VARC

Q1. DIRECTIONS *for questions 1 to 4:* The following question consists of a highlighted sentence followed by a passage consisting of two paragraphs from which the sentence may have been taken. The passage has a total of four blanks numbered as (2), (3), (4) and (5). Choose the number of the blank where the highlighted sentence can best be reinserted and key in that number in the input box provided below the question. (Note that blanks 2, 3, 4 and 5 are within the given passage.)
Further:
If you think that the highlighted statement can be part of ANOTHER PARA that logically precedes OR is upstream of the given passage, then key in the number **1** as your answer in the input box.
If you think that the statement can be part of ANOTHER para that logically succeeds OR is downstream of the given passage, then key in the number **6** as your answer in the input box.
Which required a lengthy debate, apparently, because it was whole seconds before the car lurched backward.
The passenger door hinge was more rust than mud, and I had to put some strength into opening it. It squealed open just wide enough for me to slide in sideways. I saw the driver Casey Nice doing the exact same thing on her side, like we were limbo dancing towards each other. There were no seat belts. No seats at all, really. _____(2)_____ Just a green canvas sling fraying its way off a tubular metal frame.
But the engine started, eventually. After much popping and churning, it idled, wet and lumpy. The transmission was slower than the postal service. She rattled the selector into reverse, and all the mechanical parts inside called the roll and counted quorum and set about deciding what to do. _____(3)_____ She turned the wheel, which looked like hard work, and then she jammed the selector into a forward gear, and first of all the reversing committee wound up its business and approved its minutes and exited the room, then the forward crew signed on and got comfortable, and a motion was tabled and seconded and discussed. _____(4) _____ More whole seconds passed, and then the car slouched forward, slow and stuttering at first, before picking up its pace and rolling implacably towards the exit gate. _____(5)_____.

Q2. DIRECTIONS *for questions 1 to 4:* The following question consists of a highlighted sentence followed by a passage consisting of two paragraphs from which the sentence may have been taken. The passage has a total of four blanks numbered as (2), (3), (4) and (5). Choose the number of the blank where the highlighted sentence can best be reinserted and key in that number in the input box provided below the question. (Note that blanks 2, 3, 4 and 5 are within the given passage.)

Further:

If you think that the highlighted statement can be part of ANOTHER PARA that logically precedes OR is upstream of the given passage, then key in the number **1** as your answer in the input box.

If you think that the statement can be part of ANOTHER para that logically succeeds OR is downstream of the given passage, then key in the number **6** as your answer in the input box.

Punctuated by moments of humanity, affection and even humour, there is a d readful, cramped feel to this book.

This is a small book with a big voice. _____(2)_____

It took Marceline Loridan-Ivens, a French film-maker, 70 years before she felt able to write it. At the age of 15, in April 1944, she and her father, Solomon Rozenberg, were captured in their garden in Nazi-occupied France and deported: he to Auschwitz, she to Birkenau. She returned; he never did. _____(3)_____ This is her tender, anguished, remorseful letter of love to him.

The memoir is structured around the author's failing effort to recall the words her father wrote to her in a letter, smuggled to Ms Loridan-Ivens when they were both held in the extermination camp. _____(4)_____ At the time, she was assigned to dig trenches into which gassed bodies would be dumped. His words "probably spoke to me of hope and love," she muses: "but there was no humanity left in me ...... I served death. _____(5)_____ I'd been its hauler. Then its pickaxe.

Q3. DIRECTIONS *for questions 1 to 4:* The following question consists of a highlighted sentence followed by a passage consisting of two paragraphs from which the sentence may have been taken. The passage has a total of four blanks numbered as (2), (3), (4) and (5). Choose the number of the blank where the highlighted sentence can best be reinserted and key in that number in the input box provided below the question. (Note that blanks 2, 3, 4 and 5 are within the given passage.)

Further:

If you think that the highlighted statement can be part of ANOTHER PARA that logically precedes OR is upstream of the given passage, then key in the number **1** as your answer in the input box.

If you think that the statement can be part of ANOTHER para that logically succeeds OR is downstream of the given passage, then key in the number **6** as your answer in the input box.

Only by making certain approximations can solutions be found.

The idea of gravitational waves emerged from the general theory of relativity, Albert Einstein's fundamental exposition of gravity, unveiled almost exactly 100 years ago. Mass, Einstein realized, deforms the space and time around itself. _____(2)_____ Gravity is the effect of this, the behaviour of objects dutifully moving along the curves of mass-warped

space-time. It is a simple idea, but the equations that give it mathematical heft are damnably hard to solve. _____(3)_____ And one such approximation led Einstein to an odd prediction: any accelerating mass should make ripples in spacetime.

Einstein was not happy with this idea. He would, himself, oscillate like a wave on the topic – rescinding and remaking his case, arguing for such waves and then, after redoing the sums, against them. _____(4)_____ But, while he and others stretched and squeezed the maths, experimentalists set about trying to catch the putative waves in the act of stretching and squeezing matter. _____(5)_____ But the waves themselves proved elusive until the construction of the Advanced Laser Interferometer Gravitational-wave Observatory (LIGO).

Q4. DIRECTIONS *for questions 1 to 4:* The following question consists of a highlighted sentence followed by a passage consisting of two paragraphs from which the sentence may have been taken. The passage has a total of four blanks numbered as (2), (3), (4) and (5). Choose the number of the blank where the highlighted sentence can best be reinserted and key in that number in the input box provided below the question. (Note that blanks 2, 3, 4 and 5 are within the given passage.)

Further:

If you think that the highlighted statement can be part of ANOTHER PARA that logically precedes OR is upstream of the given passage, then key in the number **1** as your answer in the input box.

If you think that the statement can be part of ANOTHER para that logically succeeds OR is downstream of the given passage, then key in the number **6** as your answer in the input box.

It is also a boon for crooks.

_____(2)_____ Humans are a trusting sort. This is largely a good thing, as progress requires cooperation, and cooperation demands trust. Countries with higher levels of trust grow faster and have more stable public institutions. Trusting citizens are healthier, happier and more likely to start their own businesses.

_____(3)_____ People can be bad at spotting deception because, ultimately, very few are downright deceptive. This is great good news for humanity. _____(4)_____.

Confidence artists are the "aristocrats of crime", writes Maria Konnikova in "The Confidence Game," a fascinating look at the psychology behind every hustle, from Bernie Madoff's Ponzi scheme to a three-card-monte game. _____(5)_____The beauty of a good con is that it relies solely on persuasion: victims give willingly, and many never discuss that they have been had.

DIRECTIONS *for questions 5 to 10:* The long passage given below is followed by a set of six questions. Choose the best answer to each question.

It is a well known fact that the museum of the past was content to care for the "old fashioned satisfaction," "aesthetic refreshment," and "pleasure and delight" of its permanent collection or what was derided as the "salvage and warehouse business." But I think (and others agree) that the museum of tomorrow must come to see itself not as the steward of a collection of objects but as "an instrument for social change."

In 1997 a Brazilian museum director envisioned how "a museum without walls and without objects, a true virtual museum, is being born" to be "used in a new way, as tools for self-expression, self-recognition, and representation." Another museum director recently observed, "Times have changed. Back then, a museum's role was about protecting the art, but this century it is more about 'visitor experience.'" Museums will focus on restaurants, auditoriums, educational divisions, event spaces. The museum of the future will virtually be a museum without objects, as new non-collection spaces dwarf exhibition halls with the promise that no direct contact with the past will disturb your meal.

The museum of the past focused on its permanent collection. The museum of the present forsakes the visited, and its own cultural importance, to focus on the visitor. From offering an unmediated window onto the real and astonishing objects of history, the contemporary museum looks to reify our own socially mediated self-reflections. This it does not learn from history but to show the superiority of our present time over past relics. The result is a museum that succeeds in its own destruction. ...

Unlike in Europe, where museums were either created out of revolutionary turmoil or acts of government, almost all American museums were founded and supported by the free will of private individuals. The treasures these benefactors bequeathed became not only public objects of secular devotion but also tokens of the idealism behind the institutions that maintained them. As manifestations of private wealth transferred to the public trust, American museums were founded, in part, to represent our civic virtues. The aesthetic education offered through their permanent collections was not just about history and connoisseurship. It was also about how hard work can become an expression of virtue by gifting objects to the public trust. But it wasn't long into the twentieth century before some American museums began to change. ...

Consider the Brooklyn Museum. In the 1930s, a progressive director Philip Newell Youtz launched an assault on his museum from which it has never recovered. Youtz vowed to "turn a useless Renaissance palace into a serviceable modern museum." He undertook the transformation of the Brooklyn Museum from a temple of contemplation into a school of instruction, where the arts were put in the service of progressive ends and funding would derive from the state rather than private philanthropy. He even hired department store window-dressers to arrange exhibitions and

transform his collection into a parade of teachable moments. He demolished the Brooklyn Museum's exterior Grand Staircase, which once resembled the entrance to the Metropolitan Museum of Art and was meant to elevate the museum-goer from Eastern Parkway into the refined precincts of the museum. Here, we can see a progressive strain agitating for a more "socially orientated museum".

Another example where a museum has catered to the 'visitor experience': Back in New York, the Whitney museum relocated in 2015 from the Upper East Side to a flood zone along the Hudson River. Designed by Renzo Piano, here is the modern museum as sky-box (known as "white box"), an institution built as much to be looked out of as looked into. The new museum metaphorically explodes, reprocesses, and repackages its own history through a giddy, irrational space for spectacle and an incinerator for its dusty, unwanted past. It has been rechristened as, simply, Whitney, dropping the words "museum," "American," and "art" from its branding. Yet while Piano increased the Whitney's floorplan from 85,000 to 220,000 square feet, just 50,000 of that is going to indoor galleries. The rest goes to multi-million-dollar views and a circulation system that forces the museumgoer outside onto a fire escape turned against the skyline, which treats the museum as an institutional theater.

