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PREVIOUS FMS QUESTION PAPER

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SECTION I

English Comprehension(50 questions)

Directions for Question Nos. 1 to 15: Read the following passage-1 and answer the questions given at the end of the passage. The answers should be based either on the author's views or inferences drawn from the given passage.

Passage - 1

The fairness exercise, thus structured, is aimed at identifying appropriate principles that would determine the choice of just institutions needed for the basic structure of a society. Rawls identifies some very specific principles of justice (to be discussed presently), and makes the strong claim that these principles would be the unanimous choice that would emerge from the political conception of justice as fairness. He argues that since these principles would be chosen by all in the original position, with its primordial equality, they constitute the appropriate 'political conception' of justice, and that people growing up in a well-ordered society governed by these principles would have good reason to affirm a sense of justice based on them (irrespective of each person's particular conception of a 'good life' and personal 'comprehensive' priorities). So the unanimous choice of these principles of justice does quite a bit of work in the Rawlsian system, which includes the choice of institutions for the basic structure of the society, as well as the determination of a political conception of justice, which Rawls presumes will correspondingly influence individual behaviours in conformity with that shared conception.

The choice of basic principles of justice is the first act in Rawls's multi-staged unfolding of social justice. This first stage leads to the next, 'constitutional', stage in which actual institutions are selected in line with the chosen principle of justice, taking note of the conditions of each particular society. The working of these institutions, in turn, leads to further social decisions at later stages in the Rawlsian system, for example through appropriate legislation (in what Rawls calls 'the legislative stage'). The imagined sequence moves forward step by step on firmly specified lines, with an elaborately characterized unfolding of completely just societal arrangements.

The whole process of this unfolding is based on the emergence of what he describes as 'two principles of justice' in the first stage that influence everything else that happens in the Rawlsian sequence. I have to express considerable scepticism about Rawls's highly specific claim about the unique choice, in the original position, of one particular set of principles for just institutions, needed for a fully just society. There are genuinely plural, and sometimes conflicting, general concerns that bear on our understanding of justice. They need not differ in the convenient way—convenient for choice that is— that only one such set of principles really incorporates impartiality and fairness, while the others do not. Many of them share features of being unbiased and dispassionate, and represent maxims that their proponents can 'will to be a universal law' (to use Immanuel Kant's famous requirement).

Indeed, plurality of unbiased principles can, I would argue, reflect the fact that impartiality can take many different forms and have quite distinct manifestations. For example, in the illustration with the competing claims of three children over a flute, considered in the Introduction, underlying each child's claim there is a general theory of how to treat people in an unbiased and impartial way, focusing, respectively, on effective use and utility, economic equity and distributional fairness, and the entitlement to the fruits of one's unaided efforts. Their arguments are perfectly general, and their respective reasoning about the nature of a just society reflects different basic ideas that can each be defended impartially (rather than being parasitic on vested interests). And if there is no unique emergence of a given set of principles of justice that together identify the institutions needed for the basic structure of the society, then the entire procedure of 'justice as fairness', as developed in Rawls's classic theory, would be hard to use.

As was discussed in the Introduction, Rawls's basic claim of the emergence of a unique set of principles of justice in the original position (discussed and defended in his *A Theory of Justice*) is considerably softened and qualified in his later writings. Indeed, in his *Justice as Fairness: A Restatement*, Rawls notes that 'there are

indefinitely many considerations that may be appealed to in the original position and each alternative conception of justice is favoured by some consideration and disfavoured by others', and also that 'the balance of reasons itself rests on judgment, though judgment informed and guided by reasoning'. When Rawls goes on to concede that 'the ideal cannot be fully attained', his reference is to his ideal theory of justice as fairness. However, there need not be anything particularly 'non-ideal' in a theory of justice that makes room for surviving disagreement and dissent on some issues, while focusing on many solid conclusions that would forcefully emerge from reasoned agreement on the demands of justice.

What is clear, however, is that if Rawls's second thoughts are really saying what they seem to be saying, then his earlier stage-by-stage theory of justice as fairness would have to be abandoned. If institutions have to be set up on the basis of a unique set of principles of justice emanating from the exercise of fairness, through the original position, then the absence of such a unique emergence cannot but hit at the very root of the theory. There is a real tension here within Rawls's own reasoning over the years. He does not abandon, at least explicitly, his theory of justice as fairness, and yet he seems to accept that there are incurable problems in getting a unanimous agreement on one set of principles of justice in the original position, which cannot but have devastating implications for his theory of 'justice as fairness'. My own inclination is to think that Rawls's original theory played a huge part in making us understand various aspects of the idea of justice, and even if that theory has to be abandoned— for which there is, I would argue, a strong case— a great deal of the enlightenment from Rawls's pioneering contribution would remain and continue to enrich political philosophy. It is possible to be at once deeply appreciated and seriously critical of a theory, and nothing would make me happier than having Rawls's own company, if that were to come, in this 'dual' assessment of the theory of justice as fairness.

1. According to Rawls,

- (1) Principles of justice are the unanimous choice of a just society

- (2) Principles of justice are politically derived
- (3) Both the above
- (4) None of the above

2. Which of the following best fits the title of the passage?

- (1) The Idea of Justice
- (2) Unbiased Principles
- (3) Justice as Fairness
- (4) The Basic Structure of Society

3. Which of the following is NOT a correct statement?

- (1) Suitable principles need to be identified to determine the choice of just institutions
- (2) Just institutions are required for the basic structure of society
- (3) Rawls has identified specific principles of justice
- (4) The author of the passage is in agreement with the principles of justice identified by Rawls

4. Which of the following is a *correct* statement?

- (1) Rawls argues that citizens of a society governed by principles of justice would affirm a sense of justice based on them
- (2) The author of the passage argues that citizens of a society governed by principles of justice would affirm a sense of justice based on them
- (3) Both Rawls and the author of the passage argue that citizens of a society governed by principles of justice would affirm a sense of justice based on them
- (4) Neither Rawls nor the author of the passage argues that citizens of a society governed by principles of justice would affirm a sense of justice based on them

5. Which of the following is a *correct* statement?

- (1) The author of the passage argues that principles of justice are chosen by all in the original position
- (2) Rawls argues that principles of justice are chosen by all in the original position

- (3) Both the author of the passage and Rawls argue that principles of justice are chosen by all in the original position
- (4) Neither the author of the passage nor Rawls argue that principles of justice are chosen by all in the original position
6. Which of the following is NOT a correct statement?
- (1) The author of the passage believes that principles of justice constitute the political concept of justice
- (2) Rawls believes that principles of justice constitute the political concept of justice
- (3) Both the author of the passage and Rawls believe that principles of justice constitute the political concept of justice
- (4) Neither the author of the passage nor Rawls believe that principles of justice constitute the political concept of justice
7. Which of the following is a *correct* statement?
- (1) Rawls rejects the theory of justice as fairness
- (2) The author of the passage rejects the theory of justice as fairness
- (3) Neither the author of the passage nor Rawls rejects the theory of justice as fairness
- (4) All of the above
8. Which of the following is NOT a *correct* statement?
- (1) The author of 'Justice as Fairness: A Restatement' is not the author of the passage
- (2) Rawls is the author of 'Justice as Fairness: A Restatement'
- (3) Rawls has not changed or modified his original position on the principles of justice.
- (4) None of the above
9. According to the passage,
- (1) Rawls's multistage theory of justice as fairness is not tenable
- (2) Rawls's multistage theory of justice as fairness is very sound
- (3) The author of the passage reinforces Rawls's multistage theory of justice as fairness.
- (4) None of the above
10. According to the passage,
- (1) The basic principles of justice is the first stage of a multistaged process of social justice developed by Rawls.
- (2) The basic principles of justice is the first stage of a multistaged process of social justice developed by the author of the passage
- (3) Rawls's concept of social justice is confined to the basic principles of justice
- (4) Rawls's concept of social justice developed as a two-stage process
11. Which of the following is a *correct* statement?
- (1) The author of the passage does not agree that impartiality can take many different forms
- (2) Rawls thinks that impartiality can take many different forms
- (3) The author of the passage believes that impartiality can take many different forms
- (4) None of the above
12. According to the passage,
- (1) The author of the passage is in agreement with Rawls's claim that there exists one particular set of principles for just institutions
- (2) The author of the passage is not in agreement with Rawls's claim that there exists one particular set of principles for just institutions
- (3) Neither of the above
- (4) Both (1) and (2) above
13. According to the passage,
- (1) Rawls believes that there are several concerns that may lead to an understanding of justice
- (2) The author of the passage believes that there are several concerns that may lead to an understanding of justice
- (3) The author of the passage believes that one set of principles lead to our understanding of justice

- (4) Rawls believes that there are conflicting concerns that may lead to an understanding of justice

14. According to the passage,

- (1) There is no theory of how to ensure justice in an unbiased and impartial way
- (2) One cannot treat people with economic equity and distributional fairness
- (3) There is a general theory of economic equity and distributional fairness
- (4) None of the above

15. Which of the following is a *correct* statement?

- (1) Rawls suggests the theory 'justice as fairness'
- (2) The author of the passage suggests the theory 'justice as fairness'
- (3) Both Rawls and the author of the passage suggest the theory 'justice as fairness'
- (4) None of the above

Directions for Questions Nos. 16 to 26: Read the following passage - 2 and answer the questions given at the end of the passage. The answers should be based either on the author's views or inferences drawn from the given passage.

