a serious issue may be appropriate at the hands of a relatively sensitive comedian, but inappropriate at the hands of a relatively insensitive one. By bringing this subjectivity, it fails to weaken the argument.**

Bookmark

FeedBack

**Direction for questions (11-14):** Read the given passage and answer the questions that follow.

Why do I find myself flicking through Twitter in the evening, alternately looking at tables of COVID-19 death rates and bidet memes? How can I find something so scary one minute so funny the next? And what is it about this crisis in particular that has spawned such an industrial output of humor? Is this some kind of hysteria?

The *why* of humor has long been a mystery. For ancient Greek philosophers such as Plato and Aristotle, it was a dangerous phenomenon, something that had the potential to undermine authority and the good order of society. Laughing at those in charge was a serious issue then (and still remains the case in more autocratic parts of the world). Today, in democratic societies, we know the importance of mocking those with power, and we celebrate it, on *Saturday Night Live* in the United States and *Have I Got News for You* in Britain. In a typically provocative essay for *Vanity Fair*, the late Christopher Hitchens expanded on the link between power and laughter by arguing that humor was “part of the armor-plate” of humanity, protecting us from life’s grim reality—that, ultimately, death wins out. How’s that for an LOL. We joke because if we didn’t, we’d cry.

Tim Minchin, the British Australian comedian, actor, and composer, opined “We don’t laugh at scary things because we don’t understand their seriousness,” he told me. “We laugh *because* they’re serious. Making jokes gives us a sense of power over the threat.” In fact, Minchin rejected the notion that joking about serious issues was somehow inappropriate.

That said, humor is more than thumbing our noses at power. The late Robert R. Provine, a professor at the University of Maryland who became one of the world’s leading experts on laughter, came to the conclusion, after a decade of studying how and why people laugh, that it was actually a way of bonding. “Most people think of laughter as a simple response to comedy, or a cathartic mood-lifter,” he wrote. “Instead ... I concluded that laughter is primarily a social vocalization that binds people together.” We laugh *with* others to give us “the pleasure of acceptance,” Provine argued—to show that we are the same. Simon Stuart, a clinical psychologist in Britain, told me that, from an evolutionary perspective, laughter is rooted in this ability to connect. It is a shared social signal.

We laugh, then, to take back control and to connect—two things we have lost in our fight against the coronavirus. Not only are we unable to stop the tidal wave of infection washing over us, but we are being forced to endure this reality alone in our own home. Powerless and isolated, we’re finding that the joke is now our most reliable shield—and our warmest comfort blanket.

---

**Q.14 [11594329]**

Tim Minchin says that we laugh at a serious issue because it is serious. This action of ours is most similar to which of the following?

- 1 ☐ A boy laughing at a serious scene during a movie because he is imagining its spoof in his mind.
  - 2 ☐ A trekker happily taking on a trekking challenge because she finds it challenging.
  - 3 ☐ A disaster victim seeking regular psychotherapy to cope with her emotional trauma.
  - 4 ☐ A woman joking that the upside of her chemotherapy is that she doesn’t have to worry about a haircut anymore.
-



**Solution:**

**Correct Answer : 4**

**Your Answer : 4**

 Answer key/Solution

Tim Minchin says that we laugh at serious things because that gives us a sense of power over the threat. 4 clearly shows a joke aimed at feeling less helpless when faced with a difficult situation. The situation in 1 doesn't represent a threat, and the reaction isn't a mechanism to acquire a sense of power over it. 2 doesn't involve use of any coping mechanism when faced with a difficult situation. 3 talks about overcoming a problem through a systematic treatment-based approach, and not relying on a mechanism to adapt to the problem.

Bookmark

FeedBack

**Direction for questions (15-18):** Read the given passage and answer the questions that follow.

Trump constantly torques up the tribal friction and cruelty on Twitter and Facebook, even as the sites Facebook refine their systems to ratchet up rage. It is amazing that a septuagenarian became the greatest exploiter of social media. Trump and Twitter were a match made in hell.

The Wall Street Journal had a chilling report a few days ago that Facebook's own research in 2018 revealed that "our algorithms exploit the human brain's attraction to divisiveness. If left unchecked," Facebook would feed users "more and more divisive content in an effort to gain user attention & increase time on the platform."

Mark Zuckerberg shelved the research.

"The shareholders of Facebook decided, 'If you can increase my stock tenfold, we can put up with a lot of rage and hate,'" says Scott Galloway, professor of marketing at New York University's Stern School of Business. "The rise of social media will be seen as directly correlating to the decline of Western civilization."

Jack Dorsey, CEO of Twitter, made some mild moves against the president who has been spewing lies and inciting violence on Twitter for years. He added footnotes clarifying false Trump tweets about mail-in ballots and put a warning label on the president's tweet about the Minneapolis riots that echo the language of a Miami police chief in 1967 and segregationist George Wallace: "When the looting starts, the shooting starts."

Zuckerberg, on the other hand, went on Fox to report that he was happy to continue enabling the Emperor of Chaos, noting that he did not think Facebook should be "the arbiter of truth of everything that people say online." It was a sickening display that made even some loyal Facebook staffers queasy.

Trump, furious that Dorsey would attempt to rein him in on the very platform that catapulted him into the White House, immediately decided to try to rein in Dorsey. He signed an executive order that might strip liability protection from social media sites, which would mean they would have to more assiduously police false and defamatory posts. Now that social media sites are behemoths, Galloway thinks that the removal of the Communications Decency Act makes a lot of sense even if the president is trying to do it for the wrong reasons.

"It's the mother of all cutting-off-your-nose-to-spite-your-face moves," says Galloway.

The president wants to say things on Twitter that he will not be allowed to say if he exerts this control over Twitter. In a sense, it's Trump versus his own brain. If Twitter can be sued for what people say on it, how can Trump continue to torment? Wouldn't thousands of his own tweets have to be deleted?

"He'd be the equivalent of a slippery floor at a store that sells equipment for hip replacements," says Galloway, who also posits that, in our hyper-politicized world, this will turn Twitter into a Democratic site and Facebook into a Republican one.

Nancy Pelosi, whose district encompasses Twitter, said that it did little good for Dorsey to put up a few fact-checks while letting Trump's rants about murder and other "misrepresentations" stay up.

C'mon, Jack. Make @realDonaldTrump melt to help end our meltdown.

**Q.15 [11594329]**

Which of the following, if true, would cast the most doubt on the reason indicated behind Zuckerberg's shelving the research?

- 1 ☐ The research did not extend any concrete reason behind the human brain's attraction to divisiveness.
- 2 ☐ The data used in the research belonged to election times in the sample countries, when divisive content attracts unusually high attention of people.
- 3 ☐ As Facebook is present in a large number of countries, the sample size for the research was extremely large.
- 4 ☐ That year, Zuckerberg diverted funds from all those good research projects whose recommendations could reduce the profits of Facebook to all those good projects whose recommendations could increase them.

**Solution:**

**Correct Answer : 2**

 Answer key/Solution

The reason indicated in Para 4 for Zuckerberg's action is giving primacy to the monetary interests of the shareholders over not spreading hate and rage. 1

doesn't cast a doubt because the research wasn't supposed to extend reasons behind human brain's attraction to divisiveness; it wasn't a neurological research. It was just supposed to find out the role of Facebook's algorithm in exploiting this attraction. 2 weakens the reason cited as it points out to a flaw in the research. This flaw (biased data) could be the reason behind Zuckerberg shelving the research. 3 is an advantage and not a flaw. 4 is a tempting option, but it is partially in line with the reason indicated in Para 4. It shows giving primacy to profits, i.e. the monetary interests of the shareholders.

Bookmark

FeedBack

**Direction for questions (15-18):** Read the given passage and answer the questions that follow.

Trump constantly torques up the tribal friction and cruelty on Twitter and Facebook, even as the sites Facebook refine their systems to ratchet up rage. It is amazing that a septuagenarian became the greatest exploiter of social media. Trump and Twitter were a match made in hell.

The Wall Street Journal had a chilling report a few days ago that Facebook's own research in 2018 revealed that "our algorithms exploit the human brain's attraction to divisiveness. If left unchecked," Facebook would feed users "more and more divisive content in an effort to gain user attention & increase time on the platform."

Mark Zuckerberg shelved the research.

"The shareholders of Facebook decided, 'If you can increase my stock tenfold, we can put up with a lot of rage and hate,'" says Scott Galloway, professor of marketing at New York University's Stern School of Business. "The rise of social media will be seen as directly correlating to the decline of Western civilization."

Jack Dorsey, CEO of Twitter, made some mild moves against the president who has been spewing lies and inciting violence on Twitter for years. He added footnotes clarifying false Trump tweets about mail-in ballots and put a warning label on the president's tweet about the Minneapolis riots that echo the language of a Miami police chief in 1967 and segregationist George Wallace: "When the looting starts, the shooting starts."

Zuckerberg, on the other hand, went on Fox to report that he was happy to continue enabling the Emperor of Chaos, noting that he did not think Facebook should be "the arbiter of truth of everything that people say online." It was a sickening display that made even some loyal Facebook staffers queasy.

Trump, furious that Dorsey would attempt to rein him in on the very platform that catapulted him into the White House, immediately decided to try to rein in Dorsey. He signed an executive order that might strip liability protection from social media sites, which would mean they would have to more assiduously police false and defamatory posts. Now that social media sites are behemoths, Galloway thinks that the removal of the Communications Decency Act makes a lot of sense even if the president is trying to do it for the wrong reasons.

"It's the mother of all cutting-off-your-nose-to-spite-your-face moves," says Galloway.

The president wants to say things on Twitter that he will not be allowed to say if he exerts this control over Twitter. In a sense, it's Trump versus his own brain. If Twitter can be sued for what people say on it, how can Trump continue to torment? Wouldn't thousands of his own tweets have to be deleted?

"He'd be the equivalent of a slippery floor at a store that sells equipment for hip replacements," says Galloway, who also posits that, in our hyper-politicized world, this will turn Twitter into a Democratic site and Facebook into a Republican one.

Nancy Pelosi, whose district encompasses Twitter, said that it did little good for Dorsey to put up a few fact-checks while letting Trump's rants about murder and other "misrepresentations" stay up.

C'mon, Jack. Make @realDonaldTrump melt to help end our meltdown.

---

**Q.16 [11594329]**

All of the following are true as per the passage, EXCEPT:

- 1 ☐ Trump is a septuagenarian.
- 2 ☐ Zuckerberg's comments in relation to Trump's tweet worried some Facebook employees.
- 3 ☐ The removal of the Communications Decency Act is a wrong step in the right direction.
- 4 ☐ Jack Dorsey's actions against Trump's tweets enraged Trump.



**Solution:**

**Correct Answer : 3**

**Your Answer : 3**

**1 is mentioned in Para 1. 2 is stated at the end of Para 6. 4 is mentioned in the beginning of Para 7. 3 is incorrect as, in Para 7, Galloway thinks that it is the right step, even though it is being taken for the wrong reasons. Hence, 3.**

 Answer key/Solution

Bookmark

FeedBack



**Direction for questions (15-18):** Read the given passage and answer the questions that follow.

Trump constantly torques up the tribal friction and cruelty on Twitter and Facebook, even as the sites Facebook refine their systems to ratchet up rage. It is amazing that a septuagenarian became the greatest exploiter of social media. Trump and Twitter were a match made in hell.

The Wall Street Journal had a chilling report a few days ago that Facebook's own research in 2018 revealed that "our algorithms exploit the human brain's attraction to divisiveness. If left unchecked," Facebook would feed users "more and more divisive content in an effort to gain user attention & increase time on the platform."

Mark Zuckerberg shelved the research.

"The shareholders of Facebook decided, 'If you can increase my stock tenfold, we can put up with a lot of rage and hate,'" says Scott Galloway, professor of marketing at New York University's Stern School of Business. "The rise of social media will be seen as directly correlating to the decline of Western civilization."

Jack Dorsey, CEO of Twitter, made some mild moves against the president who has been spewing lies and inciting violence on Twitter for years. He added footnotes clarifying false Trump tweets about mail-in ballots and put a warning label on the president's tweet about the Minneapolis riots that echo the language of a Miami police chief in 1967 and segregationist George Wallace: "When the looting starts, the shooting starts."

Zuckerberg, on the other hand, went on Fox to report that he was happy to continue enabling the Emperor of Chaos, noting that he did not think Facebook should be "the arbiter of truth of everything that people say online." It was a sickening display that made even some loyal Facebook staffers queasy.

Trump, furious that Dorsey would attempt to rein him in on the very platform that catapulted him into the White House, immediately decided to try to rein in Dorsey. He signed an executive order that might strip liability protection from social media sites, which would mean they would have to more assiduously police false and defamatory posts. Now that social media sites are behemoths, Galloway thinks that the removal of the Communications Decency Act makes a lot of sense even if the president is trying to do it for the wrong reasons.

"It's the mother of all cutting-off-your-nose-to-spite-your-face moves," says Galloway.

The president wants to say things on Twitter that he will not be allowed to say if he exerts this control over Twitter. In a sense, it's Trump versus his own brain. If Twitter can be sued for what people say on it, how can Trump continue to torment? Wouldn't thousands of his own tweets have to be deleted?

"He'd be the equivalent of a slippery floor at a store that sells equipment for hip replacements," says Galloway, who also posits that, in our hyper-politicized world, this will turn Twitter into a Democratic site and Facebook into a Republican one.

Nancy Pelosi, whose district encompasses Twitter, said that it did little good for Dorsey to put up a few fact-checks while letting Trump's rants about murder and other "misrepresentations" stay up.

C'mon, Jack. Make @realDonaldTrump melt to help end our meltdown.

**Q.17 [11594329]**

"The rise of social media will be seen as directly correlating to the decline of Western civilization." Which of the following, if true, would strengthen the correlation mentioned in the statement the most?

- 1 ☐ Social media has turned the world into a global village where each civilization draws from the other and changes its character.
- 2 ☐ The rise of social media has already been seen as directly correlated to the decline in the ideals of the Eastern civilisation.
- 3 ☐ In a survey in the West, people reported that their face-to-face interactions with the other members of their civilisation have reduced significantly because of the rise of social media.
- 4 ☐ Because of the discordant exchanges resulting from the increased adoption of social media, people in the West report experiencing a loss of societal harmony, which is regarded as the basis of any civilization.

**Solution:**

**Correct Answer : 4**

 Answer key/Solution

**1 talks about a change, not a decline in the civilisation. 2 talks of the Eastern civilisation. Till the time it is demonstrated that the Eastern civilization is very similar to the Western civilisation, this doesn't strengthen or weaken the argument. 3 talks about reduced face-to-face interactions, but it doesn't state that their reduction can be equated to a decline in the Western civilisation. So, it is rejected. 4 by calling societal harmony the basis of a civilization and reporting its loss in the West due to an increased adoption of social media, strengthens the correlation mentioned in the question statement. Hence, 4.**

Bookmark

FeedBack

**Direction for questions (15-18):** Read the given passage and answer the questions that follow.

Trump constantly torques up the tribal friction and cruelty on Twitter and Facebook, even as the sites Facebook refine their systems to ratchet up rage. It is amazing that a septuagenarian became the greatest exploiter of social media. Trump and Twitter were a match made in hell.

The Wall Street Journal had a chilling report a few days ago that Facebook's own research in 2018 revealed that "our algorithms exploit the human brain's attraction to divisiveness. If left unchecked," Facebook would feed users "more and more divisive content in an effort to gain user attention & increase time on the platform."

Mark Zuckerberg shelved the research.

"The shareholders of Facebook decided, 'If you can increase my stock tenfold, we can put up with a lot of rage and hate,'" says Scott Galloway, professor of marketing at New York University's Stern School of Business. "The rise of social media will be seen as directly correlating to the decline of Western civilization."

Jack Dorsey, CEO of Twitter, made some mild moves against the president who has been spewing lies and inciting violence on Twitter for years. He added footnotes clarifying false Trump tweets about mail-in ballots and put a warning label on the president's tweet about the Minneapolis riots that echo the language of a Miami police chief in 1967 and segregationist George Wallace: "When the looting starts, the shooting starts."