Q5. The first sentence of the passage can best be described as

 a) a deliberately controversial statement intended to drive home the author's message.
 b) an obvious fallacy intended to confuse the readers.
 c) one implying that certain cliches are considered anachronistic.
 d) a universal truth that the author intends to question.

Q6. All of the following serve to differentiate the "museum of the past" from the "museum of the present or future" EXCEPT?

 a) The museum of the past focussed on art but in the museum of the future, exhibits will be secondary to experience and exposure.
 b) Unlike the museum of the past, the museum of the future will no longer be an ark of culture but one where the artifact at greatest risk is the museum itself.
 c) The museum of the past focussed more on aesthetics while the museum of tomorrow will serve to make concrete the socially reconciled self-reflections of its visitors.

d) The museum of the past engaged visitors in dialogue, fully involving them with art; while the museum of the future will cease to be a museum with walls.

Q7. Which of the following choices captures all the correct words that are likely to be included in the mission statements of the museums of tomorrow?

a) "art", "warehouse", "aesthetic pleasure", "being about something", "culture".
b) "being for somebody", "learn", "engage", "observe", "collection of people surrounded by objects".
c) "salvage", "traditional art", "artist", "educate", "socially orientated".
d) "museum without walls", "exhibit art", "great financial endowment", "collection of objects surrounded by people", "great sharing".

Q8. Which of the following best summarizes the characteristic of American museums as can be ascertained from para 4 of the passage?

a) In the case of American museums, private wealth, accumulated through industry, was willingly transferred to the public good.
b) American museums did not just learn from history but they showed the superiority of the present time over historical artifacts.
c) All American museums were created out of revolutionary warfare and laws enforced by American governments.
d) American museums gave importance to values like aesthetics, secular devotion, history and connoisseurship.

Q9. Why has the author made a mention of the Brooklyn museum in the passage?

a) To indicate that the Brooklyn museum was no palimpsest but it was nearly a pristine structure.
b) To point to the iconoclasm of the museum's director and suggest that artists are never satisfied with their work till they are constantly reassured.
c) To give an example of an American museum that began to attack its own physiological structure, in the pursuit of progressive social change.
d) To show that the diversity of the world's culture, like its ecological culture, is at risk.

Q10. According to the passage, the revamped look of the Whitney

a) implies that the "new wine in the old bottle" face off will make it more appealing to prominent museum critics.
b) provides a visitor with a platform to see its contents and look out from it.

c) leaves a lot to be desired as far as helping it to recover from its boring past is concerned.

d) is an example of how the motto of distancing the present from the past has turned the American museum into a neoliberal juggernaut.

Q11. DIRECTIONS *for questions 11 to 14:* Five sentences (labelled 1, 2, 3, 4, 5) are given in the following question. Four of them can be put together to form a meaningful and coherent short paragraph and one sentence is the odd one out. Decide on the proper logical order for the sentences and key in the sequence of <u>four</u> numbers as your answer, even as you omit the contextually unrelated sentence.

1.   Its remit is to chart the seabed completely by 2030.
2.   But if it is a map of two-thirds of Earth's surface, then the cost per square kilometer, about $8.30, is not, perhaps, too bad.
3.   Mere curiosity aside, an accurate map of the seabed may help open this unknown two-thirds of Earth's surface to economic activity.
4.   And making such a map at such a cost is just what an organization called the General Bathymetric Chart of the Oceans (GEBCO) is proposing to do.
5.   Three billion dollars sounds a lot to spend on a map.

Q12. DIRECTIONS *for questions 11 to 14:* Five sentences (labelled 1, 2, 3, 4, 5) are given in the following question. Four of them can be put together to form a meaningful and coherent short paragraph and one sentence is the odd one out. Decide on the proper logical order for the sentences and key in the sequence of <u>four</u> numbers as your answer, even as you omit the contextually unrelated sentence.

1.   A case in point: Kamasi Washington, a Los Angeles-based jazz saxophonist was unknown globally until his three-CD debut recording, "The Epic", became a bestseller and critics' favourite in 2015.
2.   Yet audience exposure for jazz artists may be a better measure of its staying power.
3.   Meanwhile, some music experts wonder if jazz can survive: it represents only about 1.2% of recorded and streamed albums sold (compared with the 26.8% for rock and 22.6% for hip-hop and rhythm and blues combined).
4.   Today's nonconformists and mavericks, though well grounded in jazz's history and repertoire, also incorporate elements of hip-hop, rock or classical music into their works.
5.   This year, Mr Washington performed before thousands of people at the Coachella Valley Music and Arts Festival, which is usually reserved for rock, hip-hop and pop stars.

Q13. **DIRECTIONS** *for questions 11 to 14:* Five sentences (labelled 1, 2, 3, 4, 5) are given in the following question. Four of them can be put together to form a meaningful and coherent short paragraph and one sentence is the odd one out. Decide on the proper logical order for the sentences and key in the sequence of <u>four</u> numbers as your answer, even as you omit the contextually unrelated sentence.

1. There was usually an early moment that required genuine love and considerable courage, perhaps in becoming extremely authentic, in confronting some inside truth about others which really needed to be said.

2. I enjoyed one particularly meaningful synergistic experience as I worked with my associates to create the corporate mission statement for our business.

3. Then others became more authentic, open, and honest, and the synergistic communication process began.

4. As I think back on many consulting and executive education experiences, I can say that the highlights were almost always synergistic.

5. It usually became more and more creative, and ended up in insights and plans that no one had anticipated initially.

Q14. **DIRECTIONS** *for questions 11 to 14:* Five sentences (labelled 1, 2, 3, 4, 5) are given in the following question. Four of them can be put together to form a meaningful and coherent short paragraph and one sentence is the odd one out. Decide on the proper logical order for the sentences and key in the sequence of <u>four</u> numbers as your answer, even as you omit the contextually unrelated sentence.

1. Narcissists seem to have considerable difficulty in forging long-term relationships.

2. That is, they understand that they have narcissistic characteristics, and their meta-perceptions are closer to others' perceptions (i.e., less positively biased) than are their self-perceptions.

3. The second view, the Narcissistic Awareness view, argues that narcissists have insight into their personality and reputation.

4. That is, they fail to understand that they have narcissistic characteristics, and they overestimate how positively others see them (i.e., their meta-perceptions are just as overly positive as their self-perceptions).

5. The Narcissistic Ignorance view, argues that narcissists lack insight into their personality and reputation.

DIRECTIONS *for questions 15 to 20:* The long passage given below is followed by a set of six questions. Choose the best answer to each question.

In 1951, in his defining article on the marble trade in Roman North Africa, Ward Perkins lamented that that 'a detailed survey of the evidence for the marble trade in other provinces during the first and second centuries AD has never been attempted'. Now the picture is different and such studies are 'currently fashionable'. Much of this can be credited to Ward Perkins, whose detailed studies of individual sites and objects took place alongside, and in combination with broader discussions of the entire trade in decorative stone, its structure and organization, as well as its historical context. The editors of his collected papers rightly credit Ward Perkins as the main founder of what is now a large field of research, and his work remains the established point of references for any discussion on Roman stone use.

The editors, though were equally correct to assert in 1992 that despite the great intrinsic interest of the subject for archaeologists, art historians and historians alike, there is so far no general and fully accessible book on the ancients' use of marble. This remains true today. Since Ward Perkins was writing, the available datasets have increased markedly on almost all fronts. Considerable numbers of new quarrying sites have been discovered and significant progress has been made in the field of archaeometry. A wider interest in where materials came from and how they were carved can also be seen in more specifically art historical or architectural studies. Discussions of quarrying, carving and the labour involved, are now thoroughly integrated into most work on Roman architecture. Rockwell's discussions of practicalities of stone carving have also helped to reinvigorate the study of artistic production and foreground it in even the most mainstream studies of Roman and Greek art.

The study of Roman use, in sum, is booming. Despite this, research in this field remains irregularly spread and often highly targeted. There is a lot of material that needs to be drawn together. While archaeometric studies are increasingly revealing where materials came from and how and when they were used, much less work has been done on interpreting what this tells us about how the stone trade was organized and what it reveals about the economy. This is not to say that important synthesis tackling these issues do not exist. Fant worked extensively on the evidence for imperial stone use, while Braemer brought together a lot of data for the more localized patterns of stone use that have tended to be ignored. Pensabene, most notably of all, has produced a huge number of detailed examinations of the production and supply of stone, primarily for architectural projects.

However, there remain questions to be asked. How did imperial and non-imperial stone use compare with respect to the procurement, distribution and scale? Did the imperial stone trade really lie outside of the normal orbit of trade in marbles and decorative stones, as has been proposed? What can the distribution of stone reveal about wider connectivity, transport logistics, and demand for specific materials? What do stone objects add to our

understanding of Roman manufacturing? The basic interpretative framework originally laid out by Ward Perkins, his influential model of the Roman marble trade, has rarely been challenged systematically. This model proposes that as the demand for decorative stone swelled, in the first and second centuries AD, stone production was reorganized along quasi-industrial lines: production became centred on the quarries, with objects being carved in standardized forms and dimensions to stock. This was a less responsive but more efficient system that can be used to explain the apparently repetitive aspect of so much Roman art and architecture.

Q15. The editors of the collected papers of Ward Perkins were right in stating that

 a) despite their fascination for the Roman use of marble, archaeologists did not delve much into the subject to produce a generally accepted book on the subject.
 b) even though the subject of the Roman use of marble was of interest to archaeologists and historians, they did not have enough expertise to produce a general book on the subject.
 c) the archaeologists, art historians and historians, despite having great interest in the subject of the Roman use of marble, did not integrate the existing material to produce a general book on the subject.
 d) although they had great interest in Roman trade in marble, archaeologists and historians chose to not write a book on the subject.