Passage - 2

Diwali saw the last great burst of the autumnal exuberance unleashed a month earlier at Dusshera. Within a month of the last Diwali rocket vanishing into the Delhi skies, the city seemed to curl its tail between its legs and disappear into a state of semi-hibernation for the duration of the cold season. The brief but bitter Delhi winter came as suddenly as an undertaker: dark-clad, soft-footed, unannounced and unwelcome. There is no snow in Delhi – the winters are too dry – but, white winds from the snow peaks still sweep down the slopes, freezing the plains of the Punjab and shattering the brittle buds, before raking through the streets of the capital and brushing the narrow Delhi alleyways clear of people. The Delhi-wallahs withdraw into themselves. They lift up their knees to their chins and pull their heavy Kashmiri blankets tightly around. Over their heads they wind thick woollen mufflers. If you look into the dark of the roadside restaurant-shacks

you see only the whites of their eyes peering out into the cold.

The sky is grey, the air is grey, and the dull, cold greyness seeps into the ground, the stones and the buildings. The only colours are the red and yellow silk flags flying over the new Muslim graves in Nizamuddin. The trees in the gardens stand shrouded in a thin wrap of mist. In Old Delhi, the goats fattening for slaughter huddle together under sackcloth coats; some are given old cardigans to wear, with their front legs fitted through the sleeves. Winter smoke winds slowly out of the chimneys; bonfires crackle outside the *jhuggi* clusters. As you look through the windowpanes you can see winter lying curled like a cobra across the land. Olivia now spent her mornings in the warmth of our flat; it was too cold and misty to paint until the sun had reached its zenith at midday. If she ventured out she would return early, before a sudden dusk brought to a close the brief winter afternoon. Brisk evenings were followed by cold nights. We muffled ourselves in our new shawls – we had not considered packing jerseys or overcoats when we set off to India – and sat warming ourselves, in front of the heaters. My reading was mostly historical. I had become fascinated with that period of Delhi's history known as the Twilight. It was an epoch whose dark melancholy perfectly reflected the cold, misty scenes outside our own windows.

The Twilight is bounded by two of the greatest disasters in Delhi's history: the Persian massacres of 1739 and the equally vicious hangings and killings which followed the British recapture of Delhi after the 1857 Indian Mutiny. The first massacre took place in the wake of an unexpected invasion of India by the Persian ruler, Nadir Shah. At Karnal in the Punjab the newly-crowned Shah defeated the Mughal army and advanced rapidly on Delhi. He encamped at the Shalimar Gardens, five miles north of the city. Having been invited into Delhi by the nervous populace, Nadir Shah ordered the massacre after a group of Delhi-wallahs attacked and killed 900 of his soldiers in a bazaar brawl. At the end of a single day's slaughter 1, 50,000 of the city's citizens lay dead.

Nadir Shah's massacre exacerbated the decline of the Mughal Empire which had been steadily contracting since the death of Aurangzeb, the last Great Mogul, in

1707. By the end of the eighteenth century, Delhi, shorn of the empire which gave it life, had sunk into a state of impotent dotage. The aristocracy tried to maintain the life-style and civilization of the empire, but in a mined and impoverished city raped and violated by a succession of invaders. The destruction created a mood conducive to elegy, and the great Urdu writers made the most of the opportunity. 'There is no house from where the jackal's cry cannot be heard,' wrote Sauda. 'The mosques at evening are unlit and deserted. In the once beautiful gardens, the grass grows waist-high around fallen pillars and the ruined arches. Not even a lamp of clay now burns where once the chandeliers blazed with light...'

On the throne in the Hall of Audience in the 'Qila-i-Mualla, the Exalted Fort sat the Emperor Shah Alam. He was a brave, cultured and intelligent old man, still tall and commanding, his dark complexion offset by a short white beard. He spoke four languages and maintained a harem of five hundred women; but for all this, he was sightless - years before, his eyes had been gouged out by Ghulam Qadir, an Afghan marauder whom he had once kept as his catamite. Like some symbol of the city over which he presided, Shah Alam was a blind emperor ruling from a ruined palace. At his court, the elaborate etiquette of Mughal society was scrupulously 'maintained'; poetry, music and the arts flourished. But beneath the surface lustre, all was rotten. Servants prised precious stones from the *pietra dura* inlay on the walls to sell in Chandni Chowk. The old court costumes were threadbare; the plaster was peeling. Mountains of rubbish accumulated in the city streets and amid the delicate pavilions of the Exalted Palace. Unable to see the decay around him, Shah Alam still could not escape its stench.

With Iris Portal and the Huxley sisters I had heard the testimonies of the last British in Delhi. Now, in the cold of early December, I visited the chilly Delhi libraries searching for the accounts of the first English to penetrate the city's walls in the late eighteenth century. The most detailed of the early descriptions was that written by Lieutenant William Franklin. Franklin had been sent to Delhi by the directors of the East India Company to survey the then unknown heartlands of the empire of the Great Mogul. Franklin's account of his

discoveries, published in Calcutta in the 1795 *Asiatic Researches* (the journal of the newly-founded Royal Asiatic Society) painted a melancholy picture of the once-great capital. Franklin had approached the city on horseback from the northwest. His first glimpse was of a landscape littered with crumbling ruins: 'The environs are crowded with the remains of spacious gardens and the country-houses of the nobility,' he wrote in his report. 'The prospect towards Delhi, as far as the eye can reach, is covered with the remains of gardens, pavilions, mosques and burying places.'

16. Which of the following is a *correct* statement?

- (1) Olivia is a painter
- (2) Olivia is the author's neighbour
- (3) Olivia is a historian
- (4) Olivia is the author of the passage

17. During the winter season in Delhi,

- (1) People largely stay indoors
- (2) Most people prefer to walk around the streets
- (3) The road side stacks are well-lit
- (4) None of the above

18. Which of the following is a *correct* statement?

- (1) Bright saffron coloured silk flags fly over the new Muslim graves
- (2) Yellow and red silk flags fly over the new Muslim graves
- (3) Yellow and green silk flags fly over the new Muslim graves
- (4) All Muslim graves are covered with black flags

19. According to the passage,

- (1) All the goats wear old cardigans
- (2) No goats wear cardigans
- (3) All the goats are given new cardigans to wear
- (4) Some goats wear old cardigans

20. Which of the following is a *correct* statement?

- (1) The author of the passage was known to Iris Portal
- (2) The author was not familiar with the Huxley sisters

- (3) Neither Iris Portal nor the Huxley sisters knew about the last British in India
- (4) The author was not interested in the first English who entered Delhi

21. According to the passage,

- (1) Twilight is the name of a person
- (2) A period in European history is known as Twilight
- (3) A period in Delhi's history is known as Twilight
- (4) None of the above

22. Which of the following is a *correct* statement?

- (1) The Mughal Empire declined after the death of Aurangzeb
- (2) The Mughal Empire prospered after the death of Aurangzeb
- (3) Nadir Shah helped the prosperity of the Mughal Empire
- (4) By the end of the 18th century, Delhi had become a very powerful state

23. Which of the following is a *correct* statement?

- (1) Emperor Shah Alam was an intelligent old man
- (2) Emperor Shah Alam was tall and dark complexioned
- (3) Emperor Shah Alam was blind
- (4) All of the above

24. Which of the following is a *correct* statement?

- (1) Emperor Shah Alam followed the etiquette of Muslim society
- (2) Emperor Shah Alam did not care about the etiquette of Muslim society
- (3) Poetry, music and the arts were not part of the Muslim culture
- (4) All of the above

25. Which of the following is a *correct* statement?

- (1) The invasion of Nadir Shah was anticipated
- (2) Nadir Shah invaded Persia
- (3) The massacre ordered by Nadir Shah killed 900 soldiers

- (4) The massacre ordered by Nadir Shah killed 15000 citizens of Delhi

26. According to the passage,

- (1) Winter in Delhi is very pleasant
- (2) Summer season in Delhi is very pleasant
- (3) Both summer and winter seasons are pleasant in Delhi
- (4) Winter season in Delhi is not so pleasant

Directions for Question Nos. 27 to 36: Read the following passage – 3 answer the questions given at the end of the passage. The answers should be based either on the author's views or inferences drawn from the given passage.

Passage – 3

Google headquarters in Mountain View, California, has a certain Centre feel to it – so many fun space-age toys to play with, so little time. In one corner is a spinning globe that emits light beams based on the volume of people searching on Google. As you would expect, most of the shafts of light are shooting up from North America, Europe, Korea, Japan, and coastal China. The Middle East and Africa remain pretty dark. In another corner is a screen that shows a sample of what things people are searching for at that moment, all over the world. When I was there in 2001, I asked my hosts what had been the most frequent searches lately. One, of course, was "sex," a perennial favourite of Googlers. Another was "God." Lots of people searching for Him or Her. A third was "jobs" – you can't find enough of those. And the fourth most searched item around the time of my visit? I didn't know whether to laugh or cry : 'professional wrestling'. The weirdest one, though, is the Google recipe book, where people just open their refrigerators, see what ingredients are inside, type three of them into Google, and see what recipes come up!

Fortunately, no single word or subject accounts for more than 1 or 2 percent of all Google searches at any given time, so no one should get too worried about the fate of humanity on the basis of Google's top search items on any particular day. Indeed, it is the remarkable diversity of searches going on via Google, in so many different tongues, that makes the Google

search engine (and Search engines in general) such huge flatteners. Never before in the history of the planet have so many people – on their own – had the ability to find so much information about so many things and about so many other people.