Zuckerberg, on the other hand, went on Fox to report that he was happy to continue enabling the Emperor of Chaos, noting that he did not think Facebook should be "the arbiter of truth of everything that people say online." It was a sickening display that made even some loyal Facebook staffers queasy.

Trump, furious that Dorsey would attempt to rein him in on the very platform that catapulted him into the White House, immediately decided to try to rein in Dorsey. He signed an executive order that might strip liability protection from social media sites, which would mean they would have to more assiduously police false and defamatory posts. Now that social media sites are behemoths, Galloway thinks that the removal of the Communications Decency Act makes a lot of sense even if the president is trying to do it for the wrong reasons.

"It's the mother of all cutting-off-your-nose-to-spite-your-face moves," says Galloway.

The president wants to say things on Twitter that he will not be allowed to say if he exerts this control over Twitter. In a sense, it's Trump versus his own brain. If Twitter can be sued for what people say on it, how can Trump continue to torment? Wouldn't thousands of his own tweets have to be deleted?

"He'd be the equivalent of a slippery floor at a store that sells equipment for hip replacements," says Galloway, who also posits that, in our hyper-politicized world, this will turn Twitter into a Democratic site and Facebook into a Republican one.

Nancy Pelosi, whose district encompasses Twitter, said that it did little good for Dorsey to put up a few fact-checks while letting Trump's rants about murder and other "misrepresentations" stay up.

C'mon, Jack. Make @realDonaldTrump melt to help end our meltdown.

---

**Q.18 [11594329]**

Which of the following most accurately describes the nature of the last sentence of the passage?

- 1 ☐ It is an appeal made by Nancy Pelosi to Jack Dorsey to suspend Donald Trump's Twitter account so as to end the anguish that his tweets cause.
- 2 ☐ It is an encouragement by the author to Twitter's CEO to suspend Donald Trump's Twitter account to provide people relief from his false and defamatory tweets.
- 3 ☐ It is an appeal by the author to Twitter's CEO to go beyond the mild measures that he has taken so far with regard to Trump's tweets.
- 4 ☐ It is an encouragement by Nancy Pelosi to Twitter's CEO to take down Trump's rants about murder and other "misrepresentations".

**Solution:****Correct Answer : 2**[🔍 Answer key/Solution](#)

**In the last sentence, the author, not Nancy Pelosi, specifically urges Dorsey to "melt @realDonaldTrump" i.e. to take his Twitter account down. 3 is more general in nature and is something that is advocated by Nancy Pelosi. So, 1, 3, and 4 are eliminated.**

[Bookmark](#)[FeedBack](#)**Q.19 [11594329]**

**Directions for question (19):** The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. Instead of fashioning a comprehensive system, essays lightly gesture towards hidden depths and the connectedness of phenomena, often to greater effect.
2. Not at home in the treatise, taxonomy or monograph, Simmel was foremost an essayist.
3. The impression is of a temporarily illuminated whole that fades rapidly, leaving one with the sense that there is more to be discovered, provided another flash of brilliance.
4. As his fellow German scholar Theodor Adorno wrote of the essay form, thinking of Simmel, it 'does not let its domain be prescribed for it ... The essay does not play by the rules of organised science and theory ...'

[✕](#)

**Solution:****Correct Answer : 2413****Your Answer : 3124**[🔍 Answer key/Solution](#)

**2 and 4 form a mandatory pair. 2 introduces Simmel as an essayist. 4 says what 'his' fellow said about the essay form while thinking of him. 1 is related to 4 as 4 talks about what an essay is not i.e. it doesn't have a defined domain and system. 1 begins with 'instead' and tells what an essay is i.e. it gestures towards hidden depth. 3 continues the idea introduced in 1.**

[Bookmark](#)[FeedBack](#)**Q.20 [11594329]**

**Directions for question (20):** The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. His allusion to his embellishments of Homer, in which he declares himself to have surpassed Metrodorus of Lampsacus and Stesimbrotus of Thasos, seems to show that, like them, he belonged to the allegorical school of interpreters.
2. Also, the manner in which Ion is affected by his own recitations affords a lively illustration of the power which, in the Republic, Socrates attributes to dramatic performances over the mind of the performer.
3. The old quarrel between philosophy and poetry, which in the Republic leads to their final separation, is already working in the mind of Plato, and is embodied by him in the contrast between Socrates and Ion.
4. Yet here, as in the Republic, Socrates shows a sympathy with the poetic nature.

**Solution:****Correct Answer : 3421**[🔍 Answer key/Solution](#)

**3 is the best candidate for opening sentence. 2 begins with also, 4 with yet, and 1 uses the pronoun 'his'. It is only in 3 that all the people under discussion are named. 4 continues 3 by showing that although there is a quarrel between philosophy and poetry, the sympathies are on poetry's side. The 'also' in 4 continues the idea in 2. And 1 continues the discussion about Ion.**

[Bookmark](#)[FeedBack](#)

**Q.21 [11594329]**

**Directions for question (21):** The passage given below is followed by four summaries. Choose the option that best captures the author's position.

It does not appear impossible that if an inner circle of World Revolution exists, it consists of a purely International group of individuals whose aim is that of Weishaupt--the destruction of the present system of society. That such an aim can be seriously entertained is shown by the fact that it is openly proclaimed by a whole school of writers and thinkers ranging from gentle Idealists to ferocious Anarchists who, whilst widely differing as to methods and the ultimate ends to be attained, are agreed on the common purpose expressed by Rabaud de Saint-Étienne in the words: "Everything, yes, everything must be destroyed, since everything must be re-made."

- 1 ☐ It is possible that an inner circle of World Revolution, comprising an international group of individuals, exists as its aim is echoed by a variety of writers and thinkers who agree on the ultimate end of the world.
- 2 ☐ The voice lent to the idea of destruction of the current system of society by various thinkers and writers makes it possible that this is the aim of an inner circle of World Revolution, if it exists.
- 3 ☐ The existence of an inner circle of World Revolution for destroying the present system of society is made possible by the proclamation of idealists and anarchists who share the same vision.
- 4 ☐ While differing on the methods and ultimate ends, various writers and thinkers agree with the inner circle of World Revolution regarding the fact that everything must be destroyed.



**Solution:**

**Correct Answer : 2**

**Your Answer : 2**

**1 and 3 are eliminated as the possibility presented by the author is not that an inner circle exists; the possibility is that if it exists, it has its aim as destruction of the current system of society. Also, 'the writers and thinkers agree on the end' is a distorted idea. 4 assumes that such an inner circle already exists and is, thus, rejected.**

Bookmark

FeedBack

Answer key/Solution

**Q.22 [11594329]**

**Directions for question (22):** Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out.

1. Observers have drawn parallels between Mr. Xi and his powerful predecessors, Mao Zedong and Deng Xiaoping, perhaps a tad unfairly to both the iconic architects of the People's Republic of China (PRC).
2. Mao presided over the founding of the PRC in 1949 and consolidated his leadership during the Long March in the mid-1930s.
3. To the outside world, China seeks to project a picture of monolithic unity behind President Xi Jinping's highly centralised leadership.
4. Reports have surfaced alleging delays in reporting facts, conflicting instructions and tight censorship.
5. However, media tropes point to a greater scrutiny of his role and leadership style, especially during the early stages of the COVID-19 outbreak in Wuhan.



**Solution:**

**Correct Answer : 2**

**Your Answer : 5**

The paragraph is about Xi Jinping being under scrutiny. So, Mao's background is the odd one out here. The correct sequence is 3541. 3 introduces the topic, 5 contradicts what is stated in 3, 4 elaborates the greater scrutiny by talking about reports and 1 initiates a discussion on observers drawing parallels between Xi and his predecessors.

Bookmark

FeedBack

 Answer key/Solution

**Q.23 [11594329]**

**Directions for question (23):** The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. Whenever he brings from his psychological studies arguments which point to the errors in public prejudices, he can present his facts in full array.
2. But the fight in favour of the policy of silence is different.
3. But now since a new great wave of discussion has arisen, and the sexual problem is stirring the nation, the psychologist's faith in the unpopular policy puts him into an especially difficult position.
4. Nothing hinders him from speaking with earnestness against the follies of hasty and short-sighted methods in every concern of public life, if he has the courage to oppose the fancies of the day.

**Solution:**

**Correct Answer : 3142**

 Answer key/Solution

**3 is the clear opening sentence as it is the only one that mentions who is being discussed in the paragraph. 4 and 2 make a mandatory pair as 4 talks about 'speaking' whereas 2 talks about 'silence'. 1 and 4 are related as they talk about what the psychologist can do. Hence, 3142.**

Bookmark

FeedBack

**Q.24 [11594329]**

**Directions for question (24):** Five sentences related to a topic are given below. Four of them can be put together to form a meaningful and coherent short paragraph. Identify the odd one out.

1. Yet, as the market grows, the 'teleological chain' of transactions extends, making non-monetary goals more distant and more valuable.
2. Money, like Heraclitus' river, constantly moves while staying the same.
3. Take love, for instance; as we become more anonymous and distant from one another, love flourishes.
4. Because it has no goal beyond its own circulation, money points towards non-economic values.
5. The city, with its modern life, accelerates the calculable logic of money.



**Solution:****Correct Answer : 5** Answer key/Solution

5 talks about the relationship of money and city, which is not the focus of this paragraph. The correct sequence is 2413. 2 and 4 are related as 2 talks about its 'constant moving' and 4 talks about its 'circulation'. 4 and 1 are also related, both talk about non-economic values or non-monetary goals. With the 'yet' 1 follows 4. 1 and 3 are a mandatory pair with 1 talking about non-monetary goals and 3 giving an example of a non-monetary goal.

Bookmark

FeedBack

**Q.25 [11594329]**

**Directions for question (25):** The passage given below is followed by four summaries. Choose the option that best captures the author's position.

Who makes up or invents proverbs? They are so often a chockful of never-mind-what. They pile up platitude upon platitude which the officious and unctuous mouth repeats in and out of season and are taken to be the distillates of wisdom. But proverbs are sagacity after the event. Homilies, truisms, adages, maxims are the work of the glib, the undecided, the ambivalent and of those who would have it both ways. Show me a proverb and I'll show you its antidote.

- 1 ☐ Proverbs are useless as they are full of platitude and represent the wisdom collected after the event has happened.
- 2 ☐ Proverbs, each saying something that has a counter-proverb, represent clichéd wisdom attained after the event and are the creation of people who don't wish to take a clear stand.
- 3 ☐ For every proverb, there is another proverb that says the opposite, and this ambivalence reduces them to platitudinous wisdom collected after the event that doesn't really help one decide anything.
- 4 ☐ Proverbs are the refuge of the officious and unctuous who wish to utter something that is wise yet cliched and saves them from the responsibility of making decisions.

**Solution:****Correct Answer : 2** Answer key/Solution

3 is eliminated because of the cause-effect relationship created between ambivalence and the platitudinous nature of the wisdom provided by the proverb. Also, the part about helping one decide anything is not stated in the paragraph. 2 captures all the important elements. 1 and 4 don't talk about counter-proverbs.

Bookmark

FeedBack

**Q.26 [11594329]**

**Directions for question (26):** The four sentences (labelled 1, 2, 3, and 4) given in this question, when properly sequenced, form a coherent paragraph. Decide on the proper order for the sentences and key in this sequence of four numbers as your answer.

1. Between human beings, love is a relational word.
2. But the love of other people is directional.
3. Yes, you can love things that do not love you back—the sky or a mountain or a painting or the game of chess.
4. There is a lover and a beloved—you don't just love, but you love at someone.



**Solution:**

**Correct Answer : 1324**

**Your Answer : 4123**

**2 and 4 make a mandatory pair. 1 is the opening sentence as it shows that the discussion is about human beings. 3 follows 1 because after making an argument in 1, the author concedes how the love between human beings is different from the love of humans for things, before again coming back to his main argument.**

Bookmark

FeedBack

 Answer key/Solution

## Sec 2

**Directions for questions 27 to 30:** Answer the questions on the basis of the information given below.

AK wants to organise an outing for his family. However, his family members - his mother, father, sister, nephew and brother-in-law - proposed 5 different places to go - Amritsar, Fantastic park, Lohagarh, Jim Corbett, and Matamaal (in no particular order). One of these places is a 1 day trip (not requiring an overnight stay) but the other 4 trips proposed require overnight stay. The duration of these 4 trips is a minimum of 2 days and a maximum of 4 days and for these trips, they will require 4 different modes of stay: hotel, resort, mud-hut and garden home (in no particular order).

To agree on one place for the outing, AK's family members decide to rate each place and will go to that place which will have higher rating out of total 100. After the exercise, AK observed the following:

- (i) The only trip proposed for 2 days will need a stay at a mud-hut. The trip to Amritsar will be at least a 3 days trip.
- (ii) Out of these 5 trips proposed, at least 1 trip each is of 2 days, 3 days and 4 days.
- (iii) Amritsar's rating is the highest at 84. The place that requires a resort stay has the second highest rating, which is 25% more than the rating of the Fantastic park.
- (iv) The garden home stay has the lowest rating, which is 20% less than the 1 day trip to Lohagarh whose rating is greater than 72.
- (v) AK's father wants an overnight trip but has not proposed a trip needing a mud-hut stay or a garden home stay. AK's brother-in-law has proposed a trip requiring an overnight stay not based at either a hotel or a resort.
- (vi) All the ratings, out of 100, are distinct natural numbers.

**Q.27 [11594329]**

Which of the following place has the rating equal to the median of all five ratings?

1 ☐ Lohagarh

2 ☐ Fantastic park

3 ☐ Matamaa

4 ☐ Either (1) or (2)



**Solution:****Correct Answer : 1****Your Answer : 1** Answer key/Solution

The set has five variables- place to visit, mode of stay, number of days, rating, and the person who has proposed this place. A cursory glance at the information shared reveals that the two variables with the maximum information are mode of stay and the place to visit. You can choose one as your base variable and make a table that looks like the following.

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT						
NUMBER OF DAYS						
RATING						
WHO HAS PROPOSED						
EXTRA INFO						

**Statement wise analysis:**

- Two places will be for the same number of days. Atleast one place each will have a 1 day, a 2 days, a 3 days, and a 4 days trip.
- Lets assume the rating of the fantastic park to be  $4n$ . Then the rating of the resort must be  $5n$  (25% more). Since this rating is a multiple of 5 and is also the second highest, it must be 80 or less.
- Lohagarh's rating has to be decreased by 20%, or one-fifth, to get the rating for the garden home. Thus Lohagarh's rating must also be a multiple of 5 and greater than 72. So it must be 75 or 80.  
Since a resort, that has the second highest rating, means an overnight stay and Lohagarh is a day trip, so, resort's rating must be 80 and Lohagarh's rating must be 75. This information is sufficient to calculate all ratings.
- Using ratings, we can find out that Amritsar will require a hotel stay (can't be the 2<sup>nd</sup> highest resort, or lowest garden home or the 2 days mud-hut) while Fantastic park (can't be resort, or the lowest garden home) will need a mud-hut stay.
- Father must have proposed a resort or a hotel stay while his brother-in-law must have proposed a mud-hut or garden home stay.

The filled table will look like the following:

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT	Fantastic park	Jim Corbett / Matamaal	Amritsar	Matamaal / Jim Corbett	Lohagarh	
NUMBER OF DAYS	2	3/4	3/4	3/4	1	
RATING	64	80	84	60	75	
WHO HAS PROPOSED	Brother-in-law may have proposed	Father may have proposed	Father may have proposed	Brother-in-law may have proposed		

All the five ratings are 60, 64, 75, 80, 84. Median of these ratings is 75. So, Lohagrah has got the rating equal to 75.

Bookmark

FeedBack

**Directions for questions 27 to 30:** Answer the questions on the basis of the information given below.

AK wants to organise an outing for his family. However, his family members - his mother, father, sister, nephew and brother-in-law - proposed 5 different places to go - Amritsar, Fantastic park, Lohagarh, Jim Corbett, and Matamaal (in no particular order). One of these places is a 1 day trip (not requiring an overnight stay) but the other 4 trips proposed require overnight stay. The duration of these 4 trips is a minimum of 2 days and a maximum of 4 days and for these trips, they will require 4 different modes of stay: hotel, resort, mud-hut and garden home (in no particular order).