Q16. Which of the following is definitely true, according to the passage?

 a) Ward Perkins provides the locations of a number of new quarrying sites in his article.
 b) The imperial stone trade was outside the normal orbit of trade in marbles and decorative stones.
 c) Ward Perkins's model could provide a possible reason for the repetitive aspect of Roman architecture.
 d) Studies on the distribution of stone have revealed substantial information regarding wider connectivity, transport logistics and demand for specific materials.

Q17. Which of the following aspects of Roman stone use has not been paid adequate attention?

 a) The areas to which stones belong and the way in which the stones were used
 b) The practicalities involved in stone carving
 c) The organization of stone trade and its link to the economy
 d) None of the above

Q18. Which of the following statements, is definitely false, according to the passage?

 a) No one has yet tried to bring together the available data on Roman stone use to understand how the Roman stone trade was organized.
 b) A lot of work has been done on the evidence for the use of imperial stone.
 c) The data on the localized patterns of stone use was brought together by Braemer.
 d) The production and supply of the stone for Roman architectural projects has been studied in detail.

Q19. The passage attempts to answer which of the following issues regarding Roman stone use?

 a) The differences between the imperial and non-imperial stone use as far as their distribution is concerned.
 b) The relation between the increase in the demand for the stone and the organization of stone production.
 c) Whether the imperial stone trade was within the confines of the usual trade in marbles.
 d) Studying stone objects to understand more about Roman manufacturing.

Q20. One of the findings of a research paper is presented below:
"Stones used for imperial activity were transported across longer distances a s compared to the stones used for non-imperial activity."
Which of the following questions mentioned in the passage does the above finding help answer?

 a) How did imperial and non-imperial stone use compare with respect to the procurement, distribution and scale?
 b) Did the imperial stone trade really lie outside of the normal orbit of trade in marbles and decorative stones, as has been proposed?
 c) What can the distribution of stone reveal about wider connectivity, transport logistics, and demand for specific materials?
 d) What do stone objects add to our understanding of Roman manufacturing?

Q21. DIRECTIONS *for questions 21 to 24:* Given below is a paragraph with two blanks, numbered (i) and (ii). For each blank choose one numbered word /phrase from the corresponding column of choices that will best complete

the text. Key in the appropriate numbers of the words /phrases for each blank, in the correct sequential order, in the input box given below the question. For example, if you think that words /phrases labelled (3) and (5) can complete the text correctly, then enter 35 as your answer in the input box. (Note: Only one word /phrase in each column can fill the respective blank correctly.)

To some critics, Charles Dickens was an entertainer and his novels lacked intellectual _____(i)_____ , but the *London Times* described the British author as the greatest instructor of the nineteenth century in his obituary. The unparalleled sentimentality, rage, plight and bitterness in his novels established Dickens as a /an _____(ii)_____ the downtrodden.

Blank (i)	Blank (ii)
(1) doughtiness	(4) unrestrained enthusiast for
(2) challenge	(5) disapprobation of
(3) erudition	(6) spokesman for

Q22. **DIRECTIONS** *for questions 21 to 24:* Given below is a paragraph with two blanks, numbered (i) and (ii). For each blank choose one numbered word /phrase from the corresponding column of choices that will best complete the text. Key in the appropriate numbers of the words /phrases for each blank, in the correct sequential order, in the input box given below the question. For example, if you think that words /phrases labelled (3) and (5) can complete the text correctly, then enter 35 as your answer in the input box. (Note: Only one word /phrase in each column can fill the respective blank correctly.)

China's growing global clout can be _____(i)_____ for the incumbents who must make room for it. At the same time, China's recent financial tumult has been unnerving for the investors exposed to it. This combination of vastness and _____(ii)_____ has left some people afraid of China and others afraid for it.

Blank (i)	Blank (ii)
(1) utterly vindictive	(4) flagitiousness
(2) thoroughly copacetic	(5) vulnerability
(3) unfortunately unsettling	(6) encumbrance

Q23. DIRECTIONS *for questions 21 to 24:* Given below is a paragraph with two blanks, numbered (i) and (ii). For each blank choose one numbered word /phrase from the corresponding column of choices that will best complete the text. Key in the appropriate numbers of the words /phrases for each blank, in the correct sequential order, in the input box given below the question. For example, if you think that words /phrases labelled (3) and (5) can complete the text correctly, then enter 35 as your answer in the input box. (Note: Only one word /phrase in each column can fill the respective blank correctly.)

The fertility business is unlike any other in medicine, doctors and laboratory directors say. For one thing, it is _____(i)_____: it is the only medical specialty that requires clinics to report success rates to the federal government. But at the same time, it can be _____(ii)_____ and commercial as laser eye surgery or plastic surgery.

Blank (i)	Blank (ii)
(1) annoyingly self-serving	(4) as intrepid
(2) somewhat hackneyed	(5) not so exceptional
(3) essentially regulated	(6) as competitive

Q24. DIRECTIONS *for questions 21 to 24:* Given below is a paragraph with two blanks, numbered (i) and (ii). For each blank choose one numbered word /phrase from the corresponding column of choices that will best complete

the text. Key in the appropriate numbers of the words /phrases for each blank, in the correct sequential order, in the input box given below the question. For example, if you think that words /phrases labelled (3) and (5) can complete the text correctly, then enter 35 as your answer in the input box. (Note: Only one word /phrase in each column can fill the respective blank correctly.)

Rarely would we consider *Murder She Wrote* to be a science-fiction show, but the murder-mystery got futuristic in a late-'90s TV movie.

In *South By Southwest*, Fletcher befriends the only witness to the murder of an NSA employee. Why was the employee _____(i)_____? They were "going to leak information that was going to _____(ii)_____ the government." Hmm, that sounds awfully familiar. The new friend and a journalist turn up missing shortly thereafter.

Blank (i)	Blank (ii)
(1) dispatched	(4) compromise
(2) cozened	(5) fulminate
(3) rescinded	(6) traduce

DIRECTIONS *for questions 25 to 30:* The long passage given below is followed by a set of six questions. Choose the best answer to each question.

The term "Intelligence" is an abstraction. We also simply cannot measure the heritability of intelligence once and for all. We can only estimate the inborn nature of intelligence as measured from scores in a particular test by a particular group of people living at a particular time in a particular area. If any one of these were different, the heritability might be different too. Intelligence, like height or blood pressure or fertility, is only a relative quality dependent very much on the place, time, and culture. To show how 'relative' a quality intelligence is, if a society decided to bring up its children under absolutely identical conditions, the environmental factor would decline and the dependence of intelligence on heredity in a century might approach 100 percent.

Intelligence cannot be isolated from other facets of human personality; it is not a definite unitary entity depending on particular genes. People are not composed of bits that can be separated out and analysed independently. Intelligent activity is the ability to grasp the essentials of a situation and respond appropriately to them: the 'activity' can be affected by mood,

attitude, temperament, character, or aspiration. Put simply, thinking and feeling cannot be separated. ... As Galton described: a person's success in all walks of life depends on at least three types of mental quality: 'he must possess the requisite abilities; he must respond with zeal; and he must sustain the necessary effort'.

IQ is defined rather narrowly, as the quality measured by the highly fallible instrument of intelligence tests (the innate, general, cognitive ability of Burt); orthodox tests, not of the type which tests 'creativity'. We now know that intelligence is of many kinds, a name for a group of overlapping skills, and that it has to be measured not on one scale but many. However, the administration of a well-established intelligence test is still the most reliable way of assessing an individual's capacity for intelligent behaviour. The tests seem to assess the ability to spot relationships and apply them in new situations, and this ability underlies the mental effort necessary for all sorts of processes. Estimates of the heritability of intelligence by tests vary according to whether a test is dependent on an acquired knowledge and facility in the handling of words. Clearly a test stripped of such requirements is a better test of heritability.

The tests of IQ mentioned above would be of little use with Arabs or Red Indians because they involve knowledge and concepts that belong to our own type of society, besides of course requiring knowledge of a particular language. The white Westerner in doing such tests is playing on home ground; the Arab, Red Indian, Negro, or Japanese is playing away. Even non-verbal tests which ask the person to arrange coloured blocks, to draw a man, and are devised to overcome the above difficulties, do not avoid the influences of culture. Low scores are just as liable to be due to inexperience in arranging bricks or in interpreting conventional drawings as to having low inborn mental powers. 'Culture-free' tests are probably impossible to devise, anyway. …

No perfect test of real intelligence has been devised. A test which involves writing answers on paper could favour children from homes with books about and where paper and pen are in everyday use, and handicaps a child from a working-class home where there are often no cultural tools. There is, however, one line of approach which might help us to measure at least some aspects of intelligence objectively. After the brain has received a message through the eyes about, say a flash of light, it produces electrical waves, whose frequency can be measured, and there may be some link between the frequency of these waves and some forms of intelligence, but intelligence has more than one dimension and does not involve speed alone. Precise and objective tests, of facets of a child's intelligence, may well come in time, when the basic work on "brain biochemistry" may well have been done and specific remedies may have been provided for specific defects identified. But at present, our studies on the inheritance of IQ are crude and so are our notions of intelligence.

Q25. Which of the following views on intelligence cannot be surmised from the passage?

 a) Intelligence is not an independent entity.
 b) Intelligence is multi-faceted and multi-dimensional.
 c) Nurture's role in influencing intelligence is minimal.
 d) Intelligence determines a person's success.