Said Russian-born Google cofounder Sergey Brin, “If someone has broadband, dial-up, or access to an Internet cafe, whether a kid in Cambodia, the university professor, or me who runs this search engine, all have the same basic access to overall research information that anyone has. It is a total equalizer. This is very different than how I grew up. My best access was some library, and it did not have all that much stuff, and you either had to hope for a miracle or search for something very simple or something very recent. When Google came along, he added, suddenly that kid had “universal access” to the information in libraries all over the world.

That is certainly Google’s goal – to make easily available all the world’s knowledge in every language. And Google hopes that in time, with a PalmPilot or a cell phone, everyone everywhere will be able to carry around access to all the world’s knowledge in their pockets. “Everything” and “everyone” are keywords that you hear around Google all the time. Indeed, the official Google history carried on its home page notes that the name “Google” is a play on the word “googol”; which is the number represented by the numeral 1 followed by 100 zeros. Google’s use of the term reflects the company’s mission to organize the immense, seemingly infinite amount of information available on the Web, “just for you”. What Google’s success reflects is how much people are interested in having just that – all the world’s knowledge at their fingertips. There is no bigger flattener than the idea of making all the world’s knowledge, or even just a big chunk of it, available to anyone and everyone, anytime, anywhere.

“We do discriminate only to the degree that if you can’t use a computer or don’t have access to one, you can’t use Google, but other than that, if you can type, you can use Google,” said Google CEO Eric Schmidt. And surely if the flattening of the world means anything, he added, it means that “there is no discrimination in accessing knowledge. Google is now searchable in one hundred languages, and every time we find another we increase

it. Let’s imagine a group with a Google iPod one day and you can tell it to search by voice – that would take care of people who can’t use a computer- and then [Google access] just becomes about the rate at which we can get cheap devices in to people’s hands”.

How does searching fit into the concept of collaboration? I call it “informing.” Informing is the individual’s personal analogue to uploading, outsourcing, in sourcing, supply chaining, and off-shoring. Informing is the ability to build and deploy your own personal supply chain – a supply chain of information, knowledge, and entertainment. Informing is about self-collaboration – becoming your own self-directed and self-empowered researcher, editor, and selector of entertainment, without having to go to the library or the movie theatre or through network television. Informing is searching for knowledge. It is about seeking like-minded people and communities. Google’s phenomenal global popularity, which has spurred Yahoo! and Microsoft (through its MSN Search) also to make power searching and informing prominent features of their Web sites, shows how hungry people are for this form of collaboration. Google is now processing roughly one billion searches per day, up from 150 million just three years ago.

The easier and more accurate searching becomes, added Larry Page, Google’s other cofounder, the more global Google’s user base becomes, and the more powerful a flattener it becomes. Every day more and more people are able to inform themselves in their own language. Today, said Page “only a third of our searches are U.S.-based, and less than half are in English.” Moreover, he added, “as people are searching for more obscure things, people are publishing more obscure things,” which drives the flattening effect of informing even more. All the major search engines have also recently added the capability for users to search not only the Web for information but also their own computer’s hard drive for words or data or e-mail they know is in there somewhere but have forgotten where. When you can search your own memory more efficiently, that is really informing. In late 2004, Google announced plans to scan the entire contents of both the University of Michigan and Stanford University

libraries, making tens of thousands of books available and searchable online.

In the earliest days of search engines, people were amazed and delighted to stumble across the information they sought; eureka moments were unexpected surprises, said Yahoo!'s cofounder Jerry Yang. "Today their attitudes are much more presumptive. They presume that the information they're looking for is certainly available and that it's just a matter of technologists making it easier to get to, and in fewer keystrokes," he said. "The democratization of information is having a profound impact on society. Today's consumers are much more efficient- they can find information, products, and services, faster [through search engines] than through traditional means. They are better informed about issues related to health, leisure, etc. Small towns are no longer disadvantaged relative to those with better access to information. And people have the ability to be better connected to things that interest them, to quickly and easily become experts in given subjects and to connect with others who share their interests."

Google's founders understood that by the late 1990s hundreds of thousands of Web pages were being added to the Internet each day, and that existing search engines, which tended to search for keywords, could not keep pace. Brin and Page, who met as Stanford University students in computer science in 1995, developed a mathematical formula that ranked a Web page by how many other Web pages were linked to it, on the assumption that the more people linked to a certain page, more important the page. The key breakthrough that enabled Google to become first among search engines was its ability to combine its PageRank technology with an analysis of page content, which determines which pages are most relevant to the specific search being conducted. Even though Google entered the market after other major search players, its answers were seen by people as more accurate and relevant to what they were looking for. The fact that one search engine was just a little better than the others led a tidal wave of people to switch to it. (Google now employs scores of mathematicians working on its search algorithms, in an effort to always keep them one step more relevant than the competition).

For some reason, said Brin, "people underestimated the importance of finding information, as opposed to other things you would do online. If you are searching for something like a health issue, you really want to know; in some cases it is a life-and-death matter. We have people who search Google for heart-attack symptoms and then call nine-one-nine." But sometimes you really want to inform yourself about something much simpler.

27. Which of the following is *not* a correct statement?

- (1) Informing is supply chain management
- (2) Informing is the ability to build and deploy your own supply of information
- (3) Knowledge makes you self-directed and self-empowered
- (4) Knowledge and information reduce inequality

28. According to the passage,

- (1) PageRank technology analyses the relevance of information
- (2) Google search does not determine which pages contain relevant information
- (3) Google was the first search player on the web
- (4) Yahoo entered the market after Google

29. The author of the passage suggests that most people use Google to search for:

- | | |
|----------|----------------------|
| (1) Jobs | (2) Sex |
| (3) God | (4) All of the above |

30. Which of the following is a *correct* statement?

- (1) More than 70 percent of people search for God on Google
- (2) Less than 2 percent of people search for God on Google
- (3) More than 50 percent of people search for sex on Google
- (4) About 30 percent of people search for wrestling on Google

31. According to the author of the passage,

- (1) Google has made the world flat
- (2) Google has revealed the history of the planet

- (3) Different languages have created Google engine
- (4) Limited information is available on Google engine

32. Which of the following is a *correct* statement?

- (1) Only about 50 percent of Google users belong to North America
- (2) Only 20 percent of Google users belong to North America
- (3) Only 5 percent of Google users belong to North America
- (4) Nearly 33 percent of Google users belong to North America

33. Which of the following is a *correct* statement?

- (1) More than half of Google searches are in the English language
- (2) More than half of Google searches are in a Non-English language
- (3) Most of Google searches are in the English language
- (4) None of the above

34. According to the passage,

- (1) In earlier days people were not surprised to find the information they were searching
- (2) Today people do not expect to find the information they are looking for
- (3) Today people are happy to find the information they are looking for
- (4) Today people expect to find the information they are looking for

35. Which of the following is a *correct* statement?

- (1) The co-founders of Google were students of Stanford University
- (2) The co-founders of Google were professors of Stanford University
- (3) Larry Page and Jerry Yang were co-founders of Google
- (4) Eric Schmidt and Jerry Yang were co-founders of Google

36. According to the passage, most people who search on Google belong to

- (1) Europe and Korea
- (2) Japan and Central Asia
- (3) Middle East and Africa
- (4) Europe, Korea, Japan and Central Asia

Directions for Question Nos. 37 to 50: Read the following passage-4 and answer the questions given at the end of the passage. The answers should be based either on the author's views or inferences drawn from the given passage.

Passage - 4

Another style which is only partially dependent on situational factors for its effectiveness is the Pioneering-Innovative management. Like Likert, Khawwalla preferred to use the expression 'management' rather than 'leadership', though his theory could easily be taken for a theory of leadership styles of top executives. He accepted that the operative mode of the top management sets the tone for the lower levels. He therefore administered a questionnaire to the top level executives of 75 varied organisations. In addition to other variables, the responses disclosed a mode of functioning which he labelled as 'PI Management.' PI Management is characterised by a strong emphasis on attributes such as (1) Adapting freely to changing circumstances without concern for past management practices or traditions; (2) Marketing new and novel products or services; (3) Acquiring the latest, most sophisticated plant, machinery and equipment; (4) High return on investments even if they involve high risk; (5) High quality and high price orientation in marketing company's established products or services; (6) Innovation and experimentation in every area of management; (7) Ability to come up with original solutions and novel ideas; (8) Being a pioneer within the industry in marketing technologically sophisticated products and services.

Managements that score high on PI claim to pursue a business strategy of pioneering, novel, technologically sophisticated, high quality products and plants. They seem willing to take necessary risks attendant on this strategy. Since they seek to be pioneers, they cannot

afford not to adapt or innovate. Indeed, they try to be aggressively adaptive and innovative, not merely technologically but also in various areas of management. Interestingly enough, the current levels of PI in organizations are more strongly influenced by strategic decisions taken in the past than the other way around. That is, the past PI has an insignificant effect on present norms, decisions and managerial functions. For example, the past policy of recruiting creative managers at junior levels deliberate efforts to inject pioneering and innovative practices regarding business strategies (with reference to diversification, integration, marketing), operating modes (e.g. autonomy, accountability, cooperation), and personnel (e.g. reward and punishment, communication) were found to have significant effects on the current levels of PI; but past PI did not influence any of it. Similarly, past norms regarding excellence, expertise, dedication and the lower levels of dependency facilitated current PI levels, but not the other way around. In sum, PI management is an outcome rather than a cause of managerial policies and practices. Furthermore, PI management is more effective in an environment which offers opportunities than one which is highly controlled.