To agree on one place for the outing, AK's family members decide to rate each place and will go to that place which will have higher rating out of total 100. After the exercise, AK observed the following:

- (i) The only trip proposed for 2 days will need a stay at a mud-hut. The trip to Amritsar will be at least a 3 days trip.
- (ii) Out of these 5 trips proposed, at least 1 trip each is of 2 days, 3 days and 4 days.
- (iii) Amritsar's rating is the highest at 84. The place that requires a resort stay has the second highest rating, which is 25% more than the rating of the Fantastic park.
- (iv) The garden home stay has the lowest rating, which is 20% less than the 1 day trip to Lohagarh whose rating is greater than 72.
- (v) AK's father wants an overnight trip but has not proposed a trip needing a mud-hut stay or a garden home stay. AK's brother-in-law has proposed a trip requiring an overnight stay not based at either a hotel or a resort.
- (vi) All the ratings, out of 100, are distinct natural numbers.

**Q.28 [11594329]**

If AK's sister wants the mud-hut stay while his mother wants the 1 day trip, then his nephew must have proposed a trip to

- 1 ☐ One among Fantastic park, Amritsar and Matamaal
- 2 ☐ One among Amritsar, Jim Corbett and Matamaal
- 3 ☐ One among Amritsar, Jim Corbett and Fantastic park
- 4 ☐ One among Jim Corbett, Matamaal and Fantastic park



**Solution:**

**Correct Answer : 2**

**Your Answer : 2**

[🔍 Answer key/Solution](#)

The set has five variables- place to visit, mode of stay, number of days, rating, and the person who has proposed this place. A cursory glance at the information shared reveals that the two variables with the maximum information are mode of stay and the place to visit. You can choose one as your base variable and make a table that looks like the following.

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT						
NUMBER OF DAYS						
RATING						
WHO HAS PROPOSED						
EXTRA INFO						

**Statement wise analysis:**

- Two places will be for the same number of days. Atleast one place each will have a 1 day, a 2 days, a 3 days, and a 4 days trip.
- Lets assume the rating of the fantastic park to be  $4n$ . Then the rating of the resort must be  $5n$  (25% more). Since this rating is a multiple of 5 and is also the second highest, it must be 80 or less.
- Lohagarh's rating has to be decreased by 20%, or one-fifth, to get the rating for the garden home. Thus Lohagarh's rating must also be a multiple of 5 and greater than 72. So it must be 75 or 80.  
Since a resort, that has the second highest rating, means an overnight stay and Lohagarh is a day trip, so, resort's rating must be 80 and Lohagarh's rating must be 75. This information is sufficient to calculate all ratings.
- Using ratings, we can find out that Amritsar will require a hotel stay (can't be the 2<sup>nd</sup> highest resort, or lowest garden home or the 2 days mud-hut) while Fantastic park (can't be resort, or the lowest garden home) will need a mud-hut stay.
- Father must have proposed a resort or a hotel stay while his brother-in-law must have proposed a mud-hut or garden home stay.

The filled table will look like the following:

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT	Fantastic park	Jim Corbett / Matamaal	Amritsar	Matamaal / Jim Corbett	Lohagarh	
NUMBER OF DAYS	2	3/4	3/4	3/4	1	
RATING	64	80	84	60	75	
WHO HAS PROPOSED	Brother-in-law may have proposed	Father may have proposed	Father may have proposed	Brother-in-law may have proposed		

AK's mom wants to go to Lohagarh while his sister has chosen the fantastic park. This leaves his brother-in-law with (the only available option) the garden home. It is clear that his nephew would have either proposed the hotel or the resort stay. The hotel stay is at Amritsar while the resort is at one of Jim Corbett or Matamaal. Clearly, his nephew must have proposed a trip to one among Amritsar, Jim Corbett and Matamaal.

[Bookmark](#)
[FeedBack](#)

**Directions for questions 27 to 30:** Answer the questions on the basis of the information given below.

AK wants to organise an outing for his family. However, his family members - his mother, father, sister, nephew and brother-in-law - proposed 5 different places to go - Amritsar, Fantastic park, Lohagarh, Jim Corbett, and Matamaal (in no particular order). One of these places is a 1 day trip (not requiring an overnight stay) but the other 4 trips proposed require overnight stay. The duration of these 4 trips is a minimum of 2 days and a maximum of 4 days and for these trips, they will require 4 different modes of stay: hotel, resort, mud-hut and garden home (in no particular order).

To agree on one place for the outing, AK's family members decide to rate each place and will go to that place which will have higher rating out of total 100. After the exercise, AK observed the following:

- (i) The only trip proposed for 2 days will need a stay at a mud-hut. The trip to Amritsar will be at least a 3 days trip.
- (ii) Out of these 5 trips proposed, at least 1 trip each is of 2 days, 3 days and 4 days.
- (iii) Amritsar's rating is the highest at 84. The place that requires a resort stay has the second highest rating, which is 25% more than the rating of the Fantastic park.
- (iv) The garden home stay has the lowest rating, which is 20% less than the 1 day trip to Lohagarh whose rating is greater than 72.
- (v) AK's father wants an overnight trip but has not proposed a trip needing a mud-hut stay or a garden home stay. AK's brother-in-law has proposed a trip requiring an overnight stay not based at either a hotel or a resort.
- (vi) All the ratings, out of 100, are distinct natural numbers.

**Q.29 [11594329]**

If AK's sister wants the mud-hut stay while his mother wants the 1 day trip, who among the given options could have proposed a 3 days trip if the only trip proposed for 4 days requires a garden home stay?

1 ☐ Mother

2 ☐ Father

3 ☐ Sister

4 ☐ Brother-in-law





**Solution:****Correct Answer : 2****Your Answer : 2** Answer key/Solution

The set has five variables- place to visit, mode of stay, number of days, rating, and the person who has proposed this place. A cursory glance at the information shared reveals that the two variables with the maximum information are mode of stay and the place to visit. You can choose one as your base variable and make a table that looks like the following.

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT						
NUMBER OF DAYS						
RATING						
WHO HAS PROPOSED						
EXTRA INFO						

**Statement wise analysis:**

- Two places will be for the same number of days. Atleast one place each will have a 1 day, a 2 days, a 3 days, and a 4 days trip.
- Lets assume the rating of the fantastic park to be  $4n$ . Then the rating of the resort must be  $5n$  (25% more). Since this rating is a multiple of 5 and is also the second highest, it must be 80 or less.
- Lohagarh's rating has to be decreased by 20%, or one-fifth, to get the rating for the garden home. Thus Lohagarh's rating must also be a multiple of 5 and greater than 72. So it must be 75 or 80.  
Since a resort, that has the second highest rating, means an overnight stay and Lohagarh is a day trip, so, resort's rating must be 80 and Lohagarh's rating must be 75. This information is sufficient to calculate all ratings.
- Using ratings, we can find out that Amritsar will require a hotel stay (can't be the 2<sup>nd</sup> highest resort, or lowest garden home or the 2 days mud-hut) while Fantastic park (can't be resort, or the lowest garden home) will need a mud-hut stay.
- Father must have proposed a resort or a hotel stay while his brother-in-law must have proposed a mud-hut or garden home stay.

The filled table will look like the following:

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT	Fantastic park	Jim Corbett / Matamaal	Amritsar	Matamaal / Jim Corbett	Lohagarh	
NUMBER OF DAYS	2	3/4	3/4	3/4	1	
RATING	64	80	84	60	75	
WHO HAS PROPOSED	Brother-in-law may have proposed	Father may have proposed	Father may have proposed	Brother-in-law may have proposed		

Using information given in the question, the mother's trip would have been a 1 day trip, sister's a 2 days trip while brother-in-law's trip a 4 days trip. So among the given options, the 3 days trip could have been proposed by his father.

Bookmark

FeedBack



**Directions for questions 27 to 30:** Answer the questions on the basis of the information given below.

AK wants to organise an outing for his family. However, his family members - his mother, father, sister, nephew and brother-in-law - proposed 5 different places to go - Amritsar, Fantastic park, Lohagarh, Jim Corbett, and Matamaal (in no particular order). One of these places is a 1 day trip (not requiring an overnight stay) but the other 4 trips proposed require overnight stay. The duration of these 4 trips is a minimum of 2 days and a maximum of 4 days and for these trips, they will require 4 different modes of stay: hotel, resort, mud-hut and garden home (in no particular order).

To agree on one place for the outing, AK's family members decide to rate each place and will go to that place which will have higher rating out of total 100. After the exercise, AK observed the following:

- (i) The only trip proposed for 2 days will need a stay at a mud-hut. The trip to Amritsar will be at least a 3 days trip.
- (ii) Out of these 5 trips proposed, at least 1 trip each is of 2 days, 3 days and 4 days.
- (iii) Amritsar's rating is the highest at 84. The place that requires a resort stay has the second highest rating, which is 25% more than the rating of the Fantastic park.
- (iv) The garden home stay has the lowest rating, which is 20% less than the 1 day trip to Lohagarh whose rating is greater than 72.
- (v) AK's father wants an overnight trip but has not proposed a trip needing a mud-hut stay or a garden home stay. AK's brother-in-law has proposed a trip requiring an overnight stay not based at either a hotel or a resort.
- (vi) All the ratings, out of 100, are distinct natural numbers.

**Q.30 [11594329]**

The absolute difference between the ratings received by the places Jim Corbett and Matamaal must have been \_\_\_\_\_.

✕

**Solution:**

**Correct Answer : 20**

**Your Answer : 18**

[🔍 Answer key/Solution](#)

The set has five variables- place to visit, mode of stay, number of days, rating, and the person who has proposed this place. A cursory glance at the information shared reveals that the two variables with the maximum information are mode of stay and the place to visit. You can choose one as your base variable and make a table that looks like the following.

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT						
NUMBER OF DAYS						
RATING						
WHO HAS PROPOSED						
EXTRA INFO						

**Statement wise analysis:**

- Two places will be for the same number of days. Atleast one place each will have a 1 day, a 2 days, a 3 days, and a 4 days trip.
- Lets assume the rating of the fantastic park to be  $4n$ . Then the rating of the resort must be  $5n$  (25% more). Since this rating is a multiple of 5 and is also the second highest, it must be 80 or less.
- Lohagarh's rating has to be decreased by 20%, or one-fifth, to get the rating for the garden home. Thus Lohagarh's rating must also be a multiple of 5 and greater than 72. So it must be 75 or 80.  
Since a resort, that has the second highest rating, means an overnight stay and Lohagarh is a day trip, so, resort's rating must be 80 and Lohagarh's rating must be 75. This information is sufficient to calculate all ratings.
- Using ratings, we can find out that Amritsar will require a hotel stay (can't be the 2<sup>nd</sup> highest resort, or lowest garden home or the 2 days mud-hut) while Fantastic park (can't be resort, or the lowest garden home) will need a mud-hut stay.
- Father must have proposed a resort or a hotel stay while his brother-in-law must have proposed a mud-hut or garden home stay.

The filled table will look like the following:

	MUD- HUT	RESORT	HOTEL	GARDEN HOME	DAY TRIP	EXTRA INFO
PLACE TO VISIT	Fantastic park	Jim Corbett / Matamaal	Amritsar	Matamaal / Jim Corbett	Lohagarh	
NUMBER OF DAYS	2	3/4	3/4	3/4	1	
RATING	64	80	84	60	75	
WHO HAS PROPOSED	Brother-in-law may have proposed	Father may have proposed	Father may have proposed	Brother-in-law may have proposed		

The ratings of Jim Corbett and Matamaal will be 80 and 60 in no order. Thus the absolute difference between these ratings must be 20.

[Bookmark](#)
[FeedBack](#)

**Directions for questions 31 to 34:** Answer the questions on the basis of the information given below.

A country called Chil-land comprises only 11 cities – Addis, Barce, Casablan, Darwi, Edinbur, Floren, George, Honolu, Istan, Johaunes and Kuala, each of which is in the shape of a square. The area of all the cities are equal, with the four edges of the square as its boundaries. Any city is said to be a neighbour of another city if the two cities have one edge as a common boundary. Further, one can travel between two cities only if the two cities are neighbours and one can reach any city from any of the other cities by passing through one or more cities, if required. The only mode of travelling from one city to another is by road. Additional information is as follows:

- (i) The total area of the 11 cities is equal to the area of the entire country.
- (ii) Barce, Floren, George and Istan are the only cities which are to the North of Johannes.
- (iii) Barce is the only neighbour of Addis, while Casablan and Floren are the only other neighbours of Barce.
- (iv) Floren is the only city which is to the West of Honolu and Casablan is the only city which is to the North of Kuala.
- (v) Johannes is the only neighbour of Kuala, while Darwi is the only neighbour to each of Edinbur and Honolu.

**Q.31 [11594329]**

Which of the following cities is to the immediate North of Istan?

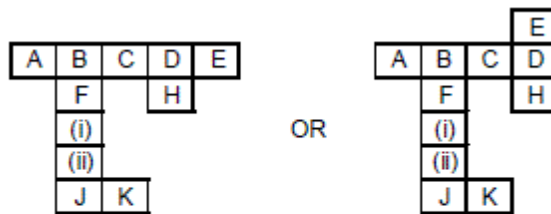
- 1 ☐ George
- 2 ☐ Floren
- 3 ☐ Barce
- 4 ☐ Either (1) or (2)

**Solution:**

**Correct Answer : 4**

[Answer key/Solution](#)

Based on the information given, following are the two possibilities:



Where, A belongs to Addis, B belongs to Barce, C belongs to Carraiblan, D belongs to Darwi, E belongs to Edinbur, F belongs to Floren, G belongs to George, H belongs to Honolu, I belongs to Istan, J belongs to Johannes and K belongs to Kuala. If (i) is George, then (ii) is Istan and vice versa.

Either George or Floren is the immediate North of Istan.

Bookmark

FeedBack

**Directions for questions 31 to 34:** Answer the questions on the basis of the information given below.

A country called Chil-land comprises only 11 cities – Addis, Barce, Casablan, Darwi, Edinbur, Floren, George, Honolu, Istan, Johaunes and Kuala, each of which is in the shape of a square. The area of all the cities are equal, with the four edges of the square as its boundaries. Any city is said to be a neighbour of another city if the two cities have one edge as a common boundary. Further, one can travel between two cities only if the two cities are neighbours and one can reach any city from any of the other cities by passing through one or more cities, if required. The only mode of travelling from one city to another is by road. Additional information is as follows:

- (i) The total area of the 11 cities is equal to the area of the entire country.
- (ii) Barce, Floren, George and Istan are the only cities which are to the North of Johannes.
- (iii) Barce is the only neighbour of Addis, while Casablan and Floren are the only other neighbours of Barce.
- (iv) Floren is the only city which is to the West of Honolu and Casablan is the only city which is to the North of Kuala.
- (v) Johannes is the only neighbour of Kuala, while Darwi is the only neighbour to each of Edinbur and Honolu.

**Q.32 [11594329]**

Which of the following cities is definitely the neighbour of George?

1 ☐ Johannes

2 ☐ Floren

3 ☐ Darwi

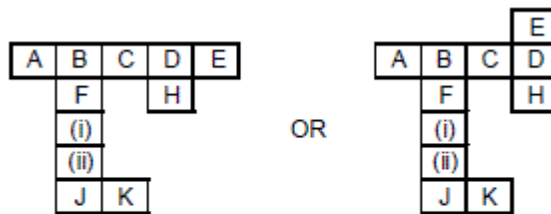
4 ☐ Istan

**Solution:**

**Correct Answer : 4**

[Answer key/Solution](#)

Based on the information given, following are the two possibilities:



Where, A belongs to Addis, B belongs to Barce, C belongs to Carraiblan, D belongs to Darwi, E belongs to Edinbur, F belongs to Floren, G belongs to George, H belongs to Honolu, I belongs to Istan, J belongs to Johannes and K belongs to Kuala. If (i) is George, then (ii) is Istan and vice versa.

Istan is definitely the neighbour of George.