Q26. According to the passage, the current intelligence tests administered on people from diverse backgrounds

 a) would measure the inherited intelligence of the individuals once and for all.
 b) can be useful in assessing the intelligence of individuals in a homogenous group.
 c) are highly reliable.
 d) serve little purpose in measuring the heritability of intelligence.

Q27. According to the passage, which of the following is not a modification to a test which could lead to greater objectivity in measuring the heritability of intelligence?

 a) Making them less language specific and keeping cultural influences to the minimum.
 b) Providing uniform environmental conditions to nurture intelligence.
 c) Examining creative instincts to determine their influence on intelligence.
 d) Measuring the speed at which a test taker's brain processes information by using light waves.

Q28. Which of the following choices cannot be inferred from the passage? Identify all that apply and enter the corresponding number in the input box given below. You must enter your answer in increasing order only. For example, if you think (2) and (4) apply, then enter 24 (but not 42) in the input box.
     1.   Intelligence is not independent of mood, attitude, temperament, character, or aspiration.
     2.   Intuition springs from the partial intersection of intelligence and instinct.
     3.   We can say nothing about an individual's measured IQ as such, except in relation to other individuals in a population.
     4.   A test of intelligence which is devoid of extraneous factors like acquired knowledge, verbal proficiency and cultural influences is a better predictor of heritability.
     5.   Research proves that the neo-nativist distinction between intelligence traits as being innate or acquired is incorrect.

Q29. According to the passage, Galton believed that success depends on which of the following types of mental abilities?
(a)cognitive
(b)emotive
(c)perseverance

 a) Only a
 b) a and c
 c) b and c
 d) a, b and c

Q30. Where can the sentence given below be inserted in the passage?
"Then there is the question of the cultural impact on intelligence, a very hot topic."

 a) After the last sentence of the passage.
 b) At the beginning of para 2.
 c) As the introduction sentence in para 4.
 d) Between the second and third sentences of para 1.

Q31. **DIRECTIONS** *for questions 31 and 32:* Five alternative summaries are given below the text. Choose the option that best captures the essence of the text. Enter the number of the correct answer choice in the input box given below the question.
According to the 18th-century economist Adam Smith, the value of the arts "in use" precedes their value "in exchange". Once something is deemed desirable, the market can indeed establish its commercial price. But although the market can trade in the products of culture, it cannot express the value of culture as a process, or what it does. A cultural economics that captures the value of the arts has to understand value in use, and that involves broader ways of understanding ourselves and our world, for instance, anthropology and environmentalism. The value in use of the arts is that they help a society make sense of itself. They generate the symbols and rituals that create a common identity – that is why art and religion are so closely linked. Like religion, the arts give access to the spiritual. Art is a link to previous generations, and anchors us to history.
      1.   The value of the arts "in use" precedes their value "in exchange". The latter focuses on the present market conditions while the former helps us to connect with our past.
      2.   The commerial market bothers about the value of the arts "in exchange" but society is concerned about the value of the arts "in use".

3.   The arts are a society's means of making sense of its history and culture, creating a common identity. Unlike the market which cannot capture the value of culture, a cultural economics needs to understand the value of the arts "in use" through a better understanding of man and environment.

4.   The market can establish the commercial price of art but cannot express its true value. Society needs to appreciate the value of the arts "in use".

5.   The arts are the only means through which a society evolves its common religious and cultural identity. The value of art to society far exceeds its market price.

Q32. DIRECTIONS *for questions 31 and 32:* Five alternative summaries are given below the text. Choose the option that best captures the essence of the text. Enter the number of the correct answer choice in the input box given below the question.

Our cultural backgrounds influence not only how we marry but how we make choices in nearly every area of our lives. From early on, members of individualistic societies are taught the special importance of personal choice. Even a walk through the grocery store becomes an opportunity to teach lessons about choosing, particularly in the United States, where stores routinely offer hundreds of options. A parent will probably narrow down the number of choices and explain the differences between this cereal and that one, or that toy and this one, but the child would be encouraged to express a preference. By contrast, members of collectivist societies place greater emphasis on duty. Children are often told, "If you are a good child, you'll do what your parents tell you," and the parents need not explain themselves. From what you eat to what you wear, the toys you play with to what you study, it is what you are supposed to do that is most important.

1.   Individualist societies have greater dialogue with their children whereas collectivist societies mostly talk down to their children.

2.   Individualistic societies stress more on the individual and are more self centered, whereas collectivist societies stress more on social units such as families and are unselfish.

3.   Children of individualist societies become accustomed to making their own decisions whereas children in collectivist societies such as India prefer to let their elders decide for them.

4.   Culture influences choice making. Individualistic societies emphasize personal choice while collectivist societies emphasize duty.

5.   Culture influences choice making. Individualistic societies are taught the importance of personal choice while collectivist societies emphasize that what you eat, what you play with, what you study etc should be determined by society and should not be left to the whims of the individual.

Q33. DIRECTIONS *for questions 33 and 34:* The following question has a paragraph from which a sentence has been left incomplete. From the given options, choose the one that completes the blank in the paragraph in the most appropriate way. Enter the number alongside the correct answer choice in the input box given below the question.

A sociological perspective on the heritage of India must ensure against yielding either to a nostalgia for the past or to a wholly negative attitude towards it. There are extreme examples of both in the available literature, and it is difficult to achieve and maintain a proper balance between the two. At the height of the national movement, many Indian writers felt impelled to reconsider their own heritage and to present a picture of a pristine past in which people lived in peace and harmony with each other and the community met the basic needs of the individual to everybody's satisfaction. This kind of nostalgia for the past is intellectually sterile. _____

1. By erasing these memories a perfect balance can be achieved.
2. Being nostalgic can serve very little practical purpose in the contemporary world.
3. Hence the memories of the past should be completely erased.
4. But nevertheless India owes much to its past and one ought to be nostalgic.
5. For any significance, it needs to be tempered with recognition of social fallibilities of those times.

Q34. DIRECTIONS *for questions 33 and 34:* The following question has a paragraph from which a sentence has been left incomplete. From the given options, choose the one that completes the blank in the paragraph in the most appropriate way. Enter the number alongside the correct answer choice in the input box given below the question.

Our attitude towards science has changed. Far from considering science a panacea, we are now conscious of the limitations and the negative or destructive results of science. Another reason for the changed climate of thinking is the disappointment at the hard returns from science which has, at times in the past, promised more than it has delivered. We have realized that science is not the supremely important tool we once thought it to be for improving the world. On a variety of fronts, from the philosophical to the ruggedly practical, science has been under attack for the sort of world it has produced. The whole basis of our science-based, growth obsessed, industrial civilization is being questioned. _____

1. Suddenly, scientists are under scrutiny on both fronts.

2.   We know, for example, that there is little convincing evidence of positive association between investment in science and the economic growth of companies and countries.

3.   To their credit, a few scientists have played an active part in publicizing the issues and in promoting the debate about the future direction that science should take and the role of society in shaping it.

4.   Such happenings have introduced a new fear of positive evil into public contemplation about science.

5.   Scientists, as a class, need to buckle down and consider the future direction that science should take and the role of society in shaping it.

DIRECTIONS *for questions 35 to 40:* The long passage given below is followed by a set of six questions. Choose the best answer to each question.

The results of the second development decade will be no better than those of the first unless there is a shift of emphasis from goods to people, without which, the results of aid will become destructive.

If we talk of promoting development, what have we in mind -- goods or people? If it is people -- which particular people? Where are they? Why do they need help? Concern with people raises countless questions. Goods do not raise many questions. Particularly when econometricians deal with them, goods cease to be anything identifiable, and become GNP, imports, exports, savings, investment, infrastructure. Impressive models can be built out of these abstractions, but they do not leave room for actual people.

It is much easier to deal with goods than with people. Those who need help are poor, uneducated, and village-based. The helpers are rich, educated and town-based. Three tremendous gulfs separate them: the gulf between rich and poor; the gulf between educated and uneducated; and the gulf between city-men and country-folk. The first problem of development aid is how to bridge these gulfs. The methods of production, the patterns of consumption, the systems of ideas that suit relatively affluent, educated city people are unlikely to suit poor, semi-illiterate peasants. If the people cannot adapt themselves to the methods, then the methods must be adapted to the people. This is the whole crux of the matter.

There are many questionable features of the rich man's economy: successful adaptation of poor communities to these features would spell ruin. The life, work, and happiness of all societies depend on certain precious and vulnerable 'psychological structures'. Social cohesion, cooperation, mutual respect, courage in the face of adversity, and the ability to bear hardship disintegrate when these 'psychological structures' are gravely damaged. A person is destroyed by the inner conviction of uselessness. No amount of economic growth can compensate for such losses.

None of these awesome problems figure in the cosy theories of most of our development economists. The failure of the first development decade is

attributed simply to an insufficiency of aid appropriations or to certain alleged defects inherent in the societies and populations of the developing countries. The decisive question was whether aid was dispensed multilaterally or bilaterally, or whether an improvement in the terms of trade for primary commodities, a removal of trade barriers, guarantees for private investors, or the effective introduction of birth control, were the only things that really mattered.

Now, these items are not irrelevant, but they do not seem to go to the heart of the matter, viz, the fact that world poverty is primarily a problem of two million villages. The solution cannot be found in the cities of the poor countries. Unless life in the hinterland can be made tolerable, the problem of world poverty is insoluble and will worsen.

All important insights are missed if we continue to think of development mainly in quantitative terms. Aid can be considered successful only if it helps to mobilise the labour-power of the masses in the receiving country and raises productivity without 'saving' labour. The common criterion of success, namely the growth of GNP, is utterly misleading and, in fact, must of necessity lead to 'neocolonialism'.