Once PI management becomes operative, it improves overall performance, the organisation's growth, public image as well as adaptability to circumstances improve. It heightens the achievement and result orientation of top management and lowers authoritarian norms at middle management levels. In order to realise the organisation's goals, the PI executives seek out a complex, turbulent but favourable environment. It is worth noting that past PI is negatively related to the maintenance of friendly relations with colleagues. PI 'perhaps temporarily lowers friendship ties at senior management levels.' Relationship orientation, particularly primary relationship, is probably not part of the PI package. Relationship is an offshoot of the 'affiliative orientation' which is a business typical of the traditional style of management. According to Khandwalla "a traditional top management, wedded to the status quo, may breed a clubby kind of affiliative, even somewhat task-oriented, work ethic at the next level of management, but a 'politicised', cliquish, conflict ridden, low work ethic, passivity prone culture

at middle-junior management levels. Also, the tenure of senior managers tends to be long in conservative set-ups. This may breed a fairly strong, affiliative orientation among the old timers." Khandwalla devised an essentially PI-like strategy for the turnaround management of sick enterprises.

A few years later, Khandwalla added that it is the 'humane' rather than the 'surgical' turnaround strategy which works in the developmental context. The turnaround and PI styles should be considered as a whole and integrated model in which the relative relevance of each depends on the health of the organisation. The sick ones need turnaround to be followed by PI management in order to make the organization even more vibrant and healthy. The underlying basic assumption in both of them is the centrality of the task system which must be built, restructured and managed rationally and scientifically.

37. According to the passage, managers who adopt PI management style
- (1) Avoid risks
 - (2) Adopt sophisticated technology
 - (3) Do not adapt or innovate
 - (4) None of the above
38. Which of the following is NOT a *correct* statement?
- (1) Organisation's growth is regulated by PI Management Style
 - (2) Organisation's image improves with PI Management Style
 - (3) PI Management improves organisation's adaptability
 - (4) PI Management improves the result orientation of organisation
39. According to the author of the passage,
- (1) Khandwalla is a proponent of the traditional style of management
 - (2) Khandwalla is a critique of the traditional style of management
 - (3) Khandwalla is neither a proponent nor a critique of the traditional style of management
 - (4) None of the above

- 40.** According to the author,
- (1) Khandwalla proposes a humane turnaround
 - (2) Khandwalla proposes a surgical turnaround
 - (3) Khandwalla proposes a mix of humane and surgical turnaround
 - (4) None of the above
- 41.** According to the passage,
- (1) Effectiveness of 'Pioneering - Innovative Management' style is not dependent on situational factors
 - (2) Situational factors have no influence on 'Pioneering - Innovative Management' style
 - (3) Effectiveness of 'Pioneering - Innovative Management' style is partially influenced by situational factors
 - (4) Situational factors totally control 'Pioneering - Innovative Management' style
- 42.** Which of the following is a *correct* statement?
- (1) The present norms and managerial functions are influenced by 'Pioneering - Innovativeness'
 - (2) 'Pioneering - Innovativeness' of the past has no significant influence on present norms and managerial functions
 - (3) The 'Pioneering - Innovativeness' of the past has very little impact on present norms and managerial functions
 - (4) None of the above
- 43.** Which of the following is NOT a *correct* statement?
- (1) The policy of recruiting creative managers at junior levels has direct impact on the current levels of 'Pioneering - Innovative' management
 - (2) Deliberate efforts to develop innovative business strategies has direct impact on 'Pioneering - Innovative' management
 - (3) Steps to inculcate innovative operating models has direct impact on 'Pioneering - Innovative' management
 - (4) Past 'Pioneering - Innovative' management had influence on present business strategies
- 44.** According to the passage,
- (1) 'Pioneering - Innovative' management enhances performance
 - (2) 'Pioneering - Innovative' management inhibits performance
 - (3) 'Pioneering - Innovative' management controls performance
 - (4) 'Pioneering - Innovative' management measures performance
- 45.** Which of the following is a *correct* statement?
- (1) 'Pioneering - Innovative' management is a result of top management policies and practices.
 - (2) Management policies and practices are a result of 'Pioneering - Innovative' management.
 - (3) 'Pioneering - Innovative' management works well in a closed environment.
 - (4) 'Pioneering - Innovative' management works well in a controlled environment.
- 46.** According to the passage,
- (1) Past practices of encouraging excellence had no influence on current 'PI' levels
 - (2) Past practices of encouraging excellence influenced current 'PI' levels
 - (3) Past 'PI' levels influenced current focus on excellence
 - (4) Past 'PI' levels influenced the current level of expertise.
- 47.** Which of the following is NOT a *correct* statement?
- (1) 'PI' management is characterised by an emphasis on innovation
 - (2) Emphasis on high return on investment is characteristic of 'PI' management
 - (3) Emphasis on high quality and low price is characteristic of 'PI' management
 - (4) 'PI' management is characterised by an emphasis on being a pioneer
- 48.** Which of the following is a *correct* statement?
- (1) Khandwalla used a questionnaire to seek responses from 75 respondents.

- (2) Khandwalla used a questionnaire to seek responses from executives of 75 respondents.
- (3) Khandwalla sought responses from 75 organisations of similar nature.
- (4) Likert sought responses from 75 organisations of similar nature

49. According to the passage,

- (1) Khandwalla believes that lower levels are influenced by the style of top management
- (2) Likert believed that lower levels are influenced by the style of top management
- (3) Neither Likert nor Khandwalla believed that lower levels are influenced by the style of top management
- (4) None of the above

50. Which of the following is NOT a *correct* statement?

- (1) Likert preferred to use the expression 'management' instead of 'leadership'
- (2) Khandwalla preferred to use the expression 'management' instead of 'leadership'
- (3) Neither the work of Likert nor that of Khandwalla deal with the theory of 'leadership'.
- (4) Both Likert and Khandwalla deal with the theory of 'leadership'

SECTION – II

Verbal Ability (50 questions)

Question Nos. 51 to 57 consist of a number of sentences which, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a letter. Choose the most logical order of sentences from among the four choices lettered (1) through (4).

51.

- A. The men jumped up and rushed to the river
- B. They poured it on the glowing bed of charcoal
- C. The water gurgled out and the dying embers hissed and sent up little curls of vapour
- D. They quickly came back with pitchers laden with water.

(1) DABC (2) ADCB (3) CBAD (4) BADC

52.

- A. failure to put the right person at the right place could prove expensive for the organisation
- B. All managers are decision makers
- C. The rightness of a decision largely depends upon whether or not the manager has utilized the right persons in right ways.
- D. The effectiveness of managers is largely reflected in their track record in taking the right decisions

(1) DCBA (2) BDCA (3) ABCD (4) BACD

53.

- A. I also believe in the possibility as well as the desirability of applying science to problems arising in social science
- B. Believing as I do in social science, I can only look with apprehension upon social pseudo-science
- C. I am a rationalist, which means that I believe in discussion and argument
- D. I may say why I have chosen this particular subject

(1) CDAB (2) DCAB (3) BCAD (4) DBAC

54.

- A. The investigation was confined to manufacturing firms in the area
- B. Those concerned with mining and quarrying, construction, transport, and trade and commerce, were excluded
- C. The number of workers employed by the firms in the area ranged from a dozen to approximately 35,000
- D. A long search produced a comprehensive list of 203 manufacturing firms.

(1) ABDC (2) BCDA (3) DCBA (4) CBDA

55.

- A. Moreover, private sector competitors claim to be moving from aluminium manufacture to specialized uses of the metal
- B. The new concern could probably supply the metal to established companies for use as input
- C. As we all know, there is still shortage of the metal
- D. All in all, though, the new plant will not threaten existing manufacturers in a big way

(1) ADCB (2) BCDA (3) DBCA (4) CDDB

56.

- A. The causes of success or failure are deep and complex, chance plays a part
- B. Motivation and opportunity can be supplied in good part by incentive compensation and decentralisation respectively
- C. It is not easy to say why one management is successful and another is not
- D. Experience has convinced me, however, that for those who are responsible for a business, motivation and opportunity are very important factors.

(1) CDAB (2) DCAB (2) CADB (4) ACDB

- 57.
- A. The wind at his back also helped him on his course
 - B. Dark as the night was he found it easy to follow the track
 - C. Not only that he was confident that there would be few, if any, traces of his passage
 - D. Thanks to the drought, it was hard and firm and he made good speed
- (1) CABD (2) DACB (3) DBAC (4) BCDA

Question Nos. 58 to 63 consist of sentences each of which contains one or two idioms. Four possible meanings labelled (1) through (4) are provided below each sentence. Choose the one which best expresses the meaning of the idiom.