Bookmark

FeedBack

**Directions for questions 31 to 34:** Answer the questions on the basis of the information given below.

A country called Chil-land comprises only 11 cities – Addis, Barce, Casablan, Darwi, Edinbur, Floren, George, Honolu, Istan, Johaunes and Kuala, each of which is in the shape of a square. The area of all the cities are equal, with the four edges of the square as its boundaries. Any city is said to be a neighbour of another city if the two cities have one edge as a common boundary. Further, one can travel between two cities only if the two cities are neighbours and one can reach any city from any of the other cities by passing through one or more cities, if required. The only mode of travelling from one city to another is by road. Additional information is as follows:

- (i) The total area of the 11 cities is equal to the area of the entire country.
- (ii) Barce, Floren, George and Istan are the only cities which are to the North of Johannes.
- (iii) Barce is the only neighbour of Addis, while Casablan and Floren are the only other neighbours of Barce.
- (iv) Floren is the only city which is to the West of Honolu and Casablan is the only city which is to the North of Kuala.
- (v) Johannes is the only neighbour of Kuala, while Darwi is the only neighbour to each of Edinbur and Honolu.

### Q.33 [11594329]

Which of the following cities has/have exactly two neighbouring cities?

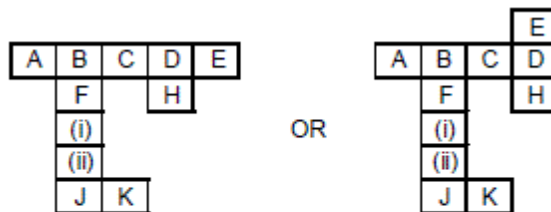
- 1 ☐ Barce
- 2 ☐ Johannes
- 3 ☐ Darwi
- 4 ☐ All of the above

**Solution:**

**Correct Answer : 2**

[Answer key/Solution](#)

Based on the information given, following are the two possibilities:



Where, A belongs to Addis, B belongs to Barce, C belongs to Carraiblan, D belongs to Darwi, E belongs to Edinbur, F belongs to Floren, G belongs to George, H belongs to Honolu, I belongs to Istan, J belongs to Johannes and K belongs to Kuala. If (i) is George, then (ii) is Istan and vice versa.

Johannes has exactly two neighbouring cities

Bookmark

FeedBack

**Directions for questions 31 to 34:** Answer the questions on the basis of the information given below.

A country called Chil-land comprises only 11 cities – Addis, Barce, Casablan, Darwi, Edinbur, Floren, George, Honolu, Istan, Johaunes and Kuala, each of which is in the shape of a square. The area of all the cities are equal, with the four edges of the square as its boundaries. Any city is said to be a neighbour of another city if the two cities have one edge as a common boundary. Further, one can travel between two cities only if the two cities are neighbours and one can reach any city from any of the other cities by passing through one or more cities, if required. The only mode of travelling from one city to another is by road. Additional information is as follows:

- (i) The total area of the 11 cities is equal to the area of the entire country.
- (ii) Barce, Floren, George and Istan are the only cities which are to the North of Johannes.
- (iii) Barce is the only neighbour of Addis, while Casablan and Floren are the only other neighbours of Barce.
- (iv) Floren is the only city which is to the West of Honolu and Casablan is the only city which is to the North of Kuala.
- (v) Johannes is the only neighbour of Kuala, while Darwi is the only neighbour to each of Edinbur and Honolu.

**Q.34 [11594329]**

Which of the following cities are definitely to the East of Addis?

- (i) Barce
- (ii) Casablan
- (iii) Darwi
- (iv) Edinbur

1 ☐ (i) and (ii)

2 ☐ (i), (ii) and (iii)

3 ☐ (ii) and (iv)

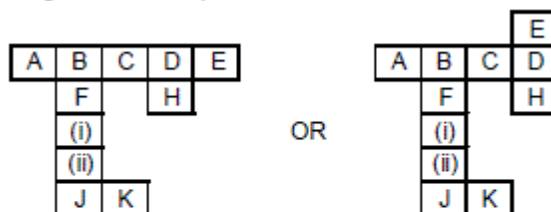
4 ☐ (i), (ii), (iii) and (iv)

**Solution:**

**Correct Answer : 2**

[Answer key/Solution](#)

Based on the information given, following are the two possibilities:



Where, A belongs to Addis, B belongs to Barce, C belongs to Carraiblan, D belongs to Darwi, E belongs to Edinbur, F belongs to Floren, G belongs to George, H belongs to Honolu, I belongs to Istan, J belongs to Johannes and K belongs to Kuala. If (i) is George, then (ii) is Istan and vice versa.

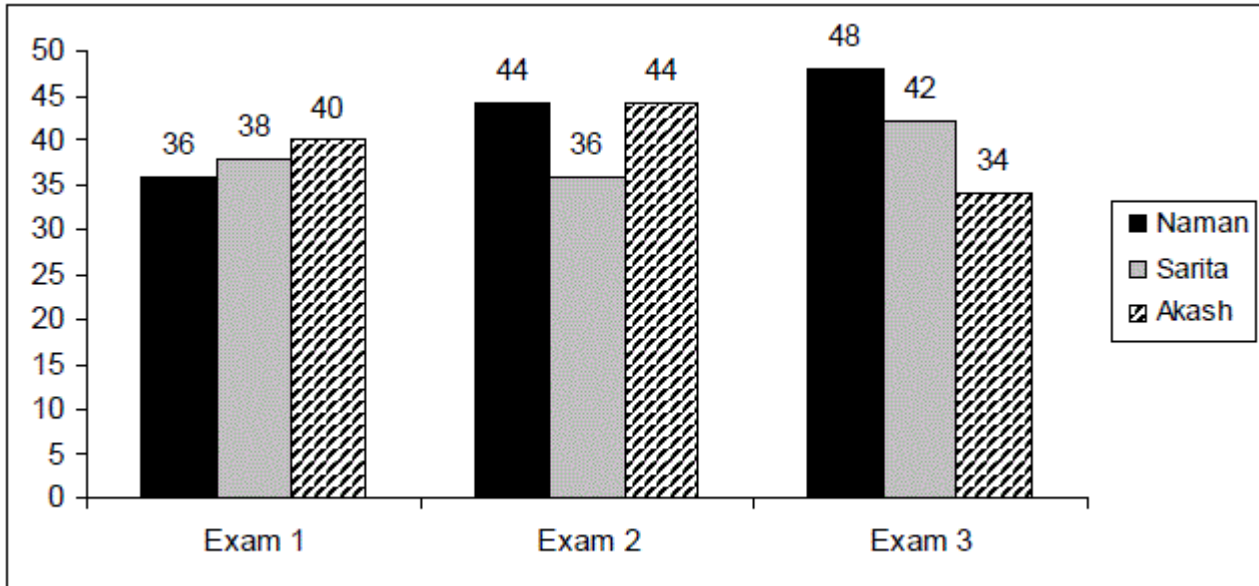
Barce, Carraiblan and Darwi cities are definitely to the East of city Addis.

Bookmark

FeedBack

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

There are three friends named as Naman, Sarita, and Akash. They appeared for the three exams - EXAM – 1, Exam – 2, and EXAM – 3. In each of the three exams there were 50 questions. The table given below tells about the number of questions attempted by the three students in each of the three exams.



Some other information about the three exams is as under.

- (i) Each correct question fetches 2 marks in each exam..
- (ii) For every incorrect question, penalty is 1 mark, 0.5 marks, and 0.5 marks respectively for the three exams..
- (iii) For every not-attempted question 0 marks were awarded..
- (iv) All the 3 friends got same total marks in the three exams together..

**Q.35 [11594329]**

Find the minimum number of questions answered incorrectly by all the three friends in the three exams together.

1 ☐ 0

2 ☐ 8

3 ☐ 10

4 ☐ 16



**Solution:****Correct Answer : 4**[Answer key/Solution](#)

Converting the bar graph into the table gives us:

	Exam 1	Exam 2	Exam 3	Total Attempts
Naman	36	44	48	128
Sarita	38	36	42	116
Akash	40	44	34	118

For minimum wrong attempts the score has to be maximum.

Let Sarita made no mistake in the paper so she must have scored  $116 \times 2 = 232$ .If Akash makes 2 mistakes, his score might be  $116 \times 2 - 1 \times 2 = 230$  or  $(116 \times 2) - (0.5 \times 2) = 231$ If Akash makes 1 mistake, his score might be  $117 \times 2 - 1 = 233$  or  $117 \times 2 - 0.5 = 233.5$ 

That's not a possible scenario because everyone's score has to be same.

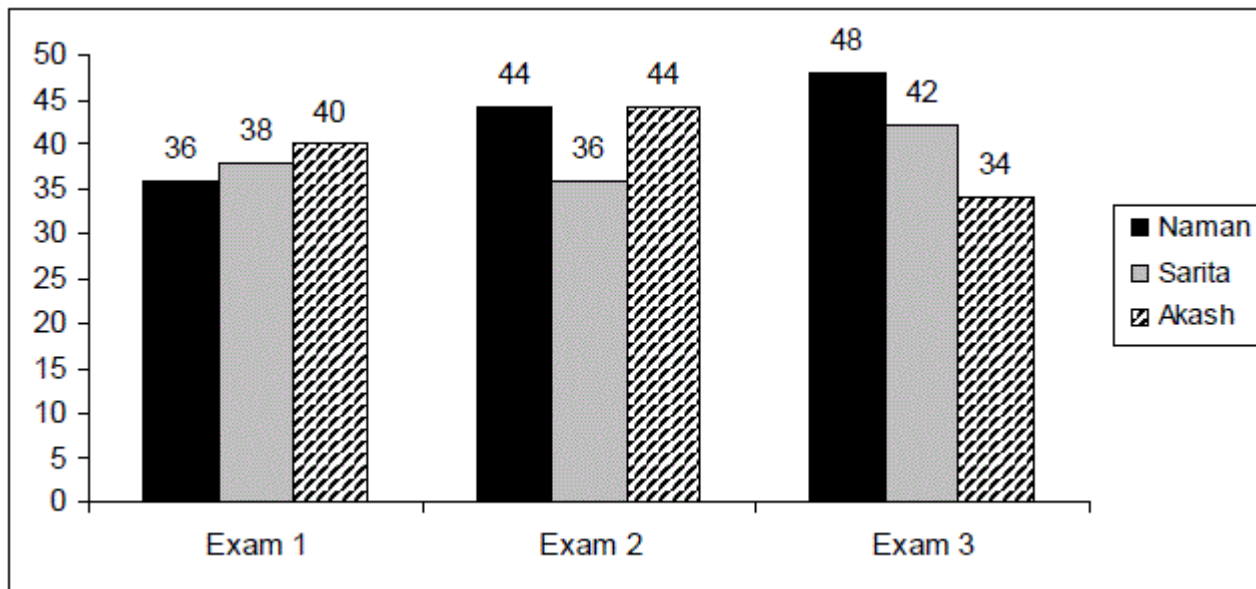
So, Sarita has to make 2 mistakes and then her score will be  $114 \times 2 - 2 \times 1 = 226$ In that scenario Akash's score will be  $114 \times 2 - 4 \times 0.5 = 226$ And Naman's score will be  $118 \times 2 - 10 \times 1 = 226$ So, total minimum wrong attempts will be  $2 + 4 + 10 = 16$ .

Bookmark

FeedBack

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

There are three friends named as Naman, Sarita, and Akash. They appeared for the three exams - EXAM – 1, Exam – 2, and EXAM – 3. In each of the three exams there were 50 questions. The table given below tells about the number of questions attempted by the three students in each of the three exams.



Some other information about the three exams is as under.

- Each correct question fetches 2 marks in each exam..
- For every incorrect question, penalty is 1 mark, 0.5 marks, and 0.5 marks respectively for the three exams..
- For every not-attempted question 0 marks were awarded..
- All the 3 friends got same total marks in the three exams together..



**Q.36 [11594329]**

What could be the maximum possible total marks got by three of them in Exam – 3?

**Solution:**

**Correct Answer : 248**

[Answer key/Solution](#)

Converting the bar graph into the table gives us:

	Exam 1	Exam 2	Exam 3	Total Attempts
Naman	36	44	48	128
Sarita	38	36	42	116
Akash	40	44	34	118

In answer to the previous question, to minimize the wrong attempts we maximized the total score, which came out to be 226. In order to achieve this total score,

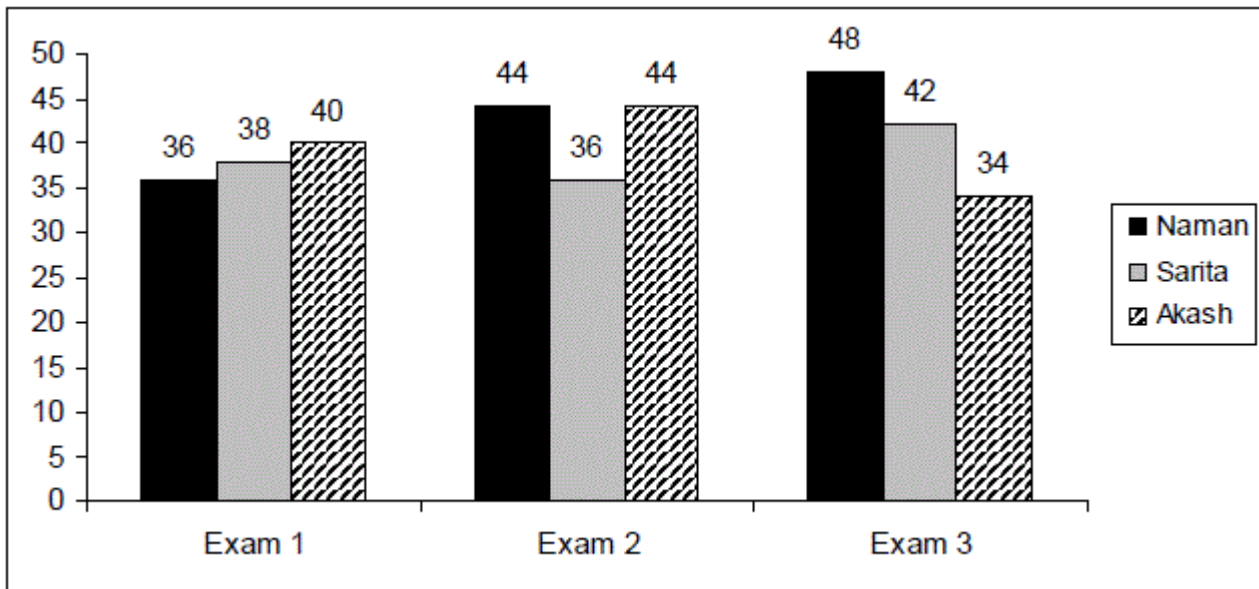
Sarita has to make 2 mistakes in Exam 1, where negative marking is 1, Akash has to make 4 mistakes in either exam 2 or 3 with negative marking of 0.5 and Naman will make 10 wrong attempts of negative marking 1. Maximum possible marks in Exam 3 can be achieved if we consider that no wrong attempts have been made in that exam by any of them. Maximum possible marks in Exam 3 can be =  $(48 + 42 + 34) \times 2 = 124 \times 2 = 248$ .

Bookmark

FeedBack

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

There are three friends named as Naman, Sarita, and Akash. They appeared for the three exams - EXAM – 1, Exam – 2, and EXAM – 3. In each of the three exams there were 50 questions. The table given below tells about the number of questions attempted by the three students in each of the three exams.



Some other information about the three exams is as under.

- (i) Each correct question fetches 2 marks in each exam..
- (ii) For every incorrect question, penalty is 1 mark, 0.5 marks, and 0.5 marks respectively for the three exams..
- (iii) For every not-attempted question 0 marks were awarded..
- (iv) All the 3 friends got same total marks in the three exams together..

**Q.37 [11594329]**

What could be the maximum possible passing marks of each exam such that each of them fails in exactly one of the three exams?

1 ☐ 84

2 ☐ 74

3 ☐ 72

4 ☐ 68

**Solution:****Correct Answer : 3**[Answer key/Solution](#)

Converting the bar graph into the table gives us:

	Exam 1	Exam 2	Exam 3	Total Attempts
Naman	36	44	48	128
Sarita	38	36	42	116
Akash	40	44	34	118

Option 1, 84, is not possible, since 84 implies atleast 41 correct attempts, but since Sarita attempted 38 and 36 questions in two exams, it doesn't satisfy the condition mentioned in the question that each of them fails in exactly one of the three exams.