This term appears to imply a deliberate intention on the part of the aid-givers. But there is no such intention. This makes the problem greater instead of smaller. Unintentional neo-colonialism is more insidious and infinitely more difficult to combat than neo-colonialism intentionally pursued. It results from the mere drift of things, supported by the best intentions. Methods of production, standards of consumption, criteria of success or failure, systems of values and behaviour patterns establish themselves in poor countries which, being (doubtfully) appropriate only to conditions of affluence already achieved, fix the poor countries ever more inescapably in a condition of utter dependence on the rich. Far more serious is the dependence created when a poor country falls for the production and consumption patterns of the rich. Poor countries slip -- and are pushed -- into the adoption of production methods and consumption standards which destroy the possibilities of self-reliance and self-help. The results are unintentional neo-colonialism and hopelessness for the poor.

Q35. According to the passage, economic concepts like GNP, imports-exports, savings, investment, infrastructure etc

 a) are qualitative terms that help economists to measure development.
 b) are abstractions used in the economic models to hasten the developmental process.
 c) can be used to build economic models but are not people-centric.
 d) are used by developmentalists because they help them in dealing with people.

Q36. What is the primary concern of the author in the passage?

 a) To indicate that economic terms do not serve any purpose other than diverting attention or confusing people.
 b) To show that unless there is a change in focus, all efforts to bring about progress in developing countries will be not merely futile but ruinous.
 c) To prove that the gulf between the rich and the poor can neither be bridged nor should we try to do so.
 d) To demonstrate that there are certain inherent weaknesses in undeveloped countries that impede progress.

Q37. The 'awesome problems' referred to by the author (para 5) ….

 a) amount to the destruction of the 'psychological structures' of society, which are invaluable.
 b) are the patterns of rustic life that continue in people even after urbanization.
 c) are the ones discussed by economists in relation to the problems of the poor countries.
 d) are the ones that inhibit growth and so are to be focussed on by developmental economists.

Q38. All of the following can be inferred to be true about neocolonialism EXCEPT?

 a) That it is unintentional makes it all the more difficult to oppose or fight it.
 b) It leads to poor countries becoming dependent on rich ones.
 c) It leads to poor countries aping the rich ones to their own detriment.
 d) Poor countries are allowed to follow production and consumption patterns best suited to them.

Q39. According to the author, the 'crux of the matter', is

 a) to teach the people of the poor countries to adopt the values and attitudes of the rich.
 b) to find the right means to achieve progress which suits the mentality, outlook and culture of the target group.
 c) to realize that dealing with people is more difficult than dealing with goods.
 d) to use imagination, not just raw facts, in dealing with the economic problems of the poor countries.

Q40. Three of the following choices mention the gulfs existing between the aid-givers and the aid-receivers as discussed in the passage. Pick the exception.

 a) The divide between the affluent and the impoverished.
 b) The gulf between the schooled and the unsophisticated.
 c) The chasm between the bucolic and the oppidan.
 d) The divide between the supporters of unintentional neo-colonialism and those of intentionally pursued neo-colonialism.

DILR

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

Five friends, Amit, Praveen, Mohit, Karan and Uday, study in the same college. On a particular day, they went to the college mess to have lunch. On arriving at the mess, they found that there were exactly twenty persons waiting in line to get their lunches served. As they were feeling extremely hungry, they decided to barge in at different points in the queue. No other person either joined or left the queue after the five friends arrived at the mess. The following information is known about their relative positions in the queue, immediately after they barged in on the queue:

     1.   For the five friends, the number of persons standing in front of any friend is not the same as the number of persons standing behind that friend or any other friend.

     2.   Karan was standing in front of Mohit, who, in turn, was standing in front of Praveen.

     3.   At least sixteen persons were standing in front of Amit.

     4.   The number of persons standing between Praveen and Karan is the same as the number of persons standing between Mohit and Amit.

     5.   The number of persons standing behind Praveen was at least five and at most seven more than the number of persons standing in front of him.

     6.   The number of persons standing between Praveen and Uday was twice the number of persons standing between Praveen and Amit.

Q1. DIRECTIONS *for question 1:* Type in your answer in the input box provided below the question.
How many persons are standing in the queue behind Karan?

Q2. **DIRECTIONS** *for question 2:* Select the correct alternative from the given choices.
How many persons are standing between Uday and Mohit?

a) **14**
b) **10**
c) **5**
d) Cannot be determined

Q3. **DIRECTIONS** *for question 3:* Type in your answer in the input box provided below the question.
How many persons are standing in the queue behind Mohit?

Q4. **DIRECTIONS** *for question 4:* Select the correct alternative from the given choices.
Between which of the following pairs of friends are the maximum number of persons standing?

a) Amit, Mohit
b) Amit, Praveen
c) Amit, Karan
d) Karan, Uday

Q5. **DIRECTIONS** *for question 5:* Select the correct alternative from the given choices.
Three friends, Ankit, Balu and Chaitu, attempted an exam which had exactly 100 questions. Each question in the test has four options A, B, C and D, out of which only one option is correct. For each correct answer, two marks were awarded, while, for each incorrect answer, one mark was deducted. Ankit marked the answer as A for all the 100 questions and scored -40 marks; Balu marked the answer as B for all the 100 questions and scored -31 marks; Chaitu marked the answer as C for all the 100 questions and scored -19 marks.

For how many questions in the test was the answer to the question option D?

a) **30**
b) **28**
c) **25**
d) 20

DIRECTIONS *for questions 6 to 9:* Answer these questions on the basis of the information given below.

Five students, Ankit, Pavan, Kiran, Ranjith and Sravan, enrolled for a test series, which comprised exactly five tests numbered 1701, 1702, 1703, 1704 and 1705, conducted in that order. However, each student wrote exactly four tests and each test was written by exactly four students. Further, it is known that, for any test, the average score of the students who wrote that test was not more than 70.

The table below provides the marks scored by each student in the four tests that he wrote. The four tests are labelled Test 1, Test 2, Test 3 and Test 4, which represents the first, second, third and fourth test written by the respective student.

Student	Test 1	Test 2	Test 3	Test 4
Ankit	50	63	63	80
Pavan	64	51	57	71
Kiran	85	77	68	90
Ranjith	82	68	68	34
Sravan	77	88	65	71

Q6. **DIRECTIONS** *for question 6:* Type in your answer in the input box provided below the question.
For any test, what is the minimum total score of the four students who attempted the test?

Q7. **DIRECTIONS** *for questions 7 to 9:* Select the correct alternative from the given choices.
Who among the following did not attempt 1705?

a) Pavan
b) Kiran
c) Ankit
d) Ranjith

Q8. DIRECTIONS *for questions 7 to 9:* Select the correct alternative from the given choices.
Who scored the maximum marks in 1704?

 a) Kiran
 b) Ankit
 c) Pavan
 d) Sravan

Q9. DIRECTIONS *for questions 7 to 9:* Select the correct alternative from the given choices.
Who among the following did not attempt any three consecutive tests out of the five tests?

 a) Ankit
 b) Pavan
 c) Ranjith
 d) Kiran

Q10. DIRECTIONS *for question 10:* Select the correct alternative from the given choices.
On a particular day, exactly four persons, A, B, C and D, had their lunch in a restaurant at different times. Each of the four persons had a different item among Lasagna, Steak, Noodles and Rice.
It is known that
     1.   C was not the first person to have lunch at the restaurant and the second person to have lunch at the restaurant had Lasagna.
     2.   D had his lunch immediately before A had his lunch and the two of them had Noodles and Rice, in any order.
What did the first person have for lunch?

 a) Noodles
 b) Rice
 c) Steak
 d) Cannot be determined

DIRECTIONS *for questions 11 to 14:* Answer these questions on the basis of the information given below.
Five persons, Kiran, Hiren, Lalit, Manju and Prajwal, participated in a quiz show in which they were seated along a circular table in the clockwise direction in that order. In the quiz, the first participant, Kiran, is asked a question. If he is able to correctly answer the question, he gets 5 points; if he is not able to correctly answer the question, the person to his left gets a chance to answer the question and if the second person correctly answers

the question, he is awarded only 4 points. The question is passed in this manner around the table and every time the question passes to the next person, the points awarded to that person, if he correctly answers the question, is reduced by 1.

The question is passed from one person to the next in this manner until the question is answered or discarded. If none of the five could answer a question (say Question 1) correctly, the question (i.e., Question 1) is discarded and the next question (i.e., Question 2) is posed to the person who is to the left of the person who was initially asked the question (i.e., Question 1). Else, if any of the five persons correctly answers the question (i.e., Question 1), the next question (i.e., Question 2) is posed to the person who is to the left of the person who correctly answered the question (i.e., Question 1).

There were a total of 12 questions in the quiz. The following table provides the name of the person who answered each question in the quiz (a '–' indicates that no one was able to answer that question):

Question Number	Answered by
1	Lalit
2	Prajwal
3	-
4	Kiran
5	Hiren
6	Manju
7	Manju
8	Hiren
9	Lalit
10	Kiran
11	Prajwal
12	Lalit

Q11. DIRECTIONS *for question 11:* Type in your answer in the input box provided below the question.
What is the total number of points scored by the five members in the quiz?