58. I would like to see Ramu do his own work for a change instead of always back-seat driving.
- (1) driving a car from the back
 - (2) being critical of work being done by others
 - (3) offering advice
 - (4) annoying
59. He proved to be quite a wet blanket at the party for he spoke to no one and morosely sat by himself.
- (1) he was crying
 - (2) discouraged the rest from having fun
 - (3) he wet the blanket
 - (4) he had covered himself with a wet blanket
60. The ship was about to weigh anchor when the storm came.
- (1) weigh the anchor (2) leave the docking berth
 - (3) raise the anchor (4) drop the anchor
61. Debu had a chequered career since I first knew him as a clerk in the local bank.
- (1) had a variety of jobs and experiences
 - (2) a career which helped him make lots of money
 - (3) a career where he signed a lot of cheques
 - (4) did odd jobs

62. Women should be paid the same as men when they do the same job, for surely, what is sauce for gander is sauce for the goose.
- (1) both goose and gander should be equally treated
 - (2) what is thought suitable for a man should also be for a woman
 - (3) goose and gander eat the same sauce
 - (4) the principle of equal treatment should be implemented
63. The two women are so jealous that at the drop of a hat they start insulting each other.
- (1) on every occasion
 - (2) for no reason at all
 - (3) when a hat is dropped
 - (4) very rarely

Directions for question Nos. 64 to 78: Each of the questions below contains one or more blank spaces, each blank space indicating an omitted word or phrase. Beneath the sentence are four words or set of words. Choose the word or set of words for each blank space that best fits the meaning of the sentence as a whole.

64. The judge, after ruling that the news report had unjustly the reputation of the Physician, ordered the newspaper to its libellous statements in print.
- (1) injured – retract
 - (2) sullied – publicize
 - (3) damaged – disseminate
 - (4) tarnished – cover up
65. Psychologists agree that human beings have a strong need to their time; having too much idle time can be as stressful as having none at all.
- (1) compartmentalise (2) structure
 - (3) functionalise (4) remand
66. several generations, Alex Haley wrote *Roots*, a novel explaining both his family history and the history of American bigotry.
- (1) Focusing on (2) Centering around

- (3) With an eye on (4) Living through
67. Although for centuries literature was considered something that would instruct as well as entertain, the modern reader has little patience with works and seeks only to be
- (1) fiction – enlightened
(2) didactic – distracted
(3) voluminous – absorbed
(4) philosophical – entertained
68. To strive, to seek, to find, and are the heroic goals of Ulysses in Tennyson’s famous poem.
- (1) not yielding (2) yet to yield
(3) not to yield (4) yet not yield
69. The most frustrating periods of any diet are the inevitable, when weight loss if not stops.
- (1) moods – accelerates (2) feasts – halts
(3) meals – ceases (4) plateaus – slows
70. Since the author’s unflattering references to her friends were so, she was surprised that her were recognized.
- (1) laudatory – styles
(2) obvious – anecdotes
(3) oblique – allusions
(4) critical – eulogies
71. Gaurav was intent on maintaining his status as first in his class; because even the smallest mistakes infuriated him, he reviewed all his papers before submitting them to his teacher.
- (1) explicitly (2) perfunctorily
(3) assiduously (4) honestly
72. The subtleties of this novel are evident not so much in the character as they are in its profoundly plot structure.
- (1) assessment – eclectic
(2) development – trite
(3) delineation – intricate
(4) portrayal – aesthetic
73. Perhaps because something in us instinctively distrusts such displays of natural fluency, some readers approach John Updike’s fiction with.....
- (1) bewilderment (2) suspicion
(3) veneration (4) recklessness
74. We were amazed that a man who had been heretofore the most of public speakers could, in a single speech, electrify an audience and bring them cheering to their feet.
- (1) masterful (2) auspicious
(3) pedestrian (4) accomplished
75. Despite the mixture’s nature, we found that by lowering its temperature in the laboratory we could dramatically reduce its tendency to vaporize.
- (1) volatile (2) resilient
(3) insipid (4) acerbic
76. In one shocking instance of research, one of the nation’s most influential researchers in the field of genetics reported on experiments that were never carried out and published deliberately scientific papers on his nonexistent work.
- (1) comprehensive - abstract
(2) theoretical - challenging
(3) fraudulent - deceptive
(4) erroneous - impartial
77. Her novel published to universal acclaim, her literary gifts acknowledged by the chief figures of the Harlem Renaissance, her reputation as yet by envious slights, Hurston clearly was at the of her career.
- (1) undamaged – ebb
(2) untarnished – zenith
(3) unmarred – brink
(4) untainted – extremity
78. New concerns about growing religious tension in Northern India were this week after at least fifty people were killed and hundreds injured or arrested in rioting between Hindus and Muslims.

- (1) invalidated (2) restrained
(3) fuelled (4) lessened

Directions for question Nos. 79 to 88: Some part of each sentence below is underlined. Four choices numbered (1) through (4) for rephrasing the underlined part follow each sentence. Select the best alternative, following the requirements of standard written English.

79. Regardless “new modernism” in literature, which produces novels, which often read like the diaries of madmen, most readers still prefer a conventional plot and simple style.

- (1) Regardless of the “new modernism” in literature, which produces
(2) Regardless of the “new modernism” literature, which produce
(3) Regardless, the “new modernism” in literature produces
(4) Irregardless of the “new modernism” in literature, which produces

80. A career in the medical profession, which requires an enormous investment of time and money, do not guarantee success as there is so much competition.

- (1) which requires an enormous investment of time and money, do not guarantee success as there is so much competition
(2) which requires an enormous investment of time and money, does not guarantee success since there is so much competition
(3) requiring an enormous investment of time and money, and cannot guarantee success because there is so much competition
(4) requires that an enormous investment of time and money be made and success cannot be guaranteed due to competition

81. The more the union stubbornly refused to budge from its original demand for 20% across-the-board salary increase, the more the company management reiterated its original proposal of a mere 3% raise.

- (1) the more the company management reiterated its original proposal of a mere 3% raise
(2) the company management’s original proposal for a mere 3% raise was reiterated all the more
(3) the company management kept on reiterating its original proposal of a mere 3% raise
(4) the more the company management’s original proposal of a mere 3% raise was reiterated

82. The president of the resident welfare association tried to convince his neighbours they should join forces prevent crime in the neighbourhood rather than continuing to be victimized.

- (1) they should join forces to prevent crime in the neighbourhood rather than continuing to be victimized
(2) that they should join forces to prevent crime in the neighbourhood rather than continue to be victimized
(3) about joining forces to prevent crime in the neighbourhood instead of continuing to be victimized
(4) to join forces to prevent crime in the neighbourhood rather than continuing to be victimized

83. Lawyers and doctors alike both agree something should be done about the rise in medical malpractice cases which are on the increase.

- (1) alike both agree that something should be done about the rise in medical malpractice cases which are on the increase
(2) alike agree that something should be done about the rise in medical malpractice cases
(3) agree that something should be done about the rise in the number of medical malpractices
(4) None of the above

84. The conductor seemed entirely arbitrary the choice of tempo. because of which each successive movement of the piece seemed to have no connection to what had come before.

- (1) The conductor’s choice of tempo seemed entirely arbitrary

- (2) It seemed the conductor chose tempo entirely arbitrary
- (3) The conductor was entirely arbitrary in his choice of tempo
- (4) The tempo was chosen entirely by the arbitrary conductor

85. Although the conditions in which she lived suggest that she was miserly, her contributions to charities show that she is generous.

- (1) her charities showed generous contributions
- (2) her generousities made large contributions
- (3) her contributions to charities showed that she is not generous
- (4) her contributions to charities show that she was generous

86. The governor's intolerance of dissent among his aids was intensified by loyalty from all.

- (1) by him insisting upon total loyalty from all.
- (2) by his insistence upon total loyalty from all
- (3) by all insisting upon his loyalty
- (4) by his insisting upon their loyalty

87. Although he was often incomplete in his work, he was promoted simply because he was with the company longer than anyone else.

- (1) Although work was often incomplete
- (2) His work was often incomplete although
- (3) Although his work was often incomplete
- (4) Although he often completed his work

88. Though the concert had been enjoyable, it was protracted overly.

- (1) it was overly protracted.
- (2) it overly protracted.
- (3) it protracted overly.
- (4) it got protracted overly.

Directions for Question Nos. 89 to 100: Each question consists of sentences, which are divided into four parts, numbered (1) through (4). One part in each sentence is not acceptable in standard

written English. Identify that part in each of the sentences which contains the error.

89. (1) Her acceptance of speech
(2) was well received
(3) eliciting thunderous applause
(4) in several points.

90. (1) An oppressive solemnity
(2) and not the festive mood
(3) one might have expected
(4) characterised the mood by the gathering

91. (1) All aspiring artists must
(2) struggle by the conflict
(3) between faith in their own talent
(4) and knowledge that very few are great enough to succeed

92. (1) Despite some bad news
(2) Michel's stature was not diminished
(3) and her fans or critics
(4) were unanimous in appreciating her work

93. (1) Jazz is an American art form
(2) which was now flourishing in Europe
(3) through the efforts of expatriates
(4) in France, Scandinavia and Germany

94. (1) Character and (2) not riches
(3) win us (4) respect

95. (1) Pickpocketers are (2) sometimes spotted
(3) by policemen (4) at bus stops

96. (1) His both hands (2) have been injured
(3) so he (4) cannot work

97. (1) Several guests noticed Mr. Peter
(2) fall back
(3) in his chair
(4) and gasping for breath

98. (1) The short story (2) should not exceed
(3) more than (4) two hundred words.

- 99.** (1) They appointed him
(2) as a manager
(3) as he
(4) is efficient

- 100.** (1) Owing to illness (2) he was unable
(3) to go (4) for his holiday.