Similarly for option 2, 74, three of them might fail in exactly one of the three subjects but they won't be able to achieve the same total score.

For option 3, 72, all the criterias will satisfy.

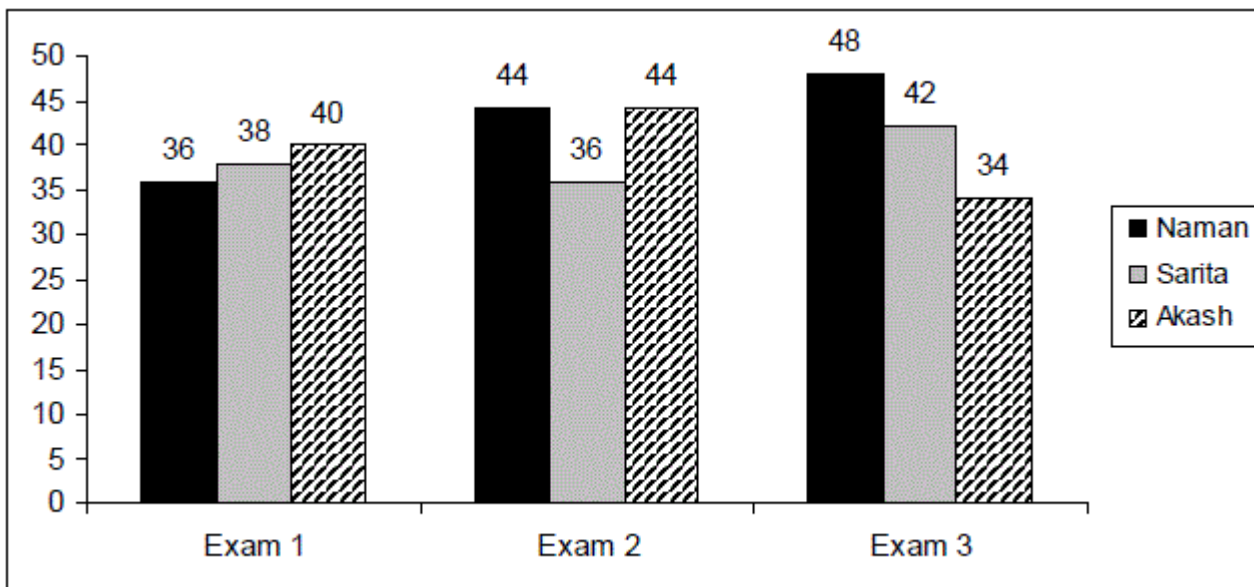
Therefore, the maximum possible passing marks for each exam such that each of them fails in exactly one of the three papers is 72.

Bookmark

FeedBack

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

There are three friends named as Naman, Sarita, and Akash. They appeared for the three exams - EXAM – 1, Exam – 2, and EXAM – 3. In each of the three exams there were 50 questions. The table given below tells about the number of questions attempted by the three students in each of the three exams.



Some other information about the three exams is as under.

- (i) Each correct question fetches 2 marks in each exam..
- (ii) For every incorrect question, penalty is 1 mark, 0.5 marks, and 0.5 marks respectively for the three exams..
- (iii) For every not-attempted question 0 marks were awarded..
- (iv) All the 3 friends got same total marks in the three exams together..

**Q.38 [11594329]**

What are the lowest possible marks scored by a friend in the three exams together?

1 ☐ -116

2 ☐ -114

3 ☐ -77

4 ☐ -74

**Solution:**

**Correct Answer : 4**

[Answer key/Solution](#)

Converting the bar graph into the table gives us:

	Exam 1	Exam 2	Exam 3	Total Attempts
Naman	36	44	48	128
Sarita	38	36	42	116
Akash	40	44	34	118

Minimum score is only possible if there are maximum wrongs.

$$\text{Naman} = 3 \times 2 - (35 \times 1) - (90 \times 0.5) = -74$$

$$\text{Sarita} = 1 \times 2 - (37 \times 1) - (78 \times 0.5) = -74$$

$$\text{Akash} = 2 \times 2 - (40 \times 1) - (76 \times 0.5) = -74.$$

Bookmark

FeedBack

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

In a ladies club of 'Vrindavan society', there are ten groups of four members each. Fatima, Mahira, Swara and Dina, all are the members of one of such groups. The ages (in years) of Fatima, Mahira, Swara and Dina, in given order, are in the descending order and further all ages are different natural numbers greater than 10. All the four members were spotted at a kitty party with each of them wearing a saree of different types among Kanjeevaram, Banarasi, Paithani and Chanderi, not necessarily in the same order. Each of them was enquired about the ages of the remaining three persons of their group, for which, their replies were as follows.

Person wearing a Kanjeevaram: The sum of the ages of all the others is 120 years.

Person wearing a Banarasi: The sum of the ages of all the others is 100 years.

Person wearing a Paithani: The sum of the ages of all the others is 110 years.

Person wearing a Chanderi: The sum of the ages of all the others is 140 years.

It later turned out that all of them made the right statement except one who made an error of 10 while adding the ages.

**Q.39 [11594329]**

Mahira was wearing a saree of which type?

1 ☐ Kanjeevaram

2 ○ Banarasi

3 ○ Paithani

4 ○ Chanderi

**Solution:****Correct Answer : 3****Your Answer : 3**

Answer key/Solution

Let the ages of ladies wearing a Kanjeevaram, Banarasi, Paithani and Chanderi saree be K, B, P and C years, respectively. The sum of ages of 3 persons taken at once out of 4 persons is given in 4 ways.

$$3[K + B + P + C] = 470 \pm 10$$

$$\Rightarrow 3[K + B + P + C] = 460 \text{ (not possible since 3 does not divide 460).}$$

$$\Rightarrow 3[K + B + P + C] = 480$$

$$\Rightarrow K + B + P + C = 160 \quad \dots (i)$$

It means the person wearing Banarasi or Paithani saree cannot make error because in that case, the sum of ages of 2 different combinations of 3 persons will be same.

Also, the person wearing a Chanderi saree cannot make error because in that case, the age of the person wearing a Chanderi saree would become 10 years, which is not possible.

So, the error must be made by the person wearing a Kanjeevaram saree.

Therefore, we can conclude that,  $B + P + C = 130$

From (i),  $K = 30$  years.

It is given that,  $K + P + C = 100$ ,  $K + B + C = 110$  and  $K + B + P = 140$

So,  $P = 50$  years

$C = 20$  years and  $B = 60$  years

Hence, Fatima, Mahira, Swara and Dina are wearing Banarasi, Paithani, Kanjeevaram and Chanderi sarees, respectively and also their ages are 60 years, 50 years, 30 years and 20 years, respectively.

Mahira was wearing a Paithani saree.

Bookmark

FeedBack

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

In a ladies club of 'Vrindavan society', there are ten groups of four members each. Fatima, Mahira, Swara and Dina, all are the members of one of such groups. The ages (in years) of Fatima, Mahira, Swara and Dina, in given order, are in the descending order and further all ages are different natural numbers greater than 10. All the four members were spotted at a kitty party with each of them wearing a saree of different types among Kanjeevaram, Banarasi, Paithani and Chanderi, not necessarily in the same order. Each of them was enquired about the ages of the remaining three persons of their group, for which, their replies were as follows.

Person wearing a Kanjeevaram: The sum of the ages of all the others is 120 years.

Person wearing a Banarasi: The sum of the ages of all the others is 100 years.

Person wearing a Paithani: The sum of the ages of all the others is 110 years.

Person wearing a Chanderi: The sum of the ages of all the others is 140 years.

It later turned out that all of them made the right statement except one who made an error of 10 while adding the ages.

**Q.40 [11594329]**

What was the age (in years) of Fatima?



**Solution:**

**Correct Answer : 60**

**Your Answer : 60**

Answer key/Solution

Let the ages of ladies wearing a Kanjeevaram, Banarasi, Paithani and Chanderi saree be K, B, P and C years, respectively. The sum of ages of 3 persons taken at once out of 4 persons is given in 4 ways.

$$3[K + B + P + C] = 470 \pm 10$$

$$\Rightarrow 3[K + B + P + C] = 460 \text{ (not possible since 3 does not divide 460).}$$

$$\Rightarrow 3[K + B + P + C] = 480$$

$$\Rightarrow K + B + P + C = 160 \quad \dots (i)$$

It means the person wearing Banarasi or Paithanisaree cannot make error because in that case, the sum of ages of 2 different combinations of 3 persons will be same.

Also, the person wearing a Chanderi saree cannot make error because in that case, the age of the person wearing a Chanderi saree would become 10 years, which is not possible.

So, the error must be made by the person wearing a Kanjeevaramsaree.

Therefore, we can conclude that,  $B + P + C = 130$

From (i),  $K = 30$  years.

It is given that,  $K + P + C = 100$ ,  $K + B + C = 110$  and  $K + B + P = 140$

So,  $P = 50$  years

$C = 20$  years and  $B = 60$  years

Hence, Fatima, Mahira, Swara and Dina are wearing Banarasi, Paithani, Kanjeevaram and Chanderi sarees, respectively and also their ages are 60 years, 50 years, 30 years and 20 years, respectively.

So, Age of Fatima is 60 years.

Bookmark

FeedBack

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

In a ladies club of 'Vrindavan society', there are ten groups of four members each. Fatima, Mahira, Swara and Dina, all are the members of one of such groups. The ages (in years) of Fatima, Mahira, Swara and Dina, in given order, are in the descending order and further all ages are different natural numbers greater than 10. All the four members were spotted at a kitty party with each of them wearing a saree of different types among Kanjeevaram, Banarasi, Paithani and Chanderi, not necessarily in the same order. Each of them was enquired about the ages of the remaining three persons of their group, for which, their replies were as follows.

Person wearing a Kanjeevaram: The sum of the ages of all the others is 120 years.

Person wearing a Banarasi: The sum of the ages of all the others is 100 years.

Person wearing a Paithani: The sum of the ages of all the others is 110 years.

Person wearing a Chanderi: The sum of the ages of all the others is 140 years.

It later turned out that all of them made the right statement except one who made an error of 10 while adding the ages.

**Q.41 [11594329]**

Who has done the error while adding the ages?

1 ☐ Fatima



2 ☐ Dina3 ☐ Swara4 ☐ Mahira

✕

**Solution:****Correct Answer : 3****Your Answer : 2**[🔑 Answer key/Solution](#)

Let the ages of ladies wearing a Kanjeevaram, Banarasi, Paithani and Chanderi saree be K, B, P and C years, respectively. The sum of ages of 3 persons taken at once out of 4 persons is given in 4 ways.

$$3[K + B + P + C] = 470 \pm 10$$

$$\Rightarrow 3[K + B + P + C] = 460 \text{ (not possible since 3 does not divide 460).}$$

$$\Rightarrow 3[K + B + P + C] = 480$$

$$\Rightarrow K + B + P + C = 160 \quad \dots (i)$$

It means the person wearing Banarasi or Paithanisaree cannot make error because in that case, the sum of ages of 2 different combinations of 3 persons will be same.

Also, the person wearing a Chanderi saree cannot make error because in that case, the age of the person wearing a Chanderi saree would become 10 years, which is not possible.

So, the error must be made by the person wearing a Kanjeevaramsaree.

Therefore, we can conclude that,  $B + P + C = 130$

From (i),  $K = 30$  years.

It is given that,  $K + P + C = 100$ ,  $K + B + C = 110$  and  $K + B + P = 140$

So,  $P = 50$  years

$C = 20$  years and  $B = 60$  years

Hence, Fatima, Mahira, Swara and Dina are wearing Banarasi, Paithani, Kanjeevaram and Chanderi sarees, respectively and also their ages are 60 years, 50 years, 30 years and 20 years, respectively.

Swara has made the error while adding the ages.

Bookmark

FeedBack

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

In a ladies club of 'Vrindavan society', there are ten groups of four members each. Fatima, Mahira, Swara and Dina, all are the members of one of such groups. The ages (in years) of Fatima, Mahira, Swara and Dina, in given order, are in the descending order and further all ages are different natural numbers greater than 10. All the four members were spotted at a kitty party with each of them wearing a saree of different types among Kanjeevaram, Banarasi, Paithani and Chanderi, not necessarily in the same order. Each of them was enquired about the ages of the remaining three persons of their group, for which, their replies were as follows.

Person wearing a Kanjeevaram: The sum of the ages of all the others is 120 years.

Person wearing a Banarasi: The sum of the ages of all the others is 100 years.

Person wearing a Paithani: The sum of the ages of all the others is 110 years.

Person wearing a Chanderi: The sum of the ages of all the others is 140 years.

It later turned out that all of them made the right statement except one who made an error of 10 while adding the ages.

**Q.42 [11594329]**

After how many years would Swara be as old as what Mahira is now?



**Solution:**

**Correct Answer : 20**

**Your Answer : 10**

 Answer key/Solution

Let the ages of ladies wearing a Kanjeevaram, Banarasi, Paithani and Chanderi saree be K, B, P and C years, respectively. The sum of ages of 3 persons taken at once out of 4 persons is given in 4 ways.

$$3[K + B + P + C] = 470 \pm 10$$

$$\Rightarrow 3[K + B + P + C] = 460 \text{ (not possible since 3 does not divide 460).}$$

$$\Rightarrow 3[K + B + P + C] = 480$$

$$\Rightarrow K + B + P + C = 160 \quad \dots (i)$$

It means the person wearing Banarasi or Paithanisaree cannot make error because in that case, the sum of ages of 2 different combinations of 3 persons will be same.

Also, the person wearing a Chanderi saree cannot make error because in that case, the age of the person wearing a Chanderi saree would become 10 years, which is not possible.

So, the error must be made by the person wearing a Kanjeevaramsaree.

Therefore, we can conclude that,  $B + P + C = 130$

From (i),  $K = 30$  years.

It is given that,  $K + P + C = 100$ ,  $K + B + C = 110$  and  $K + B + P = 140$

So,  $P = 50$  years

$C = 20$  years and  $B = 60$  years

Hence, Fatima, Mahira, Swara and Dina are wearing Banarasi, Paithani, Kanjeevaram and Chanderi sarees, respectively and also their ages are 60 years, 50 years, 30 years and 20 years, respectively.

As of now Swara is 30 years old and Mahira is 50 year old. Therefore Swara would take another 20 years to be as old as what Fatima is now.

Bookmark

FeedBack

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

Six horses entered in a race. Their names are "Ajay", "Bijay", "Chapal", "Dhananjay", "Fankaar", and "Gatimaan". The starting gates in a row are numbered consecutively from 1 to 7. Seven jockeys, numbered from 1 to 7, are eligible to ride in the race. Every jockey's number corresponds to the number of his starting gate, if he is assigned a horse. Exactly one jockey will not be assigned a horse and the starting gate corresponding to that jockey will remain vacant for the race.

The following information is provided about the race:

(i) Either Ajay or Chapal must be ridden by Jockey 1.

(ii) Fankaar must be ridden by either Jockey 4 or Jockey 5.

(iii) Bijay and Fankaar must have at least one horse between them separating the two of them in the starting gate.

(iv) Chapal must run from a starting gate position with a lower number than the starting gate position from which Gatimaan runs.

**Q.43 [11594329]**

If in the race, jockeys finish in the order of 6, 5, 4, 3, 2, 1, (6 being the first and 1 being the last) and if Bijay is the horse that wins the race, then which of the following horses could not have been among the top three finishers?



1 ☐ Dhananjay2 ☐ Chapal3 ☐ Fankaar4 ☐ Gatimaan**Solution:****Correct Answer : 2** Answer key/Solution

Jockey      Horse  
 1              Ajay/Chapal  
 4/5           Fankaar

Bijay and Fankaar must have at least 1 horse between them.

Chapal's jockey number must be less than Gatimaan's jockey number.

Rank	1	2	3	4	5	6
Start Gate	6	5	4	3	2	1
Horse	Bijay					

Fankaar must be ridden by Jockey 4 or by Jockey 5. Now, Chapal's jockey number must be less than Gatimaan's number. So, Chapal cannot ride either horse 4 or horse 5. So he cannot be in top 3.