Q12. **DIRECTIONS** *for questions 12 to 14:* Select the correct alternative from the given choices.
How many questions did Kiran not answer even though he was asked the question (either directly or because it was passed)?

a) **4**
b) **5**
c) **6**
d) **7**

Q13. **DIRECTIONS** *for questions 12 to 14:* Select the correct alternative from the given choices.
What is the highest number of questions answered by anyone as a percentage of the number of questions that they were asked (either directly or because it was passed)?

a) **30%**
b) 33.33%
c) 37.5%
d) 42.86%

Q14. **DIRECTIONS** *for questions 12 to 14:* Select the correct alternative from the given choices.
Who among the following did not answer the maximum number of questions that they were asked (either directly or because it was passed)?

a) Lalit
b) Kiran
c) Manju
d) Hiren

Q15. **DIRECTIONS** *for question 15:* Select the correct alternative from the given choices.
Five products, A through E, were ranked from 1 to 5 in the descending order of their sales in each of two quarters of a year – Quarter 1 and Quarter 2. They were also ranked similarly based on their total sales in the two quarters combined. It is known that no product got the same rank in Quarter 1 and Quarter 2.
Further, A was ranked better than two products in Quarter 1 and worse than four products in Quarter 2. B was ranked second based on the total sales in the two quarters combined and was ranked third in Quarter 2. C was ranked second in Quarter 1, while D was ranked fourth in Quarter 2.
If B was ranked worse than A in Quarter 1, which product was ranked fifth in Quarter 1?

a) **B**
b) **D**
c) **E**
d) Cannot be determined

DIRECTIONS *for questions 16 to 19:* Answer these questions on the basis of the information given below.

In a kindergarten class, the teacher was teaching the alphabet to the children in her class. He devised an exercise in which he called each child and asked him/her to write the letter with which his/her name begins (i.e., the first letter of his/her name) on the board. The first child writes the first letter of his name anywhere on a board, which was initially blank.

From the second child onwards, they have to write the letters based on the following rules:

      1.   If the first letter of the child's name comes alphabetically before the letter written by the first child, then the child has to write the first letter of his name to the left of the letter that the first child wrote.

      2.   Otherwise, the child has to write the first letter of his/her name to the right of the letter that the first child wrote.

Any child (except for the first child) who writes a letter on the board always writes it either to the immediate left of the leftmost letter on the board or to the immediate right of the rightmost letter on the board, based on the above-mentioned rules.

Q16. DIRECTIONS *for questions 16 to 19:* Select the correct alternative from the given choices.

If, after each of ten children wrote a letter on the board, the ten letters from left to right spelled 'BALJMPOSTR', which of the following can be the name of the child that wrote the first letter on the board?

a) Jatin
b) Manoj
c) Pavan
d) Omar

Q17. DIRECTIONS *for questions 16 to 19:* Select the correct alternative from the given choices.

If, after seven children wrote on the board, the seven letters from left to right spelled 'RHCASLT', which of the following was the fifth letter to be written on the board?

a) **H**
b) C
c) **S**
d) Cannot be determined

Q18.   DIRECTIONS *for questions 16 to 19:* Select the correct alternative from the given choices.
If, after seven children wrote on the board, the seven letters from left to right spelled 'JFPQUTR', which of the following cannot be the first letter of the name of the third child to write on the board?

a) **J**
b) **T**
c) R
d) More than one of the above

Q19.   DIRECTIONS *for questions 16 to 19:* Select the correct alternative from the given choices.
After six children wrote on the board, the first, third and fifth letter from the left are S, T and R respectively. If the first letters of the names of all the children were distinct and the first letter of the name of the first child to write on the board was *θ*, how many possibilities exist for *θ*?

a) **6**
b) **20**
c) **8**
d) **23**

Q20.   DIRECTIONS *for question 20:* Select the correct alternative from the given choices.
The following table provides the monthly income (in Rs.) of five persons, A through E, in three consecutive months of a particular year:

Person	March	April	May
A	25,658	26,768	32,547
B	35,479	40,658	43,987
C	15,789	17,954	20,145
D	18,948	21,550	25,548
E	28,125	31,045	33,268

In each of April and May, for how many persons did the monthly income increase by at least 10% and at most 15% as compared to the previous month?

a) **0**
b) 1

c) **2**
d) More than 2

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

Six cities – Drocham, Ecronio, Eiditpolis, Hoclence, Tria and Zlans – are connected only by flights. Exactly ten flights connect these six cities and each flight travels between its origin and destination every day.

Each flight has a Scheduled Time of Departure (STD) and journey time (in minutes). If the flight gets delayed by n minutes, then the Actual Time of Departure of the flight will be *n* minutes after the Scheduled Time of Departure. However, the journey time of the flight will remain unchanged, irrespective of whether it is delayed or not. Any person travelling between these six cities can only travel by these flights and he can catch any flight that originates in a city, only if he is in that city 60 minutes prior to the actual time of departure of the flight.

The first table below provides the Origin, Destination, Scheduled Time of Departure (in 24-hour format) and the journey time (in minutes) for each of the ten flights (represented by the respective flight number). The second table provides the number of minutes each flight was delayed by on each day of a particular week, from 2nd March to 8th March.

Flight	Origin	Destination	STD	Journey Time (min)
AB456	Zlans	Drocham	13:00	165
AB893	Hoclence	Tria	10:10	200
DE234	Tria	Ecronio	20:00	130
DE403	Drocham	Hoclence	02:15	240
WW234	Hoclence	Eiditpolis	08:55	135
FG345	Ecronio	Drocham	12:30	145
WW456	Eiditpolis	Zlans	13:00	185
UT756	Tria	Zlans	22:00	140
UT423	Drocham	Eiditpolis	14:00	125
DE968	Zlans	Ecronio	16:00	250

Flight	Delay (in min)						
	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar
AB456	100	15	100	90	120	0	50
AB893	50	0	0	150	200	100	0
DE234	0	160	150	180	120	40	20
DE403	100	20	30	60	200	0	120
WW234	100	0	0	150	0	160	0
FG345	80	90	0	15	0	0	100
WW456	50	25	150	25	0	140	20
UT756	0	150	100	20	15	10	90
UT423	150	0	120	0	100	0	15
DE968	75	50	90	0	0	20	100

Note: All the six cities belong to the same time zone.

Q21. DIRECTIONS *for questions 21 to 24:* Select the correct alternative from the given choices.
Piyush, started from Ecronio on 4th March and wanted to go to Eiditpolis. What is the minimum time that he could have taken for his journey?

 a) 27 hours 10 minutes
 b) 3 hours 35 minutes
 c) 5 hours 35 minutes
 d) 25 hours 10 minutes

Q22. DIRECTIONS *for questions 21 to 24:* Select the correct alternative from the given choices.
Kalyan wanted to start from Eiditpolis on 3rd March and go to Hoclence. He planned his journey based on the Scheduled Times of Departures of the flights, such that the he can reach Hoclence at the earliest. If he stuck to his plan (of the flights that he intended to take), what was the difference between the times at which he would have planned to arrive at Hoclence and the time at which he actually arrived at Hoclence?

 a) 27 hours 120 minutes
 b) 12 hours
 c) 3 hours
 d) 1 hour

Q23. **DIRECTIONS** *for questions 21 to 24:* Select the correct alternative from the given choices.

Hari started from Drocham after 02:00 hrs on 4th March and reached city X, which is one of the other five cities. If none of the flights that he travelled on were delayed and he reached city X before 06:00 hrs on 9th March, how many possibilities are there for X?

a) **5**
b) **4**
c) **3**
d) **2**

Q24. **DIRECTIONS** *for questions 21 to 24:* Select the correct alternative from the given choices.

Bob started from Drocham and planned to reach his destination, which is one of the other five cities, by travelling on exactly two flights during the given period. If Bob missed the second flight during his journey because the first flight that he travelled on was delayed, which of the following can be his destination?

a) Zlans
b) Eiditpolis
c) Tria
d) More than one of the above

Q25. **DIRECTIONS** *for question 25:* Select the correct alternative from the given choices.

The following line graph provides the revenue (in Rs. mn) of four different companies, P, Q, R and S, in five years, 2010 to 2014:
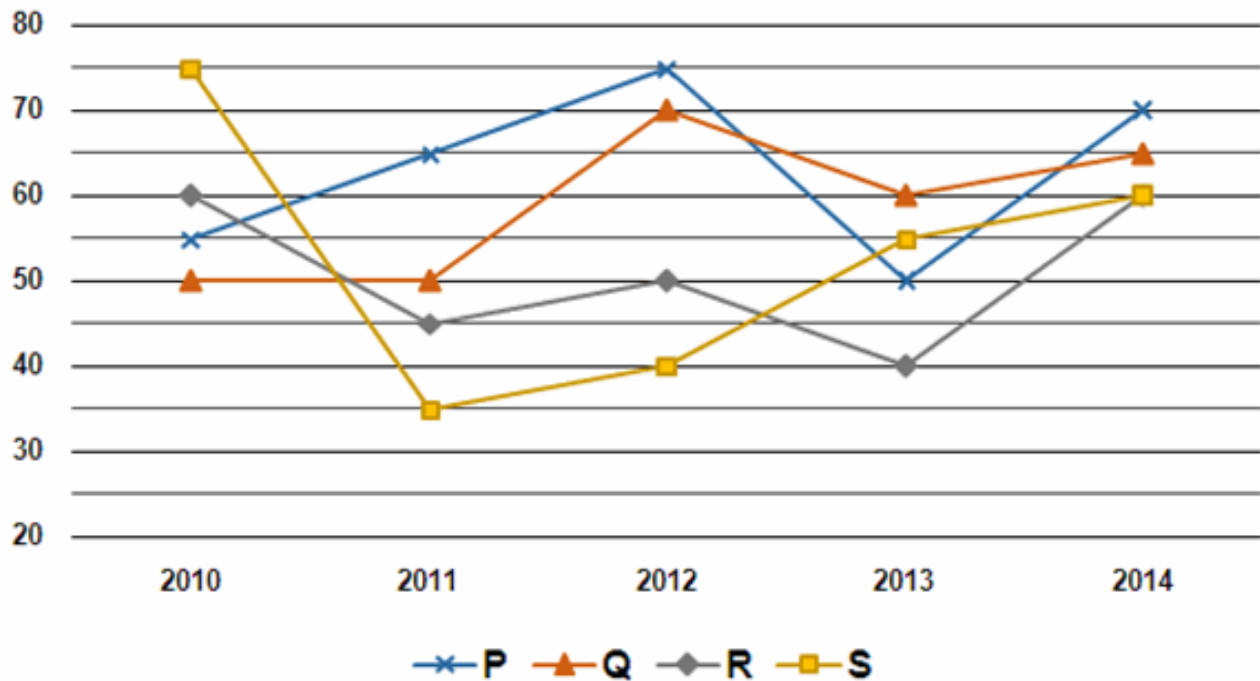
For how many of the given years is the median revenue of the four companies greater than the average revenue of the four companies?

a) **1**
b) **2**
c) **3**
d) **4**

DIRECTIONS *for questions 26 to 29:* Answer these questions on the basis of the information given below.