SECTION-III

Quantitative Ability (50 questions)

- 101.** The sum of all the roots of $4x^3 - 8x^2 - 63x - 9 = 0$ is:
 (1) 8 (2) 2 (3) -8 (4) -2
- 102.** A man born in the first half of the nineteenth century was x years old in the year x^2 . He was born in:
 (1) 1806 (2) 1836 (3) 1812 (4) 1825
- 103.** A train, an hour after starting, meets with an accident which detains it for a half hour, after which it proceeds at $3/4$ of its former rate and arrives $3(1/2)$ hours late. Had the accident happened 90 kilometers farther along the line, it would have arrived only 3 hour late. The length of the trip in kilometers was:
 (1) 400 (2) 465 (3) 600 (4) 640
- 104.** The times between 7 and 8 o'clock, correct to the nearest minute, when the hands of a clock will form an angle of 84 degrees are:
 (1) 7: 23 and 7: 53 (2) 7: 20 and 7: 50
 (3) 7: 22 and 7: 53 (4) 7: 23 and 7: 52
- 105.** The solution of $\sqrt{5x - 1} + \sqrt{x - 1} = 2$ is:
 (1) $x = 1$ (2) $x = 2$
 (3) $x = 2/3$ (4) $x = 2, x = 1$
- 106.** If $\log x - 5 \log 3 = -2$, then x equals:
 (1) 1.25 (2) 0.81 (3) 2.43 (4) 0.8
- 107.** Three boys agree to divide a bag of marbles in the following manner. The first boy takes one more than half the marbles. The second takes a third of the number remaining. The third boy finds that he is left with twice as many marbles as the second boy. The original number of marbles:
 (1) is 8 or 38
 (2) cannot be determined from the given data
 (3) is 20 or 26
 (4) is 14 or 32
- 108.** A three-digit number has, from left to right, the digits h, t , and u with $h > u$. When the number with the digits reversed is subtracted from the original number, the units' digit in the difference is 4. The next two digits, from right to left, are:
 (1) 5 and 9 (2) 9 and 5
 (3) 5 and 4 (4) 4 and 5
- 109.** In a group of cows and chickens, the number of legs was 14 more than twice the number of heads. The number of cows was:
 (1) 5 (2) 7 (3) 10 (4) 12
- 110.** Simplify $\left[\sqrt[3]{\sqrt[6]{\alpha^9}} \right]^4 \left[\sqrt[6]{\sqrt[3]{\alpha^9}} \right]^4$; the result is:
 (1) α^{16} (2) α^{12} (3) α^8 (4) α^4
- 111.** The expression $1 - \frac{1}{1 + \sqrt{3}} + \frac{1}{1 - \sqrt{3}}$ equals :
 (1) $1 - \sqrt{3}$ (2) 1
 (3) $-\sqrt{3}$ (4) $\sqrt{3}$
- 112.** Given two positive integers x and y with $x < y$. The percent that x is less than y is:
 (1) $\frac{100(y - x)}{x}$ (2) $\frac{100(x - y)}{x}$
 (3) $\frac{100(y - x)}{y}$ (4) $100(y - x)$
- 113.** The points A, B and C are on circle O. The tangent line at A and the secant BC intersect at P, B lying between C and P. If $\overline{BC} = 20$ and $\overline{PA} = 10\sqrt{3}$, then \overline{PB} equals:
 (1) 5 (2) 10 (3) $10\sqrt{3}$ (4) 20
- 114.** The sum of three numbers is 98. The ratio of the first to the second is $2/3$, and the ratio of the second to the third is $5/8$. The second number is:
 (1) 15 (2) 20 (3) 30 (4) 32

- 115.** Two candles of the same height are lighted at the same time. The first is consumed in 4 hours and the second in 3 hours. Assuming that each candle burns at a constant rate, in how many hours after being lighted was the first candle twice the height of the second?
 (1) $\frac{3}{4}$ hrs (2) $1\frac{1}{2}$ hrs. (3) 2hrs (4) $2\frac{2}{5}$ hrs.
- 116.** In our number system the base is ten. If the base were changed to four, you would count as follows: 1, 2, 3, 10, 11, 12, 13, 20, 21, 22, 23, 30,..... The twentieth number would be:
 (1) 110 (2) 104 (3) 44 (4) 38
- 117.** Hari and Ravi started a race from opposite ends of the pool. After a minute and a half, they passed each other in the center of the pool. If they lost no time in turning and maintained their respective speeds, how many minutes after starting did they pass each other the second time?
 (1) 3 (2) $4\frac{1}{2}$ (3) 6 (4) $7\frac{1}{2}$
- 118.** The numbers x, y, z are proportional to 2, 3, 5. The sum of x, y and z is 100. The number y is given by the equation $y = ax - 10$. Then a is:
 (1) 2 (2) $\frac{3}{2}$ (3) 3 (4) $\frac{5}{2}$
- 119.** If the square of a number of two digits is decreased by the square of the number formed by reversing the digits, then the result is not always divisible by:
 (1) 9
 (2) the product of the digits
 (3) the sum of the digits
 (4) the difference of the digits
- 120.** The expression $2 + \sqrt{2} + \frac{1}{2 + \sqrt{2}} + \frac{1}{\sqrt{2} - 2}$ equals:
 (1) 2 (2) $2 - \sqrt{2}$
 (3) $2 + \sqrt{2}$ (4) $2\sqrt{2}$
- 121.** The sum of the roots of equation $4x^2 + 5 - 8x = 0$ is equal to :
 (1) - 5 (2) $-\frac{5}{4}$ (3) -2 (4) none of the above
- 122.** The values of y which will satisfy the equations $2x^2 + 6x + 5y + 1 = 0$ and $2x + y + 3 = 0$ may be found by solving:
 (1) $y^2 + 14y - 7 = 0$ (2) $y^2 + 8y + 1 = 0$
 (3) $y^2 + 10y - 7 = 0$ (4) $y^2 + y - 12 = 0$
- 123.** If the digit 1 is placed after a two digit number whose tens' digit is t , and units' digit is u , the new number is:
 (1) $10t + u + 1$ (2) $100t + 10u + 1$
 (3) $1000t + 10u + 1$ (4) $t + u + 1$
- 124.** The area of the largest triangle that can be inscribed in a semi-circle whose radius r , is:
 (1) r^2 (2) r^3 (3) $2r^2$ (4) $2r^3$
- 125.** The value of $\log_5 \frac{(125)(625)}{25}$ is equal to :
 (1) 725 (2) 6 (3) 3125 (4) 5
- 126.** Two boys A and B start at the same time to ride from Delhi to Meerut, 60 kilometers away. A travels 4 kilometers an hour slower than B. B reaches Meerut and at once turns back meeting A 12 kilometers from Meerut. The rate of A was:
 (1) 4 kph (2) 8 kph (3) 12 kph (4) 16 kph
- 127.** A manufacturer builds a machine which will address 500 envelopes in 8 minutes. He wishes to build another machine so that when both are operating together they will address 500 envelopes in 2 minutes. The equation used to find how many minutes x it would require the second machine to address 500 envelopes alone, is:
 (1) $8 - x = 2$ (2) $\frac{1}{8} + \frac{1}{x} = \frac{1}{2}$

$$(3) \frac{500}{8} + \frac{500}{x} = 500 \quad (4) \frac{x}{2} + \frac{x}{8} = 1$$

128. From a group of boys and girls, 15 girls leave. There are then left two boys for each girl. After this 45 boys leave. There are then 5 girls for each boy. The number of girls in the beginning was:

- (1) 40 (2) 43 (3) 29 (4) none of these

129. Ajay ordered 4 pairs of black socks and some additional pairs of blue socks. The price of the black socks per pair was twice that of the blue. When the order was filled, it was found that the number of pairs of the two colors had been interchanged. This increased the bill by 50%. The ratio of the number of pairs of black socks to the number of pairs of blue socks in the original order was :

- (1) 4 : 1 (2) 2 : 1 (3) 1 : 4 (4) 1 : 2

130. The number of circular pipes with an inside diameter of 1 inch which will carry the same amount of water as a pipe with an inside diameter of 6 inches is:

- (1) 6π (2) 12 (3) 36 (4) 36π

131. The sum to infinity of $\frac{1}{7} + \frac{2}{7^2} + \frac{1}{7^3} + \frac{2}{7^4} + \dots$ is:

- (1) $\frac{1}{24}$ (2) $\frac{5}{48}$ (3) $\frac{1}{16}$ (4) none of these

132. A rectangle inscribed in a triangle has its base coinciding with the base b of the triangle. If the altitude of the triangle is h , and the altitude x of the rectangle is half the base of the rectangle, then:

$$(1) x = \frac{1}{2}h \quad (2) x = \frac{bh}{h+b}$$

$$(3) x = \frac{bh}{2h+b} \quad (4) x = \sqrt{\frac{hb}{2}}$$

133. Indicate in which one of the following equations y is neither directly nor inversely proportional to x :

- (1) $x + y = 0$ (2) $3xy = 10$

$$(3) x = 5y$$

$$(4) 3x + y = 10$$

134. The values of a in the equation: $\log_{10} (a^2 - 15a) = 2$ are:

$$(1) \frac{15 \pm \sqrt{233}}{2} \quad (2) 20, -5$$

$$(3) \frac{15 \pm \sqrt{305}}{2} \quad (4) \pm 20$$

135. $\frac{2^{n+4} - 2(2^n)}{2(2^{n+3})}$ when simplified is:

$$(1) 2^{n+1} - \frac{1}{8} \quad (2) -2^{n+1}$$

$$(3) 1 - 2^n \quad (4) \frac{7}{8}$$

136. A total of 28 handshakes was exchanged at the conclusion of a party. Assuming that each participant was equally polite toward all the others, the number of people present was:

- (1) 14 (2) 28 (3) 56 (4) 8

137. A number which when divided by 10 leaves a remainder of 9, when divided by 9 leaves a remainder of 8, by 8 leaves a remainder of 7, etc., down to where, when divided by 2, it leaves a remainder of 1, is:

- (1) 59 (2) 419 (3) 1259 (4) 2519

138. The ratio of the area of a square inscribed in a semicircle to the area of the square inscribed in the entire circle is:

- (1) 1 : 2 (2) 2 : 3 (3) 2 : 5 (4) 3 : 4

139. The points (6, 12) and (0, -6) are connected by a straight line. Another point on this line is:

- (1) (3, 3) (2) (2, 1) (3) (7, 16) (4) (-1, -4)

140. A merchant bought some goods at a discount of 20% of the list price. He wants to mark them at such a price that he can give a discount of 20% of the marked price and still make a profit of 20% of

the selling price. The percent of the list price of which he should mark them is:

- (1) 20 (2) 100 (3) 125 (4) 80

141. If $\frac{x^2 - bx}{ax - c} = \frac{m - 1}{m + 1}$ has roots which are numerically equal but of opposite signs, the value of m must be:

- (1) $\frac{a - b}{a + b}$ (2) $\frac{a + b}{a - b}$
 (3) c (4) $\frac{1}{c}$

142. If the sum of the first ten terms of an arithmetic progression is four times the sum of the first five terms, then the ratio of the first term to the common difference is:

- (1) 1 : 2 (2) 2 : 1 (3) 1 : 4 (4) 4 : 1

143. Two cyclist, k kilometres apart, and starting at the same time, would be together in r hours if they travelled in the same direction, but would pass each other in t hours if they travelled in opposite direction. The ratio of the speed of the faster cyclist to that of the slower is:

- (1) $\frac{r + t}{r - t}$ (2) $\frac{r}{r - t}$
 (3) $\frac{r + t}{r}$ (4) $\frac{r}{t}$

144. If $f(x) = \frac{x(x - 1)}{2}$, then $f(x + 2)$ equals:

- (1) $f(x) + f(2)$ (2) $(x + 2)f(x)$
 (3) $x(x + 2)f(x)$ (4) $\frac{(x + 2)f(x + 1)}{x}$

145. In solving a problem that reduces to a quadratic equation one student makes a mistake only in the constant term of the equation and obtains 8 and 2 for the roots. Another student makes a mistake

only in the coefficient of the first degree term and finds -9 and -1 for the roots. The correct equation is:

- (1) $x^2 - 10x + 9 = 0$ (2) $x^2 + 10x + 9 = 0$
 (3) $x - 10x + 16 = 0$ (4) $x^2 - 8x - 9 = 0$

146. Instead of walking along two adjacent sides of a rectangular field, a boy took a short-cut along the diagonal of the field and saved a distance equal to $1/2$ of the longer side. The ratio of the shorter side of the rectangle to the longer side is:

- (1) $\frac{1}{2}$ (2) $\frac{2}{3}$ (3) $\frac{1}{4}$ (4) $\frac{3}{4}$

147. If x varies as the cube of y , and y varies as the fifth root of z , then x varies as the n th power of z , where n is:

- (1) $\frac{1}{15}$ (2) $\frac{5}{3}$ (3) $\frac{3}{5}$ (4) 15

148. Of the following sets, the one that includes all values of x which will satisfy $2x - 3 > 7 - x$ is:

- (1) $x > 4$ (2) $x < \frac{10}{3}$
 (2) $x = \frac{10}{3}$ (4) $x > \frac{10}{3}$

149. If $\frac{m}{n} = \frac{4}{3}$ and $\frac{r}{t} = \frac{9}{14}$, the value of $\frac{3mr - nt}{4nt - 7mr}$ is :

- (1) $-5\frac{1}{2}$ (2) $-\frac{11}{14}$ (3) $-1\frac{1}{4}$ (4) $\frac{11}{14}$

150. A and B together can do a job in 2 days; B and C can do it in four days; and A and C in $2\frac{2}{5}$ days. The number of days required for A to do the job alone is:

- (1) 1 (2) 3 (3) 6 (4) 12

SECTION-IV

Analytical Ability (50 questions)

Information for Question Nos. 151 to 156: In a Public Sector Undertaking Township, there are five executives – Ambrish, Amit, Rohit, Manu and Tarun. Two of them play Cricket while the other three play different games viz. Football, Tennis and Chess. One Cricket player and a Chess player stay in the third flat, whereas the other three stay in different flats, i.e. 2nd, 4th and 5th. Two of these five players are mechanical engineers while the other three are quality inspector, design engineer and power engineer respectively. The chess player is the oldest in age while one of the cricket players, who plays at the national level, is the youngest in age. The age of the other cricket player, who plays at the regional level, lies between the football player and the chess player. Manu is a regional level player and stays in the 3rd flat while Tarun is a quality inspector and stays in the 5th flat. The football player is a design engineer and stays in the 2nd flat. Amit is a power engineer and plays Chess while Ambrish is the mechanical engineer and plays Cricket at the national level.

151. Who stays in the 4th flat?

- (1) Ambrish (2) Amit
(3) Rohit (4) Manu

152. What does Tarun play?

- (1) Chess (2) Football
(3) Cricket (4) Tennis

153. Who plays football?

- (1) Ambrish (2) Amit
(3) Rohit (4) Manu

154. Agewise, who among the following lies between Manu and Tarun?

- (1) Quality inspector (2) Mechanical engineer
(3) Power engineer (4) Design engineer

155. Who stay in the same flat?

- (1) Ambrish and Amit
(2) Manu and Tarun
(3) Amit and Manu

(4) Rohit and Tarun

156. The Chess player is a :

- (1) Power engineer (2) Mechanical Engineer
(3) Design engineer (4) Quality inspector

Information for Question Nos. 157 to 159: P, Q, R, S, T and X are six persons who decided to start a partnership business in computer hardware. Q, R and T are ladies and the rest are men. P, Q, R and X are well versed in hardware but the others do not know much about hardware. Q, S and X know marketing, but the others do not know anything about marketing.

157. The male partner who knows marketing but does not know computer hardware :

- (1) S (2) P (3) X (4) Q

158. The female partner who is well versed in computer hardware but does not know marketing :

- (1) X (2) Q (3) T (4) R

159. The female partner who neither knows hardware nor marketing:

- (1) R (2) Q (3) T (4) X

Information for Question Nos. 160 to 162: In a cycling race, five participants from various nations – Chinese, Nepalese, Indian, Iraqi and English – take part. Track 1 is extreme left and Track 5 is extreme right. The following conditions exist:

- (i) The Nepalese and the Englishmen are not cycling adjacent to each other.
(ii) The Iraqi is not in one of the extreme tracks.
(iii) The Chinese is to the left of the Indian

160. If the Nepalese is in Track 3, the Chinese in Track 1, then the Indian could be in :

- (1) Track 4 (2) Track 2
(3) Track 2 or 4 (4) None of the above

161. If the Nepalese is in Track 4 and the Indian is in Track 3, then the English-man could be in :

- (1) Track 1 (2) Track 2
(3) Track 1 or 2 (4) None of the above

162. If the Iraqi is to the left of the Chinese, then the Iraqi could be in :

- (1) Track 2 only (2) Track 3 only
(3) Track 2 or 3 (4) None of the above

Information for Question Nos. 163 to 165: In each of these questions, jumbled alphabets of a meaningful word are given. You are to rearrange the alphabets and select from the given alternatives the word which is almost opposite in meaning to the re-arranged word.

163. E E L I L S U O B R :

- (1) gentle (2) submissive
(3) offensive (4) indifferent

164. N E M I U E C P D :

- (1) unconcerned (2) modesty
(3) honesty (4) silence

165. C L V A I G N I A L T :

- (1) fascinating (2) fanaticism
(3) resolute (4) indolence

166. A hunter has just returned after a day's bird shooting. He was asked how many birds he had in his bag. He answered, "They are all sparrows but six, all pigeons but six, and all doves but six." How many birds did he have in his bag?

- (1) 18 (2) 9 (3) 27 (4) None of the above

Information for Question Nos. 167 to 170: Mohan is Rakesh's paternal uncle. Ritu is Rakesh's daughter. Madhav is Ritu's younger brother. Mukesh is Ritu's husband. John is Sunita's son. Tinu is Madhav's sister. Kulwant is Rakesh's father. Pushpa is Kulwant's sister. Kaushalaya is Mohan's wife. Gagan is Mohan's son. Sunita is Kulwant's daughter.

167. How is John related to Kulwant?

- (1) Nephew (2) Grandnephew
(3) Grandson (4) Great Grandson

168. Tinu is John's.....

- (1) Aunt (2) Cousin Sister
(3) Sister (4) Niece

169. Mukesh is Gagan's.....

- (1) Nephew (2) Brother
(3) Brother-in-law (4) Nephew-in-law

170. From this data, which of the following statements can be said to be *correct*?

- (1) Mohan is younger than Kulwant
(2) Mukesh and Gagan do not share the same surname
(3) Madhav is younger than Rakesh
(4) Pushpa is younger than Mohan

Information for Question Nos. 171 to 174: All the vowels in the English Alphabet are retained in their original places and the remaining letters are written in the reverse order. The new sequence looks like: A, Z, Y, X, E, W,..... . Now each of the letters in the new sequence represents the letter in the original sequence.