Bookmark

FeedBack

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

Six horses entered in a race. Their names are "Ajay", "Bijay", "Chapal", "Dhananjay", "Fankaar", and "Gatimaan". The starting gates in a row are numbered consecutively from 1 to 7. Seven jockeys, numbered from 1 to 7, are eligible to ride in the race. Every jockey's number corresponds to the number of his starting gate, if he is assigned a horse. Exactly one jockey will not be assigned a horse and the starting gate corresponding to that jockey will remain vacant for the race.

The following information is provided about the race:

- (i) Either Ajay or Chapal must be ridden by Jockey 1.
- (ii) Fankaar must be ridden by either Jockey 4 or Jockey 5.
- (iii) Bijay and Fankaar must have at least one horse between them separating the two of them in the starting gate.
- (iv) Chapal must run from a starting gate position with a lower number than the starting gate position from which Gatimaan runs.

**Q.44 [11594329]**

If Jockey 5 is not assigned to any horse, then which of the following could be a possible pair?

1 ☐ Ajay - Jockey 42 ☐ Bijay - Jockey 6

3 ☐ Gatimaan - Jockey 6

4 ☐ Chapal - Jockey 7

**Solution:**

**Correct Answer : 3**

 Answer key/Solution

Jockey      Horse  
1            Ajay/Chapal  
4/5        Fankaar

Bijay and Fankaar must have at least 1 horse between them.

Chapal's jockey number must be less than Gatimaan's jockey number.

Jockey	1	2	3	4	5	6	7
Horse				Fankaar	-		

Option 1 cannot be true.

Option 2 cannot be true, as Bijay and Fankaar must be separated by at least 1 horse.

Option 4 cannot be true, as Chapal's jockey number must be less than Gatimaan's jockey number.

Bookmark

FeedBack

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

Six horses entered in a race. Their names are "Ajay", "Bijay", "Chapal", "Dhananjay", "Fankaar", and "Gatimaan". The starting gates in a row are numbered consecutively from 1 to 7. Seven jockeys, numbered from 1 to 7, are eligible to ride in the race. Every jockey's number corresponds to the number of his starting gate, if he is assigned a horse. Exactly one jockey will not be assigned a horse and the starting gate corresponding to that jockey will remain vacant for the race.

The following information is provided about the race:

- (i) Either Ajay or Chapal must be ridden by Jockey 1.
- (ii) Fankaar must be ridden by either Jockey 4 or Jockey 5.
- (iii) Bijay and Fankaar must have at least one horse between them separating the two of them in the starting gate.
- (iv) Chapal must run from a starting gate position with a lower number than the starting gate position from which Gatimaan runs.

#### Q.45 [11594329]

If Dhananjay is unable to run the race and no replacement horse is found, and if the jockeys that finish the race, from first to last, is in the order of 1, 2, 4, 6 and 7, which of the following must have finished last in the race?

1 ☐ Ajay

2 ☐ Bijay

3 ☐ Chapal

4 ○ Fankaar

**Solution:****Correct Answer : 2** Answer key/Solution

Jockey      Horse  
 1            Ajay/Chapal  
 4/5        Fankaar

Bijay and Fankaar must have at least 1 horse between them.  
 Chapal's jockey number must be less than Gatimaan's jockey number.

Rank	1	2	3	4	5
Jockey	1	2	4	6	7
Horse	Ajay/ Chapal		Fankaar		Bijay

Jockey 1 will ride either Ajay or Chapal. Bijay and Fankaar must be separated by at least 1 horse. So, Bijay must be at the last position.

Bookmark

FeedBack

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

Six horses entered in a race. Their names are "Ajay", "Bijay", "Chapal", "Dhananjay", "Fankaar", and "Gatimaan". The starting gates in a row are numbered consecutively from 1 to 7. Seven jockeys, numbered from 1 to 7, are eligible to ride in the race. Every jockey's number corresponds to the number of his starting gate, if he is assigned a horse. Exactly one jockey will not be assigned a horse and the starting gate corresponding to that jockey will remain vacant for the race.

The following information is provided about the race:

- (i) Either Ajay or Chapal must be ridden by Jockey 1.
- (ii) Fankaar must be ridden by either Jockey 4 or Jockey 5.
- (iii) Bijay and Fankaar must have at least one horse between them separating the two of them in the starting gate.
- (iv) Chapal must run from a starting gate position with a lower number than the starting gate position from which Gatimaan runs.

**Q.46 [11594329]**

If Chapal runs from starting gate 5 and starting gate 6 is vacant, which of the following is a correct pair?

1 ○ Gatimaan - gate 2

2 ○ Ajay - gate 2

3 ○ Fankaar - gate 3

4 ○ Dhananjay - gate 3

**Solution:****Correct Answer : 4**[Answer key/Solution](#)

Jockey      Horse  
1            Ajay/Chapal  
4/5        Fankaar

Bijay and Fankaar must have at least 1 horse between them.

Chapal's jockey number must be less than Gatimaan's jockey number.

Jockey	1	2	3	4	5	6	7
Horse	Ajay	Bijay	Dhananjay	Fankaar	Chapal	-	Gatimaan

If Chapal runs from starting gate 5 and starting gate 6 is vacant, then "Dhananjay - gate 3" is a correct pair.

[Bookmark](#)[FeedBack](#)

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

In an online game "Smart Cricket Live", two players can play simultaneously. Both of them bat for 3 overs of 6 balls each on their respective screens simultaneously. They can score runs in the form of 1's, 2's, 3's, 4's and 6's. If a player misses a ball there are two possibilities, either the ball hits the wicket or not. If the ball hits the wicket, there is a penalty of 5 runs (i.e., 5 runs are deducted from total runs) and if the ball does not hit the wicket, 0 runs are scored. There are no catching fielders except a bowler and the player who is batting.

Given below is some partial data about the three overs faced by the two players namely Player1 (P1) and Player2 (P2):

Over1:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	2			6		0
	P2	3	1			0	

Over2:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1		0	4	4		2
	P2	6		1	1		

Over3:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	0	2		2		2
	P2	1		3		4	4

Additional information is as follows:

- In the 3rd over, player 1 has scored more runs than player 2.
- Player 2 has hit a 6 in the last ball of the 2nd over.
- Both the players have scored 24 runs through 6's.
- Both the players have got exactly 1 penalty throughout the game and that too in the same over and in the same ball.
- Both the players have hit a hat trick of 4's (i.e., three consecutive 4's in three consecutive balls) exactly once in the game.
- The number of 4's hit by Player 1 and Player 2 in the 2nd over is in the ratio of 2:1.

**Q.47 [11594329]**

What is the number of runs scored by Player 2 in the 3rd over?

1 ☐ 16

2 ☐ 18

3 ☐ 17

4 ☐ Either (1) or (3)

**Solution:****Correct Answer : 4**[Answer key/Solution](#)

- As both the players have hit 24 runs through 6's, thus both hit four 6's.
  - Both players have hit a hat trick of 4's exactly once, so, for P1 it will be 2nd over (Balls 3, 4 and 5) and for P2 it will be 3rd over (Balls 4, 5 and 6).
  - In 3rd over, P1 has scored more runs than P2, so P1 should score two 6's in balls 3 and 5. P2 should score either 0 or 1 in ball 2.
  - The number of 4's hit by P1 and P2 in 2nd over is in the ratio of 2:1, so P1 should have hit four 4's and thus P2 should have hit two 4's. As P2 has hit a 6 in the last ball of 2nd over so the two 4's should have been hit by him in balls 2 and 5.
  - The penalty scored by both will be in ball 3 of 1st over.
  - As both have hit four 6's, therefore, P2 should hit 6's in balls 4 and 6 of the 1st over and P1 should have hit a 6 in either ball 2 or ball 5 of the 1st over.
- So, the final tables are:

**Over 1:**

'6' will come in one of these two places

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	2		-5	6		0
P <sub>2</sub>	3	1	-5	6	0	6

**Over 2:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	4	0	4	4	4	2
P <sub>2</sub>	6	4	1	1	4	6

**Over 3:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	0	2	6	2	6	2
P <sub>2</sub>	1	1/0	3	4	4	4

Clearly, we can say that P2 scored either 16 or 17 runs in the 3rd over.

Bookmark

FeedBack

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

In an online game "Smart Cricket Live", two players can play simultaneously. Both of them bat for 3 overs of 6 balls each on their respective screens simultaneously. They can score runs in the form of 1's, 2's, 3's, 4's and 6's. If a player misses a ball there are two possibilities, either the ball hits the wicket or not. If the ball hits the wicket, there is a penalty of 5 runs (i.e., 5 runs are deducted from total runs) and if the ball does not hit the wicket, 0 runs are scored. There are no catching fielders except a bowler and the player who is batting.

Given below is some partial data about the three overs faced by the two players namely Player1 (P1) and Player2 (P2):

Over1:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	2			6		0
	P2	3	1			0	

Over2:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1		0	4	4		2
	P2	6		1	1		

Over3:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	0	2		2		2
	P2	1		3		4	4

Additional information is as follows:

- In the 3rd over, player 1 has scored more runs than player 2.
- Player 2 has hit a 6 in the last ball of the 2nd over.
- Both the players have scored 24 runs through 6's.
- Both the players have got exactly 1 penalty throughout the game and that too in the same over and in the same ball.
- Both the players have hit a hat trick of 4's (i.e., three consecutive 4's in three consecutive balls) exactly once in the game.
- The number of 4's hit by Player 1 and Player 2 in the 2nd over is in the ratio of 2:1.

#### Q.48 [11594329]

What is the absolute difference between the total number of runs scored by player 1 and player 2 in the 2nd over?

**Solution:****Correct Answer : 4** Answer key/Solution

- As both the players have hit 24 runs through 6's, thus both hit four 6's.
  - Both players have hit a hat trick of 4's exactly once, so, for P1 it will be 2nd over (Balls 3, 4 and 5) and for P2 it will be 3rd over (Balls 4, 5 and 6).
  - In 3rd over, P1 has scored more runs than P2, so P1 should score two 6's in balls 3 and 5. P2 should score either 0 or 1 in ball 2.
  - The number of 4's hit by P1 and P2 in 2nd over is in the ratio of 2:1, so P1 should have hit four 4's and thus P2 should have hit two 4's. As P2 has hit a 6 in the last ball of 2nd over so the two 4's should have been hit by him in balls 2 and 5.
  - The penalty scored by both will be in ball 3 of 1st over.
  - As both have hit four 6's, therefore, P2 should hit 6's in balls 4 and 6 of the 1st over and P1 should have hit a 6 in either ball 2 or ball 5 of the 1st over.
- So, the final tables are:

**Over 1:**

'6' will come in one of these two places

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	2		-5	6		0
P <sub>2</sub>	3	1	-5	6	0	6

**Over 2:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	4	0	4	4	4	2
P <sub>2</sub>	6	4	1	1	4	6

**Over 3:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	0	2	6	2	6	2
P <sub>2</sub>	1	1/0	3	4	4	4

P1 scored 18 runs and P2 scored 22 runs in the 2nd over. Hence, the absolute difference is 4.

Bookmark

FeedBack



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

In an online game "Smart Cricket Live", two players can play simultaneously. Both of them bat for 3 overs of 6 balls each on their respective screens simultaneously. They can score runs in the form of 1's, 2's, 3's, 4's and 6's. If a player misses a ball there are two possibilities, either the ball hits the wicket or not. If the ball hits the wicket, there is a penalty of 5 runs (i.e., 5 runs are deducted from total runs) and if the ball does not hit the wicket, 0 runs are scored. There are no catching fielders except a bowler and the player who is batting.

Given below is some partial data about the three overs faced by the two players namely Player1 (P1) and Player2 (P2):

Over1:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	2			6		0
	P2	3	1			0	

Over2:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1		0	4	4		2
	P2	6		1	1		

Over3:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	0	2		2		2
	P2	1		3		4	4

Additional information is as follows:

- In the 3rd over, player 1 has scored more runs than player 2.
- Player 2 has hit a 6 in the last ball of the 2nd over.
- Both the players have scored 24 runs through 6's.
- Both the players have got exactly 1 penalty throughout the game and that too in the same over and in the same ball.
- Both the players have hit a hat trick of 4's (i.e., three consecutive 4's in three consecutive balls) exactly once in the game.
- The number of 4's hit by Player 1 and Player 2 in the 2nd over is in the ratio of 2:1.

#### Q.49 [11594329]

How many 6's are hit by player1 in the 1st over?

**Solution:****Correct Answer : 2**[Answer key/Solution](#)

- As both the players have hit 24 runs through 6's, thus both hit four 6's.
  - Both players have hit a hat trick of 4's exactly once, so, for P1 it will be 2nd over (Balls 3, 4 and 5) and for P2 it will be 3rd over (Balls 4, 5 and 6).
  - In 3rd over, P1 has scored more runs than P2, so P1 should score two 6's in balls 3 and 5. P2 should score either 0 or 1 in ball 2.
  - The number of 4's hit by P1 and P2 in 2nd over is in the ratio of 2:1, so P1 should have hit four 4's and thus P2 should have hit two 4's. As P2 has hit a 6 in the last ball of 2nd over so the two 4's should have been hit by him in balls 2 and 5.
  - The penalty scored by both will be in ball 3 of 1st over.
  - As both have hit four 6's, therefore, P2 should hit 6's in balls 4 and 6 of the 1st over and P1 should have hit a 6 in either ball 2 or ball 5 of the 1st over.
- So, the final tables are:

**Over 1:**

'6' will come in one of these two places

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	2		-5	6		0
P <sub>2</sub>	3	1	-5	6	0	6

**Over 2:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	4	0	4	4	4	2
P <sub>2</sub>	6	4	1	1	4	6

**Over 3:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	0	2	6	2	6	2
P <sub>2</sub>	1	1/0	3	4	4	4

Player 1 hit two 6's in the 1st over.

Bookmark

FeedBack

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

In an online game "Smart Cricket Live", two players can play simultaneously. Both of them bat for 3 overs of 6 balls each on their respective screens simultaneously. They can score runs in the form of 1's, 2's, 3's, 4's and 6's. If a player misses a ball there are two possibilities, either the ball hits the wicket or not. If the ball hits the wicket, there is a penalty of 5 runs (i.e., 5 runs are deducted from total runs) and if the ball does not hit the wicket, 0 runs are scored. There are no catching fielders except a bowler and the player who is batting.

Given below is some partial data about the three overs faced by the two players namely Player1 (P1) and Player2 (P2):

Over1:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	2			6		0
	P2	3	1			0	

Over2:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1		0	4	4		2
	P2	6		1	1		

Over3:		Ball 1	Ball 2	Ball 3	Ball 4	Ball 5	Ball 6
	P1	0	2		2		2
	P2	1		3		4	4

Additional information is as follows:

- In the 3rd over, player 1 has scored more runs than player 2.
- Player 2 has hit a 6 in the last ball of the 2nd over.
- Both the players have scored 24 runs through 6's.
- Both the players have got exactly 1 penalty throughout the game and that too in the same over and in the same ball.
- Both the players have hit a hat trick of 4's (i.e., three consecutive 4's in three consecutive balls) exactly once in the game.
- The number of 4's hit by Player 1 and Player 2 in the 2nd over is in the ratio of 2:1.

#### Q.50 [11594329]

If both the players scored below 50 in the match, then which of the following statements could be true?

- Player 1 has scored more runs than Player 2 in the match.
- There are exactly 2 balls in the 1st over in which player 1 scored 0.
- Both have scored equal number of runs.
- Player 2 has hit a six in every over.