Exactly five persons – A through E – participated in a sports meet comprising four different events. In each event, the persons who stood first, second and third were awarded prize money of USD 10000, USD 7500 and USD 5000 respectively, while the other two persons were awarded USD 2500 each.
It is also known that
(i) the total prize money won by no two persons in the sports meet was the same.
(ii) A won USD 5000 more than C and neither of them won the highest total prize money in the sports meet.
(iii) B, who was the last in one of the four events, won a total of USD 22500 in the sports meet but he was not the first in any event.
(iv) one of the five persons was the first in more than one event and he did not win the highest prize money in the sports meet.
(v) D was not the third in any of the four events but he was the first in one of the four events.
(vi) the prize money that C won in the sports meet was more than the prize money that E won.

Q26.   DIRECTIONS *for questions 26 and 27:* Type in your answer in the input box provided below the question.
What is the total prize money (in USD) won in the sports meet by C?

Q27.   DIRECTIONS *for questions 26 and 27:* Type in your answer in the input box provided below the question.
What is the highest prize money (in USD) won by any of the five persons in the sports meet?

Q28.   DIRECTIONS *for questions 28 and 29:* Select the correct alternative from the given choices.
How many of the following definitely won higher prize money than E in at least three of the four events?
I.A
II.B
III.C
IV.D

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

Q29.   DIRECTIONS *for questions 28 and 29:* Select the correct alternative from the given choices.
Which of the following statements is definitely true?

 a) B was second in the event that D was first.
 b) B was second in the event that A was fifth.
 c) C was first in the event that E was third.
 d) E was first in the event that A was third.

Q30.   DIRECTIONS *for question 30:* Type in your answer in the input box provided below the question.
Each of three persons had coins of three denominations, Rs.1, Rs.2 and Rs. 5, with him. It is known that each person had at least one coin of each type. No two persons had the same number of coins of any type and no person

had the same number of coins of any two types. Further, the total amount with each person was the same.
What is the minimum total amount (in Rs.) with any person?

QA

Q1. DIRECTIONS *for questions 1 and 2*: Select the correct alternative from the given choices.
Each of Shiva and Hari has a few marbles with them. If Shiva gives 12 marbles to Hari, the ratio of the number of marbles with them becomes the reciprocal of the initial ratio. If they together have a total of N marbles, how many marbles should Shiva give to Hari so that each of them has an equal number of marbles?

a) 6
b) **12**
c) **24**
d) **26**

Q2. DIRECTIONS *for questions 1 and 2*: Select the correct alternative from the given choices.
The internal angles of a polygon are in an arithmetic progression. The smallest angle measures 65° and the common difference is 18 3°/4. The number of sides of the polygon is

a) **8**
b) **9**
c) **10**
d) **7**

Q3. DIRECTIONS *for questions 3 and 4:* Type in your answer in the input box provided below the question.
A four-digit number gets reversed when it is multiplied by 4. Find the sum of the digits of the number.

Q4. DIRECTIONS *for questions 3 and 4:* Type in your answer in the input box provided below the question.
If the two adjacent sides of a parallelogram are in the ratio 17 : 12 and the sum of a pair of opposite angles of the parallelogram is 120°, find the

minimum number of equilateral triangles (not necessarily all of the same size) into which the parallelogram can be exactly cut.

Q5. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
In a library, a series of 10 volumes (all of which are identical as far as the physical dimensions are concerned) of an encyclopedia are stacked on a shelf in order, in the usual way, with their spines vertical and facing outwards. But the last volume is placed upside down. Each volume has a total of 1000 pages, numbered from 1 to 1000. A bookworm wants to 'cover' the entire encyclopedia. It begins from one end of the stack and bores its way to the other end of the stack. If, for each volume, the bookworm takes 25 minutes to go through all the pages and a total of 5 minutes to go through both the covers, how long does it take to go from the first page, i.e. page numbered 1, of the first volume to the last page, i.e. page numbered 1000, of the last volume?

 a) 300 minutes
 b) 245 minutes
 c) 295 minutes
 d) 270 minutes

Q6. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
How many distinct eight-character codes-with all characters distinct, containing only two numerals can be formed from A, B, C, D, E, F, 1, 2, 3, 4, such that all of them start with B and no two letters of B, D, F are together?

 a) 2400
 b) 36000
 c) 14400
 d) 43200

Q7. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
Prakash, Varun and Gajini had to paint three identical fences. On the first day, only Prakash turned up for work and he completed the work only on the first fence, taking m hours. On the second day, all three of them turned up for work and they completed the work only on the second fence, taking ($m - 4$) hours. On the third day, Varun and Gajini turned up and they completed the work on the third fence, taking ($m + 5$) hours. What is the value of m?

 a) **8**
 b) **6**

c) **10**
d) **9**

Q8. DIRECTIONS *for questions 5 to 14*: Select the correct alternative from the given choices.

If *a, b, c* are real, $ac > 0$ and $cx^2 - ax + b = 0$, which of the following is true about the roots of the equation given that $\dfrac{2b}{a} - \dfrac{a}{2c} < 0?$

a) If one of the roots is rational, the other root is also rational.

b) If one of the roots is of the form $a + \sqrt{b}$ then the other root must be of the form $a - \sqrt{b}$.

c) The equation has no real roots.

d) If one of the roots is rational the other root can be irrational.

Q9. DIRECTIONS *for questions 5 to 14*: Select the correct alternative from the given choices.

The number of ordered triplets (x, y, z), such that x, y, z are distinct prime numbers and $xy + yz + zx = 120$ is

a) **9**
b) **3**
c) 0
d) More than 9

Q10. DIRECTIONS *for questions 5 to 14*: Select the correct alternative from the given choices.

Given $f(x) = a|x| - bx^2$, where *a* and *b* are constants. Then at $x = 0$, $f(x)$ is

a) maximized whenever $a > 0, b > 0$.
b) minimized whenever $a > 0, b > 0$.
c) minimized whenever $a < 0, b > 0$.
d) maximized whenever $a < 0, b > 0$.

Q11. DIRECTIONS *for questions 5 to 14*: Select the correct alternative from the given choices.

Amar has nine friends. He wants to invite them to his birthday party. In how many ways can he invite at least two of his friends for his birthday party?

a) **45**
b) **502**
c) 511
d) 1023

Q12. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
Raj distributed N coins equally among his three children. The eldest son of Raj observed that the last digit of the sum of N and the number formed by reversing the digits of N is 9. How many values can N assume between 400 and 999?

a) **18**
b) **20**
c) **24**
d) **30**

Q13. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
An arithmetic progression has $2k$ (where k is a natural number) terms. The sum of the 1st, 3rd ……. $(2k – 1)$th terms is 186 and the sum of the other terms is 216. If the last term was 55 more than the first term, find the fourth term.

a) **11**
b) **26**
c) **30**
d) None of the above

Q14. **DIRECTIONS** *for questions 5 to 14*: Select the correct alternative from the given choices.
Raman, Ram, Ramu and Ramana bought a certain number of apples. Ramana bought half the number of apples bought by the other three. Ramu bought one-third the number of apples bought by the other three, while Raman bought two-fifths the number of apples bought by the other three. If each of them bought a distinct number of apples, find the ratio of the number of apples bought by Ram to the total number of apples bought by all four.

a) 11 : 84
b) 1 : 12
c) 11 : 73
d) Data inconsistent

**DIRECTIONS** *for questions 15 and 16:* Answer the questions on the basis of the information given below.
In each question, two graphs, $y = f(x)$ and $y = F(x)$, are shown. Further, in each question, one or more of the following relations could hold between $f(x)$ and $F(x)$:

1. $f(x) = F(-x)$
2. $f(x) = -F(x)$
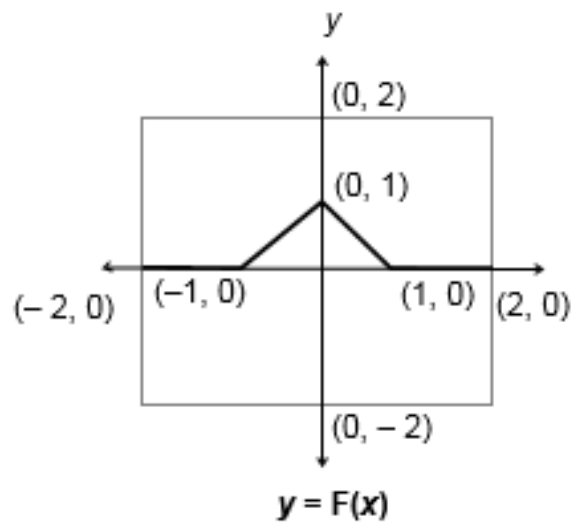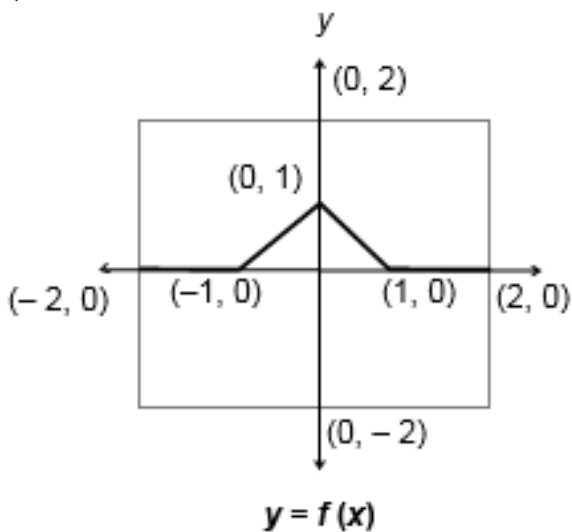3. $f(x) = -F(-x)$
4. $f(x) = |F(x)|$
5. $f(x) = -|F(x)|$

Identify, in each case, the number of relations that the pair of graphs satisfy.