1 ☐ I and III

2 ☐ II and IV

3 ☐ I, II and III

4 ○ II and III

**Solution:****Correct Answer : 4** Answer key/Solution

- As both the players have hit 24 runs through 6's, thus both hit four 6's.
  - Both players have hit a hat trick of 4's exactly once, so, for P1 it will be 2nd over (Balls 3, 4 and 5) and for P2 it will be 3rd over (Balls 4, 5 and 6).
  - In 3rd over, P1 has scored more runs than P2, so P1 should score two 6's in balls 3 and 5. P2 should score either 0 or 1 in ball 2.
  - The number of 4's hit by P1 and P2 in 2nd over is in the ratio of 2:1, so P1 should have hit four 4's and thus P2 should have hit two 4's. As P2 has hit a 6 in the last ball of 2nd over so the two 4's should have been hit by him in balls 2 and 5.
  - The penalty scored by both will be in ball 3 of 1st over.
  - As both have hit four 6's, therefore, P2 should hit 6's in balls 4 and 6 of the 1st over and P1 should have hit a 6 in either ball 2 or ball 5 of the 1st over.
- So, the final tables are:

**Over 1:**

'6' will come in one of these two places

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	2		-5	6		0
P <sub>2</sub>	3	1	-5	6	0	6

**Over 2:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	4	0	4	4	4	2
P <sub>2</sub>	6	4	1	1	4	6

**Over 3:**

	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>
P <sub>1</sub>	0	2	6	2	6	2
P <sub>2</sub>	1	1/0	3	4	4	4

Total runs scored by P1 will be one among 45, 46, 47 and 49 depending on the run scored in the remaining one ball of 1st over, which can be either 0, 1, 2 or 4. For P2, total runs can be either 49 or 50 but as mentioned in the question that both players scored below 50 so, for P2, total runs will be 49.

Statement I cannot be true as P1's total score cannot be greater than 49.

Statement II can be true as P1 already scored 0 runs in ball 6 of the 1st over and if he scores 0 runs in the remaining one ball then there will be exactly 2 balls in which he scored 0.

Statement III can be true as there is a possibility when both score 49 runs.

Statement IV is false as P2 has not hit a single 6's in the 3rd over.

Hence, only statements II and III can be true.

Bookmark

FeedBack

## Sec 3

**Q.51 [11594329]**

How many real value/s of  $x$  are satisfying the equation  $\left(\log_{10}\left(\frac{x-5}{x-3}\right)\right)^{x^2-7x+12} = 1$ ?

1 ☐ 02 ☐ 13 ☐ 24 ☐ More than 2**Solution:****Correct Answer : 2** Answer key/Solution

Given:  $\left(\log_{10}\left(\frac{x-5}{x-3}\right)\right)^{x^2-7x+12} = 1$

Two possible cases will be:

Case 1:  $\log_{10}\left(\frac{x-5}{x-3}\right) \neq 1$  and  $x^2 - 7x + 12 = 0$

Here,  $x^2 - 7x + 12 = 0 \Rightarrow (x-3)(x-4) = 0$ , which means  $x = 3$ , and  $4$ . But for  $3$  and  $4$ ,  $\log_{10}\left(\frac{x-5}{x-3}\right)$  is not defined.

Therefore, this case is discarded.

Case 2:  $\log_{10}\left(\frac{x-5}{x-3}\right) = 1$  and  $x^2 - 7x + 12$  may or may not be equal to zero.

So,  $\log_{10}\left(\frac{x-5}{x-3}\right) = 1 \Rightarrow \frac{x-5}{x-3} = 10 \Rightarrow x = \frac{25}{9}$ .

Hence, number of real values satisfying the equation  $\left(\log_{10}\left(\frac{x-5}{x-3}\right)\right)^{x^2-7x+12} = 1$ , is **1**.

Bookmark

FeedBack

**Q.52 [11594329]**

A 3-digit number, with all its digits as natural numbers, is 396 more than the 3-digit number formed by reversing the order of its digits. If the tens digit of the number is more than its hundreds digit, then how many such numbers are possible?

**Solution:****Correct Answer : 10**[Answer key/Solution](#)

Let the 3-digit number be  $abc$ .

where  $b > a$

$$\Rightarrow (100a + 10b + c) - (100c + 10b + a) = 396$$

$$\Rightarrow a - c = 4 = 396/99$$

$$5 \quad 1$$

$$6 \quad 2$$

$$7 \quad 3$$

$$8 \quad 4$$

$$9 \quad 5$$

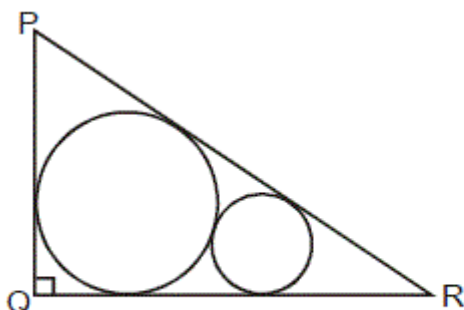
Now, when  $a = 5 \Rightarrow b = 6, 7, 8$  or  $9 \rightarrow 4$  numbers are possible

when  $a = 6 \Rightarrow b = 7, 8$  or  $9 \rightarrow 3$  numbers

when  $a = 7 \Rightarrow b = 8, 9 \rightarrow 2$  number

when  $a = 8 \Rightarrow b = 9 \rightarrow 1$  number

Hence, a total of 10 numbers.

[Bookmark](#)
[FeedBack](#)
**Q.53 [11594329]**

In a right angled  $\triangle PQR$ ,  $PQ = 3.6$  units and  $QR$  is  $4.8$  units. If the area of the smaller circle is 25% of the area of the bigger circle, then find the radius of the smaller circle.

1 ☐ 0.4 units

2 ☐ 0.5 units

3 ☐ 0.2 units

4 ☐ 0.6 units

**Solution:****Correct Answer : 4**[Answer key/Solution](#)

The triangle PQR is a right angled triangle with sides being multiple of pythagoras triplet 3, 4, 5.

If a right angled triangle has sides 3, 4, 5, so the incircle will have radius equal to 1 unit. [inradius =  $\frac{3+4-5}{2} = 1$ ]

If we take its  $n^{\text{th}}$  multiple the inradius will also be  $n^{\text{th}}$  multiple.

Here the sides of triangle PQR is  $1.2^{\text{th}}$  multiple of 3, 4, 5 so radius of the bigger circle will be 1.2 units.

As, area of smaller circle is 25% of that of bigger circle, which means its radius will be half of that of bigger circle.

Hence, the radius of the smaller circle is 0.6 units.

Bookmark

FeedBack

**Q.54 [11594329]**

Let  $p = \frac{1}{20}(a_1 + a_2 + \dots + a_{20})$  and  $q = (a_1 - 1) + (a_2 - 2) + \dots + (a_{20} - 20)$ , where  $a_i = i + \frac{1}{2}$ , then what is the value of  $|q - p|$ ?

**Solution:****Correct Answer : 1**[Answer key/Solution](#)

Given:  $a_i = i + \frac{1}{2}$

So,  $p = \frac{1}{20}(a_1 + a_2 + \dots + a_{20}) = \frac{1}{20}\left(1 + \frac{1}{2} + 2 + \frac{1}{2} + \dots + 20 + \frac{1}{2}\right) = \frac{1}{20}\left(\frac{20 \times 21}{2} + 20 \times \frac{1}{2}\right) = \frac{1}{20}(220) = 11$

And  $q = (a_1 - 1) + (a_2 - 2) + \dots + (a_{20} - 20) = \left(1 + \frac{1}{2} - 1 + 2 + \frac{1}{2} - 2 + \dots + 20 + \frac{1}{2} - 20\right) = 20 \times \frac{1}{2} = 10$

Hence,  $|q - p| = |10 - 11| = 1$ .

Bookmark

FeedBack

**Q.55 [11594329]**

It is given that,  $\text{LCM}(p, q) = 3^4 \times 5^3 \times 7^5$  and  $\text{LCM}(125p, 81q) = 3^4 \times 5^3 \times 7^5$ . If  $p$  and  $q$  are natural numbers, then how many values can 'p' take?

1 ☐ 122 ☐ 63 ☐ 304 ☐ 1

**Solution:****Correct Answer : 2** Answer key/Solution

$$\text{LCM}(p, q) = 3^4 \times 5^3 \times 7^5$$

... (i)

$$\text{LCM}(5^3p, 3^4q) = 3^4 \times 5^3 \times 7^5$$

... (ii)

Since in LCM, there is  $5^3$  and  $3^4$  in both the cases (i.e., when  $(p, q)$  are there and when  $(125p, 81q)$  is there).

Hence, it can be concluded that  $p$  is definitely not a multiple of 5 and  $q$  is definitely not a multiple of 3. This further implies that  $p$  must be a multiple of  $3^4$  and  $q$  must be a multiple of  $5^3$ .  $7^5$  can be there because of either  $p$  or  $q$  or both.

Hence, possible values of  $p$  are:  $3^4$ ,  $(3^4 \times 7)$ ,  $(3^4 \times 7^2)$ ,  $(3^4 \times 7^3)$ ,  $(3^4 \times 7^4)$ ,  $(3^4 \times 7^5)$ .

Bookmark

FeedBack

**Q.56 [11594329]**

If  $p$  and  $q$  are the roots of  $ax^2 + bx + c = 0$  and  $p^3$  and  $q^3$  are the roots of  $1728x^2 - 91x + 1 = 0$ , then find the sum of roots of the equation  $cx^2 + bx + a = 0$ .

1 ☐ 42 ☐ 53 ☐ 64 ☐ 7**Solution:****Correct Answer : 4** Answer key/Solution

Solving the equation  $1728x^2 - 91x + 1 = 0$ , we get roots as  $\frac{1}{64}$  and  $\frac{1}{27}$ .

Therefore,  $p = \frac{1}{4}$  and  $\frac{1}{3}$  or vice versa. These are the roots of the equation  $ax^2 + bx + c = 0$ , so using the sum and product of the roots formulae we get the value of  $a$ ,  $b$  and  $c$  as 12, -7 and 1 respectively. So, putting these values of  $a$ ,  $b$  and  $c$ , the equation  $cx^2 + bx + a = 0$  will become  $x^2 - 7x + 12 = 0$ . Hence, the required sum will be 7.

Bookmark

FeedBack

**Q.57 [11594329]**

Box A contains 25% more balls than Box B, Box C contains 20% more balls than Box D and Box B contains 10% less balls than Box D. Exactly two balls from Box A is transferred to Box D, due to which Box D will have 10 more balls than Box B. How many balls are there in Box A and Box C together, after the transfer?

1 ☐ 1842 ☐ 176



3 ☐ 1524 ☐ 168**Solution:****Correct Answer : 1****Your Answer : 1**
[🔍 Answer key/Solution](#)

Let Box D contains  $x$  balls, then Box B, Box A and Box C will have  $\frac{9x}{10}$ ,  $\frac{9x}{8}$  and  $\frac{6x}{5}$  balls respectively.

After two balls are transferred from box A to box D,  $x + 2 = 10 + \frac{9x}{10} \Rightarrow x = 80$

Hence, balls in box A and C together after the transfer will be  $= \frac{9x}{8} - 2 + \frac{6x}{5} = 88 + 96 = 184$ .

Bookmark

FeedBack

**Q.58 [11594329]**

If  $f(x + y) = f(x) + f(y) + f(x)f(y)$  for all real values of  $x$  and  $y$  except 0 and  $f(1) = 1$ , then find the value of  $f(12)$ .

1 ☐ 20472 ☐ 40953 ☐ 18844 ☐ 8191**Solution:****Correct Answer : 2**
[🔍 Answer key/Solution](#)

$$f(2) = f(1 + 1) = f(1) + f(1) + f(1) \times f(1)$$

$$f(2) = f(1 + 1) = 1 + 1 + 1 = 3$$

$$f(3) = f(2 + 1) = f(2) + f(1) + f(2) \times f(1) \\ = 3 + 1 + 3 = 7$$

$$f(4) = f(3 + 1) = 7 + 1 + 7 = 15$$

$$f(5) = f(4 + 1) = 15 + 1 + 15 = 31$$

On observation, the series is of  $2^n - 1$

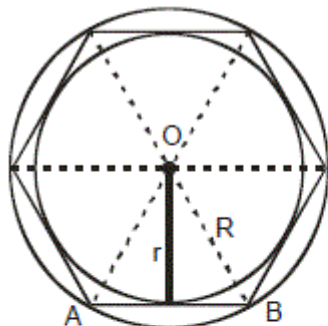
So, the value of  $f(12)$  will be  $2^{12} - 1 = 4095$ .

Bookmark

FeedBack

**Q.59 [11594329]**

Given that the area of a regular hexagon is  $18\sqrt{3}$  and its inradius and circumradius are  $r$  and  $R$ , respectively. Find the value of the expression  $R^2 + 3r$ .

**Solution:****Correct Answer : 21**[Answer key/Solution](#)

A regular hexagon is made up of 6 equal equilateral triangles.

$\therefore$  Each side of the hexagon is equal to its circum-radius,  $R$ .

$$\therefore 6 \times \frac{\sqrt{3}}{4} R^2 = 18\sqrt{3} \Rightarrow R = 2\sqrt{3}$$

The inradius of the hexagon is the height of the equilateral triangle OAB.

$$\therefore r = \frac{\sqrt{3}}{2} R = 3$$

Hence, the value of  $R^2 + 3r = (2\sqrt{3})^2 + 3 \times 3 = 21$ .

Bookmark

FeedBack

**Q.60 [11594329]**

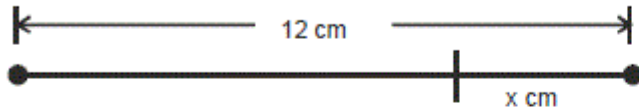
Raghu noticed that an incense stick of 10 cm long burns at the uniform rate of 4 cm in 4 hours and another incense stick of 12 cm long burns at the uniform rate of 4 cm in 3 hours. If Raghu lightens both the incense sticks at exact 11.00 AM, then at what time both the incense sticks remain equal in length after burning for a few hours?

1 ☐ 03.00 PM2 ☐ 04.00 PM3 ☐ 05.00 PM4 ☐ 06.00 PM

**Solution:****Correct Answer : 3**[Answer key/Solution](#)

$$\text{Burning rate of 10 cm long incense stick} = \frac{4\text{cm}}{4\text{ hour}} = 1 \text{ cm/hour}$$

$$\text{Burning rate of 12 cm long incense stick} = \frac{4\text{cm}}{3\text{ hour}} = 1.33 \text{ cm/hour}$$



After burning for 't' hours, let both the incense stick remain 'x cm' in length

$$\frac{12-x}{\left(\frac{4}{3}\right)} = \frac{10-x}{1}$$

$$\Rightarrow 3(12-x) = 4(10-x)$$

$$\Rightarrow 36 - 3x = 40 - 4x$$

$$\Rightarrow \boxed{x = 4 \text{ cm}}$$

$$\therefore t = \frac{10-x}{1} = 10 - 4 = 6 \text{ hour}$$

Hence, if Raghu lightens both the incense sticks at exact 11:00 a.m., then after 6 hours i.e., at 5:00 p.m., both the incense sticks remain equal in length.

Bookmark

FeedBack

**Q.61 [11594329]**

Ajit and Baljit start running from the same point at the same time in the same direction, around a circular track. Their second meeting point is at the distance of 200 meters from the starting point, and the whole circular track is of 400 meters (in length). Which of the following could not be the time after the start when their first meeting takes place, if the speed of Ajit is 20 m/s?

1 ☐ 15 sec2 ☐ 25 sec3 ☐ 30 sec4 ☐ 35 sec

**Solution:****Correct Answer : 3** Answer key/Solution

I. If Ajit has covered only half of the whole circular track till 2nd meeting, then his 2nd meeting time =  $\frac{200}{20} = 10$  sec

after the start.

Hence, 1st meeting time = 5 seconds.

II. If Ajit has covered two and a half rounds till the 2nd meeting, then his 2nd meeting time =  $\frac{800 + 200}{20} = 50$  seconds

after the start.

Hence, 1st meeting time = 25 seconds.

III. When Ajit has covered one and a half round till the 2nd meeting, then 2nd meeting time =  $\frac{400 + 200}{20} = 30$

seconds after the start .

Hence, 1st meeting time = 15 seconds.

IV. When Ajit has covered three and a half rounds till the 2nd meeting, then 2nd meeting time =  $\frac{1200 + 200}{20} = 70$

seconds after the start .

Hence, 1st meeting time = 35 seconds.

So, his 1st meeting time can be either 5 seconds or 15 seconds or 25 seconds or 35 seconds and so on.

Hence, among the options 30 seconds is not possible.

Bookmark

FeedBack

**Q.62 [11594329]**

Anju can paint a certain wall in 30 minutes and Sanju can do it in 50 minutes. Anju starts painting the wall, after five minutes Sanju joins her. After few more minutes, Manju joins them and they together finish the remaining work. If Manju has done  $\frac{1}{5}$ th of the total work, then find the approximate time (in minutes) taken to complete the total work.

1 ☐ 142 ☐ 193 ☐ 234 ☐ 17**Solution:****Correct Answer : 4** Answer key/Solution

Let us say total work is LCM of 30 and 50 i.e., 150 units. Anju can do 5 units per minute while Sanju can do 3 units per minute. Now, we know that Manju has done  $\frac{1}{5}$ th i.e., 30 units of work. Out of 150 units of work, 30 units is subtracted, so 120 units of work is done by Anju and Sanju.

Let Anju worked for "x" minutes and Sanju worked for "x - 5" minutes.

$$5x + 3(x - 5) = 120$$

$$\Rightarrow 8x = 135$$

$$\Rightarrow x = 135/8 = 16.87 \text{ minutes.}$$

Bookmark

FeedBack

**Q.63 [11594329]**

Rahul and Varun appeared for the annual exams. Marks scored by Rahul in Physics, Maths and Chemistry were in the ratio of 7 : 5 : 8. Whereas marks scored by Varun in Physics, Maths and Chemistry were in the ratio of 6 : 6 : 5. If Rahul scored 180% more marks than Varun in Chemistry, then in the Maths Exam, the percentage by which Varun's marks were less than Rahul's marks is closest to

1 ☐ 292 ☐ 313 ☐ 334 ☐ 35**Solution:****Correct Answer : 2****Your Answer : 2**

Let Rahul's marks in Physics, Maths and Chemistry be  $7x$ ,  $5x$ ,  $8x$ , respectively.  
And Varun's marks in Physics, Maths and Chemistry be  $6y$ ,  $6y$ ,  $5y$ , respectively.  
Since Rahul scored 180% more marks than Varun in Chemistry.  
Thus,  $8x$  is 280% of  $5y$ ,  
or,  $8x = 2.8 \times 5y$   
or,  $4x = 7y$  ( $x = 7$ ,  $y = 4$  can be assumed)  
We have to tell what percentage is  $6y$  less than  $5x$ .  
Putting the values,  
 $6y = 24$ ,  $5x = 35$   
 $24$  is 31.43% less than  $35$ .

Bookmark

FeedBack

[🔍 Answer key/Solution](#)**Q.64 [11594329]**

A tomato seller sells half of his stock daily and 20% of the remaining stock gets spoiled overnight. How many tomatoes did he start with on his first day if 234 tomatoes rotted over three nights?

1 ☐ 18002 ☐ 16003 ☐ 15004 ☐ 1400

**Solution:****Correct Answer : 3****Your Answer : 3**[Answer key/Solution](#)

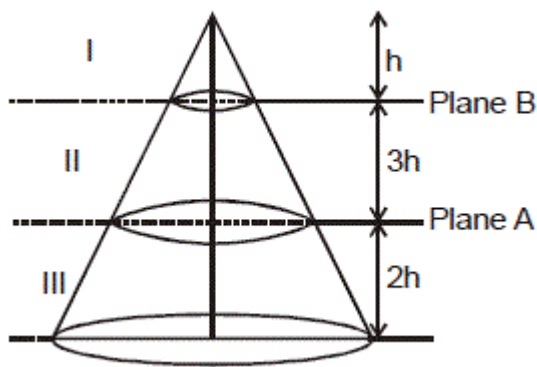
Let initial number of tomatoes be 'x'.

Day	Initial amount	Sales	Remaining overnight	Rotten	Stock for next day
I	x	0.5 x	0.5 x	0.1 x	0.4 x
II	0.4 x	0.2 x	0.2 x	0.04 x	0.16 x
III	0.16 x	0.08 x	0.08 x	0.016 x	0.064 x

 $\therefore$  Total rotten amount =  $0.156 x = 234$  $\Rightarrow x = 1500$ .

Bookmark

FeedBack

**Q.65 [11594329]**

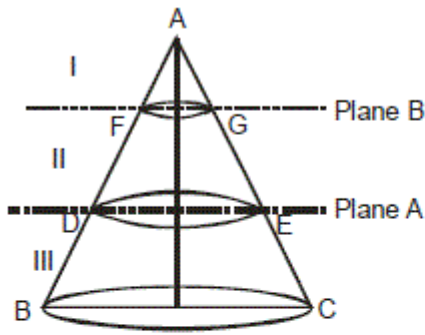
Two planes A and B cut a cone in three parts shown above. Find the ratio of the volume of the III part to the sum of volumes of I and II parts.

1 ☐  $\frac{216}{65}$

2 ☐  $\frac{19}{8}$

3 ☐  $\frac{27}{8}$

4 ☐  $\frac{24}{7}$

**Solution:****Correct Answer : 2**[Answer key/Solution](#)

As cones AFG, ADE and ABC are similar, therefore,

Ratio of their heights = Ratio of their radii

Ratio of their heights = 1 : 4 : 6

By cubing them, this becomes the ratio of their volumes.

$\therefore$  Ratio of their volumes = 1 : 64 : 216 and hence, the ratio of the volumes of I, II and III parts = 1 : (64 – 1) : (216 – 64)  
= 1 : 63 : 152

$$\therefore \frac{\text{Volume of III part}}{\text{Volume of (II + I) parts}} = \frac{152}{64} = \frac{19}{8}$$

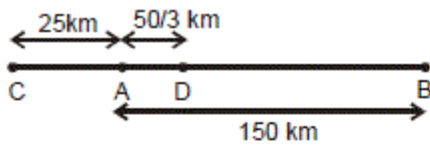
Bookmark

FeedBack

**Q.66 [11594329]**

There are two cities A and B which are 150 km apart. A train T1 from city A to city B leaves city A at 12 noon and travels at 50 km/hr towards city B. Another train T2 from city A to city B leaves city A at 11:30 a.m. and travels at 20 km/hr. A third train T3 travelling with the speed of 30 km/hr, leaves city B towards city A just when train T1 crosses train T2. When will train T3 meet train T1?

1 ☐ 1:30 p.m.2 ☐ 2 p.m.3 ☐ 2:30 p.m.4 ☐ None of these

**Solution:****Correct Answer : 2**[Answer key/Solution](#)

From city A towards city B, train  $T_1$  starts at 12 noon and train  $T_2$  at 11:30 a.m.

At 11:30 a.m., train  $T_1$  would be at C. So, in this half an hour, train  $T_1$  covers the distance from C to A =  $50 \times \frac{1}{2} = 25$  km

At 11:30 a.m., train  $T_1$  was at C and train  $T_2$  was at A.

So, the train  $T_1$  crosses the train  $T_2$  in =  $\frac{25}{50 - 20}$  hours = 50 minutes

$\therefore$  Train  $T_1$  crosses  $T_2$  at point D, which is =  $50 \times \frac{20}{60} = \frac{50}{3}$  km from A at 12:20 p.m.

So, remaining distance between D and B =  $150 - \frac{50}{3} = \frac{400}{3}$  km

Now, at 12:20 p.m., train  $T_1$  from point D and train  $T_3$  from point B move towards each other.

They will meet in =  $\frac{400}{3 \times 80} = \frac{5}{3}$  hours = 100 minutes

$\therefore$  Train  $T_3$  will meet train  $T_1$  at 2 p.m.

Bookmark

FeedBack

**Q.67 [11594329]**

If  $\frac{x^3(x-4)^4(x+6)^7(x+11)}{x^2(x-4)^2(x+6)^3(x+11)^4} \leq 0$ , where  $x$  is an integer, then how many values can ' $x$ ' take?

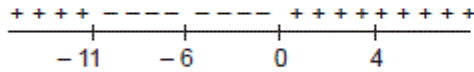
1 ☐ 112 ☐ 123 ☐ 104 ☐ 9



**Solution:****Correct Answer : 4**[Answer key/Solution](#)

$$\frac{x^3(x-4)^4(x+6)^7(x+11)}{x^2(x-4)^2(x+6)^6(x+11)^4} \leq 0$$

Using number line method,

Between  $x = -11$  and  $x = 0$ , the above inequality is negative; except at  $x = -6$  where it is not defined.(It is undefined at  $x = 0, -11$  and  $4$  also)Hence, 9 values of  $x$  are possible.

Bookmark

FeedBack

**Q.68 [11594329]**

Asmita sells a laptop to Beenu at 20% profit. Beenu further sells it to Chintu at 25% profit. Chintu sells it to Deepika at 30% loss. Find the absolute difference between the cost (in Rs.) incurred by Asmita and Deepika if the loss incurred by Chintu was Rs. 13,500.

✕

**Solution:****Correct Answer : 1500****Your Answer : 15000**[Answer key/Solution](#)

Let us say, Asmita bought it at  $100x$ . She sold it to Beenu at  $120x$ . Beenu sold it Chintu at  $1/4^{\text{th}}$  profit i.e.,  $150x$ . Chintu sold it to Deepika at  $105x$ . Now, loss incurred by Chintu is  $45x$  which is equal to 13500. Therefore,  $x = 300$ .

Difference between cost incurred by Asmita and Deepika is  $5x$  i.e.,  $5(300) = 1500$ .

Bookmark

FeedBack

**Q.69 [11594329]**

How many factors of 72000 will have at least two trailing zeros?

1 ☐ 152 ☐ 123 ☐ 184 ☐ 30

**Solution:****Correct Answer : 4**[Answer key/Solution](#)

$72000 = 2^6 \times 3^2 \times 5^3$ . Now, we require factors which will have atleast 2 trailing zeros i.e., minimum two zeros should be in the end. For getting minimum two zeros, two 2's and two 5's should be there. So, the power of 2 that we can take will be from  $2^2$  to  $2^6$ , i.e., 5 values and power of 5 will be  $5^2$  and  $5^3$ . We can take any power of 3. Hence, the required number of factors will be  $5 \times 2 \times 3 = 30$ .

Bookmark

FeedBack

**Q.70 [11594329]**

There are four numbers – a, b, c and d, such that a is 1/8th of the sum of c and d, while b is 1/6th of the sum of c and d. If a, b, c and d are increased by 6, 4, 2 and 10, respectively, then their ratio would become 1 : 1 : 5 : 5, respectively. What was the absolute difference between c and d initially?

**Solution:****Correct Answer : 8****Your Answer : 16**

Since on adding 2 to c and 10 to d, they become equal, it implies initially the difference between c and d was 8 (i.e.,  $10 - 2 = 8$ ).

[Answer key/Solution](#)

Bookmark

FeedBack

**Q.71 [11594329]**

Out of 54 chocolates in a pack, 15 have nuts, 21 have caramel, and 27 have cocoa. It is also known that, 6 chocolates have all three ingredients, 5 have only caramel and cocoa, and 8 have both caramel and nuts. How many have both cocoa and nuts if 15 chocolates have neither of these three ingredients?



**Solution:****Correct Answer : 11****Your Answer : 11**[Answer key/Solution](#)

The information given in the set can be represented in the following manner.

We can assume one of the missing information to be  $x$ .

Here, Nuts and Cocoa only has been assumed to be  $x$ .

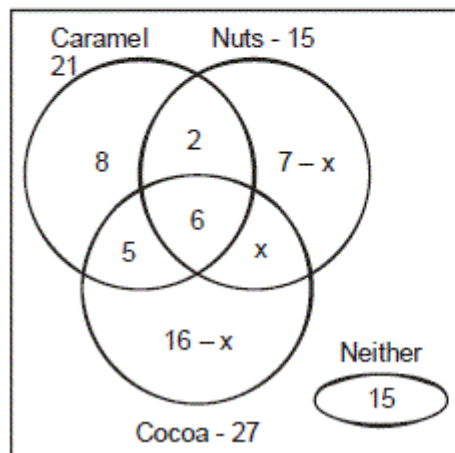
The total of all the three sets and neither should add to 54.

So,  $8 + 2 + 5 + 6 + 7 - x + x + 16 - x + 15 = 54$ .

Therefore,  $x = 5$

Hence, number of chocolates having both Nuts and Cocoa =  $6 + x = 6 + 5 = 11$ .

Total = 54



Bookmark

FeedBack

**Q.72 [11594329]**

If the value of  $a^3b^2 = 2/3$  and  $a^4b^5 = 3/2$ , then the value of  $(a + b)$  is

1 ☐ 13/42 ☐ 7/63 ☐ 13/64 ☐ 19/6

**Solution:****Correct Answer : 3**[🔍 Answer key/Solution](#)

$$a^3b^2 = a \times (ab)^2 = \frac{2}{3}$$

$$\text{and } a^4b^5 = b \times (ab)^4 = \frac{3}{2}$$

Multiply both the equations, we get,

$$a^7b^7 = 1$$

$$\text{Thus } ab = 1$$

Use the value of  $ab$  in the two equations to get

$$a = \frac{2}{3} \text{ and } b = \frac{3}{2}$$

$$\text{Therefore, } a + b = \frac{13}{6}.$$

[Bookmark](#)[FeedBack](#)**Q.73 [11594329]**

Sameer has to pay Rs. 4,356 to Raman, 2 years later at 10% compound interest per annum, and Vineet has to pay Raman the same amount at 12% simple interest per annum after certain years. If both took the same amount of loan from Raman, then Vineet paid loan after how many years?

1 ☐ 3/2 years

2 ☐ 5/2 years

3 ☐ 7/4 years

4 ☐ 9/4 years



**Solution:****Correct Answer : 3****Your Answer : 3** Answer key/Solution

Let Rs. P be the amount of loan taken by Sameer and Vineet each from Raman.

$$\text{Then, } P \left( 1 + \frac{10}{100} \right)^2 = 4356$$

$$\Rightarrow P = \frac{4356}{1.1 \times 1.1} = \text{Rs. } 3,600$$

Let 'n' be the required number of years.

$$\text{Then, } 3600 + 3600 \times \frac{12}{100} \times n = 4356$$

$$\Rightarrow 36 \times 12 \times n = 756$$

$$\Rightarrow n = \frac{756}{36 \times 12} = \frac{7}{4} \text{ years.}$$

Bookmark

FeedBack

**Q.74 [11594329]**

A trader bought two equal lots (in equal weight) of lemons, one at the rate of Rs. 60 per 2.4 kg and the other at the rate of Rs. 70 per 1.4 kg. The trader then sold the two lots at the rate of Rs. 42 per 1.5 kg and Rs. 64 for Rs. 1.6 kg, respectively. What percentage profit/loss was incurred in the transaction?

1 ☐ 9.33%2 ☐ 11.11%3 ☐ 16.66%4 ☐ 22%

**Solution:****Correct Answer : 1****Your Answer : 1**[🔍 Answer key/Solution](#)

We can assume that 1 kg each of the two lots was bought and sold.

$$\text{CP of lot 1} = \frac{60}{2.4} = \text{Rs. } 25/\text{kg}$$

$$\text{CP of lot 2} = \frac{70}{1.4} = \text{Rs. } 50/\text{kg}$$

Total cost = Rs. 75

$$\text{SP of lot 1} = \frac{42}{1.5} = \text{Rs. } 28/\text{kg}$$

$$\text{SP of lot 2} = \frac{64}{1.6} = \text{Rs. } 40/\text{kg}$$

Total sale = Rs. 68

$$\text{Hence, loss\%} = \left[ \frac{75 - 68}{75} \right] \times 100 = 9.33\%.$$

Bookmark

FeedBack

**Q.75 [11594329]**

Ten men and 20 women can complete a job in 30 days, working together with their usual efficiency. If 10 men work with twice of their usual efficiency and 20 women work with half of their usual efficiency, then the same job can be completed in 20 days. In how many days would 10 women complete the same job, working with their usual efficiency?

**Solution:****Correct Answer : 180**[🔍 Answer key/Solution](#)

Let work done by 1 man = M units/day and work done by 1 woman = W units/day

$$\Rightarrow 30(10M + 20W) = 20(2 \times 10M + \frac{1}{2} \times 20W)$$

$$\Rightarrow 1M = 4W$$

$$\text{Work} = 30(10 \times 4W + 20W) = 30 \times 60W$$

10 women can do = 10 W units/day

$$\text{Number of days required} = \frac{30 \times 60}{10} = 180 \text{ days.}$$

Bookmark

FeedBack