Q15.

$y = f(x)$ $y = F(x)$

a) **1**
b) **2**
c) 3
d) **4**

Q16.

$y = f(x)$ $y = F(x)$
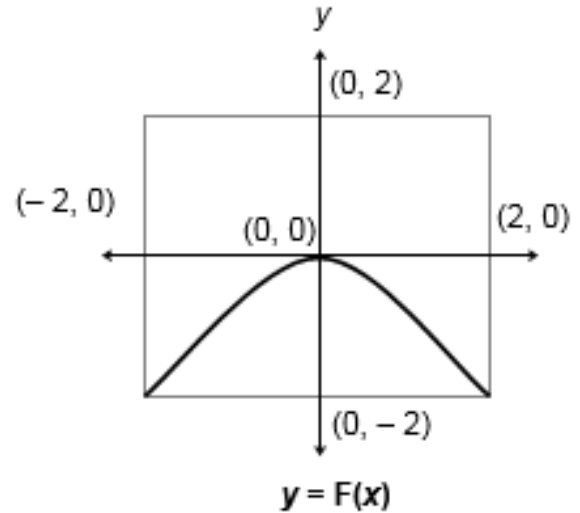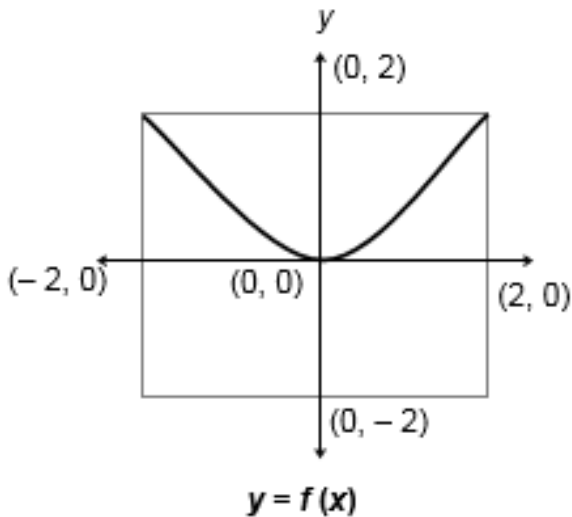
a) **1**
b) 2
c) **3**

d) **4**

Q17. DIRECTIONS *for questions 17 to 23*: Select the correct alternative from the given choices.

Akhil started from Surat at 11:00 a.m. and reached Ahmedabad at 4:00 p.m. Rahim started from Ahmedabad at 1:00 p.m. and reached Surat at 5:00 p.m. One hour after Akhil started, his friend Ritika, whose speed is 25% more than that of Akhil, started from Surat towards Ahmedabad. Assume that each of them maintains a steady speed and uses the same route.
Which of the following statements are true?
     1.   Ritika meets Rahim 10 minutes after Akhil meets Rahim.
     2.   Rahim reaches Surat 90 minutes after he meets Ritika.
     3.   Akhil and Ritika reach Ahmedabad at the same time.

 a) Only I and III
 b) Only III
 c) Only II and III
 d) Only I and II

Q18. DIRECTIONS *for questions 17 to 23*: Select the correct alternative from the given choices.
D1, D2, D3 and D4 are recurring decimals given
by $D_1 = 0.\overline{q_1 q_2 q_3 q_4}$, $D_2 = 0.q_1 q_2 \overline{q_3 q_4}$, $D_3 = 0.q_1 \overline{q_2 q_3 q_4}$ and $D_4 = 0.q_1 q_2 q_3 \overline{q_4}$, where $q1$, $q2$, $q3$ and $q4$ are four digits from 1 to 9. Which of the following numbers when multiplied by at least one of the above mentioned decimals will result in an integer, for any values of $q1$, $q2$, $q3$ and $q4$?

 a) 1800
 b) 19980
 c) **198**
 d) 1111

Q19. DIRECTIONS *for questions 17 to 23*: Select the correct alternative from the given choices.
The following pair of equations have a unique solution for *x*, which is negative. For what value of *p* does this happen?
$(3p - x)^2 - 1 + y^2 = 0$
$9x^2 - y^2 = 0$

 a) **3**
 b) **0**
 c) $\sqrt{10}/9$

d) $-\sqrt{10}/9$

Q20. **DIRECTIONS** *for questions 17 to 23*: Select the correct alternative from the given choices.
In a box there are 90 slips, numbered from 1 to 90. Ramu picks up four slips at random, one after the other, without replacement. What is the probability that the numbers on the slips, in the order he picks them up, are in ascending order?

a) $\dfrac{1}{6}$

b) $\dfrac{1}{12}$

c) $\dfrac{1}{24}$

d) $\dfrac{2}{45}$

Q21. **DIRECTIONS** *for questions 17 to 23*: Select the correct alternative from the given choices.
A pentagon is formed by drawing an equilateral triangle PQT on the side PQ of a square PQRS, such that T lies outside the square. A circle is now drawn such that the vertices R, S and T of the pentagon lie on the circumference of the circle. If the side of the square is 5 cm, what is the radius of the circle drawn?

a) 5 cm

b) $5\sqrt{2}$

c) $5\sqrt{3}$ cm

d) $\dfrac{5\sqrt{3}}{\sqrt{2}}$ cm

Q22. **DIRECTIONS** *for questions 17 to 23*: Select the correct alternative from the given choices.
A man is thrice as old as his son. If the man was 42 years old when his son was born, find the age of the son when the man was seven times as old as the son?

a) 7 years
b) 14 years
c) 12 years

d) 21 years

Q23. **DIRECTIONS** *for questions 17 to 23*: Select the correct alternative from the given choices.

The average age of a group of 60 students was 12 years. Now, the number of girls in the group was increased by 3/4th and the number of boys was decreased by half and it was found that the total number of students in the group did not change, but the average age of all the students became 13.5 years. If the average age of neither the boys nor the girls in the group changed as a result of the change in the number of boys and girls, what is the average age of the boys?

 a) 9 years
 b) 10 years
 c) 15 years
 d) Cannot be determined

Q24. **DIRECTIONS** *for questions 24 and 25:* Type in your answer in the input box provided below the question.

Find the highest power of 2 in the product 1005 × 1006 × 1007 × …….. × 2009.

Q25. **DIRECTIONS** *for questions 24 and 25:* Type in your answer in the input box provided below the question.

In a class of 95 students, each student plays at least one of hockey, cricket and football. If 55 play hockey, 60 play cricket and 65 play football, the number of students who play all the three games could be at most

Q26. **DIRECTIONS** *for question 26*: Select the correct alternative from the given choices.

Find the value of 0! (1^2 + 1 − 1) + 1! (2^2 + 2 − 1) + 2! (3^2 + 3 − 1) + -----+ 20! (21^2 + 21 − 1).

 a) 19! + 20! − 2
 b) 21! + 20! − 1
 c) 22! + 20! − 2
 d) 22! + 21! − 2

Q27. **DIRECTIONS** *for question 27:* Type in your answer in the input box provided below the question.

If x, y, z are integers, and $|x - 3| + |y - 5| + |z - 7| = 3$, then find the maximum possible value of $(x + 3)(y + 5)(z + 7)$.

Q28. DIRECTIONS *for question 28*: Select the correct alternative from the given choices.

Consider *a* triangle of area 1 sq. unit with sides of lengths a, b and c, such that $a \geq b \geq c$. Which of the following is definitely true?

a) The minimum value that can be attained by a is $\sqrt{2}$.
b) The triangle is equilateral.
c) The minimum value that can be attained by b is $\sqrt{2}$.
d) None of the above

Q29. DIRECTIONS *for question 29:* Type in your answer in the input box provided below the question.

A drum contains 9 litres of water. Two buckets with respective capacities of 3 litres and 4 litres are provided. Neither the drum nor any of the two buckets is calibrated. Any of the following activities qualifies as an *operation:*

    1.   Drawing water from the drum with a bucket.
    2.   Pouring water from either bucket into the drum
    3.   Pouring water out from one bucket into the other bucket.

If it is required to have exactly 3 litres of water in each bucket, the minimum number of *operations* to be performed is

Q30. DIRECTIONS *for question 30*: Select the correct alternative from the given choices.

A Mathematics teacher, while explaining to his students the concept of number systems, asked each student to give the sum of (3)n and (4)n by assigning to n a value of his/her individual choice. Four students Amar, Bhanu, Chandu and Dinesh gave the respective answers of (14)n, (21)n, (12)n and (10)n. If none of them revealed the value of n that he/she chose, then who among the four gave unacceptable answers?

a) Amar and Chandu
b) Chandu and Dinesh
c) Chandu and Bhanu
d) Amar and Bhanu