171. Which one of the following is a valid word in the new sequence?

- (1) PUNYT (2) VTFHC
(2) PREHG (4) None of the above

172. Which one of the following represents the name of a country?

- (1) ITXNA (3) YTOHV
(2) YTINA (4) None of the above

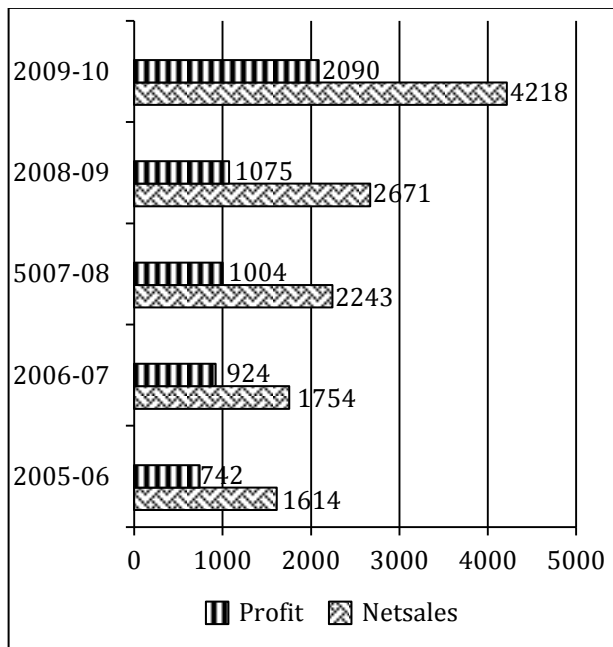
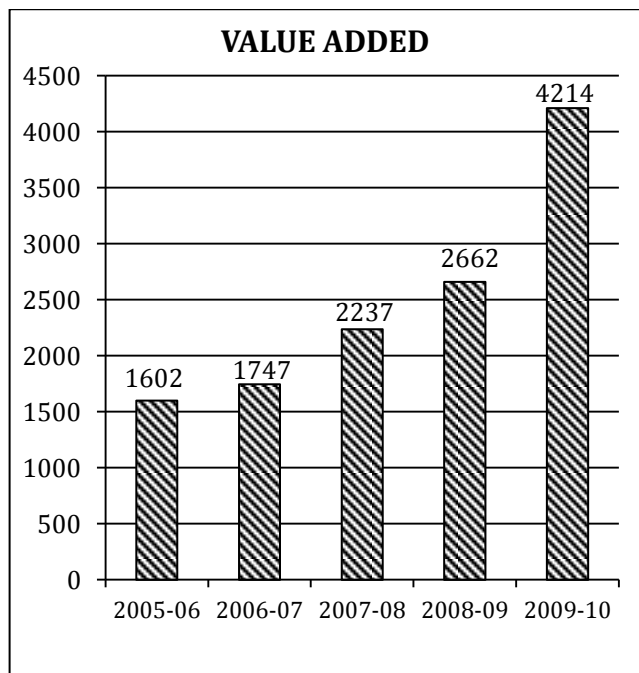
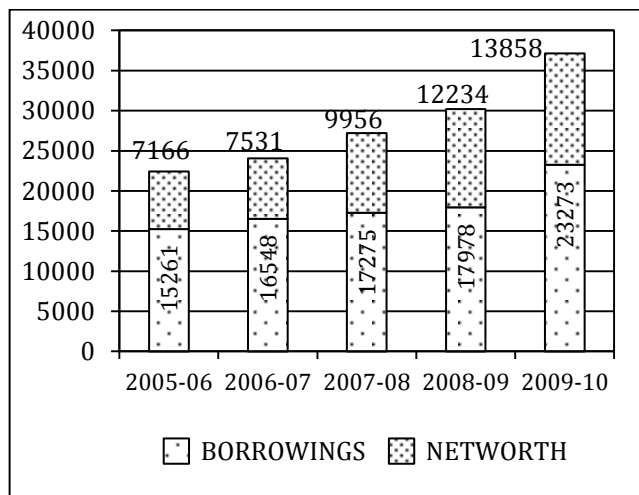
173. Which one of the following is the name of a popular brand?

- (1) FILLS (2) NIPKA
(3) AKIEQ (4) None of the above

174. Which one of the following is *not* a valid word in the new sequence?

- (1) PUJYQE (3) WQOOX
 (2) JHINH (4) None of the above

Information for Question Nos. 175 to 182 : The Financial Performance of NHPC Ltd. for the period 2005-2010 is presented in the following charts (All figures are in Rs. Crores).



Evaluate the pairs of statements in each question on the basis of data given in charts and mark:

- (1) if only Statement I is correct.
 (2) if only Statement II is correct.
 (3) if both- the Statements are correct.
 (4) if none of the Statements is correct.

175. Statement I: The Networth to Borrowings ratio has been the lowest in the year 2008-09.

Statement II: The Profit to Networth ratio has been the highest in the year 2008-09.

176. Statement I: Percentage Profit growth over the previous year has been the lowest in the year 2008-09.

Statement II: The Profit to Net Sales ratio has been the highest in the year 2006-07.

177. Statement I: Percentage Value Added growth over the previous year has been the highest in the year 2009-10.

Statement II: The Profit to Networth ratio has been the lowest in the year 2007-08.

178. Statement I: Percentage Value Added growth over the previous year has been the highest in the year 2007-08.

Statement II: Percentage Value Added growth over the previous year has been the lowest in the year 2006-07.

179. Statement I: Profit to Net Sales ratio has been consistently improving over the period under review.

Statement II: Profit to Networth ratio has not been consistently improving over the period under review.

180. Statement I: Net Sales to Networth ratio has been less than 15% in all, but one, years.

Statement II: Profit to Networth ratio has been more than 5% in all, but one, years.

181. Statement I: Profit to Net Sales ratio suffered in the year 2007-08 as compared to the previous year.

Statement II: Profit to Net Sales ratio was the highest in the year 2009-10.

182. Statement I: Percentage Value Added growth over the previous year has been the highest in the year 2009-10.

Statement II: Percentage Value Added growth over the previous year has been the lowest in the year 2006-07.

183. In a certain code, the word CARTOON is written as BBQUNPM. Using this code, OSHNZSX will stand for the word:

- (1) CURSORY (2) CORRECT
(3) NETWARE (4) None of the above

184. Five newly extracted diamonds were weighed by a diamond mine worker. In his report card he pointed out that diamond A is lighter than diamond B. Diamond C is lighter than diamond D. Diamond B is lighter than diamond D but heavier than diamond E. Which diamond is the heaviest among all of them at the time of extraction?

- (1) E (2) D (3) C (4) None of the above

Information for question Nos. 185 to 189: Five experts on Nano-technology involved in an International Research Project hold a Quarterly Review Meeting in Singapore. There are certain limitations on their language skills. Expert R1 knows only Japanese and Hindi; R2 is good at Japanese and English; R3 is good at English and Hindi; R4 knows French and Japanese quite well; and R5, an Indian, knows Hindi, English and French.

185. Besides R5, which of the following can converse with R4 without an interpreter?

- (1) Only R1 (2) Only R2
(3) Only R3 (4) Both R1 and R2

186. Which of the following cannot converse without an interpreter?

- (1) R2 and R5 (2) R1 and R2
(3) R1 and R3 (4) R3 and R4

187. Choose the language that is least commonly used at the meeting.

- (1) English (2) French
(3) Japanese (4) None of the above

188. Which of the following can act as an interpreter when R3 and R4 wish to discuss?

- (1) Only R1 (2) Only R2
(3) Only R5 (4) None of the above

189. Suppose a sixth Expert R6 joins into chair the session so that maximum number of the earlier five is able to understand him, he should be fluent in :

- (1) English & French (2) Japanese & Hindi
(3) English & Hindi (4) None of the above

Information for question Nos. 190 to 192: In the English alphabet, letters from A to M denote numeric values from 1 to 13 (such that A is 1, B is 2,), and letters from N to Z denote numeric values from -13 to -1 (such that N is -13, O is -12,.....).

190. The numeric value of which of the following equations will be a whole number?

- (1) KISS/RAPP (2) HIS/HELL
 (2) HISS/YOUR (4) None of the above

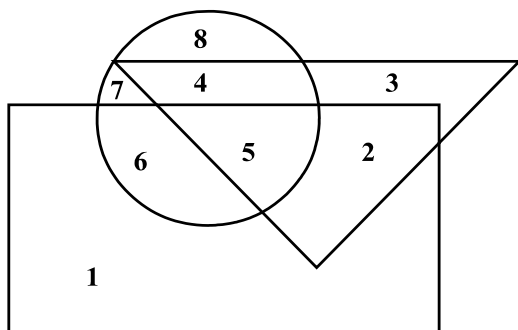
191. Assuming that the salaries are basically coded with the help of employee names using the code given above, who among the following will be drawing the highest salary?

- (1) PREM (2) SHAN
 (3) RAMU (4) None of the above

192. Following the above mentioned code, which of the following will be true?

- (1) GS – TSZ = 0 (2) PRO = DLW
 (3) ROD = YET (4) None of the above

Information for question Nos. 193 to 196: An Airline Company has divided the potential market into three categories through a market survey for the purpose of implementing a Customer Relationship Management Programme. The rectangle given in the diagram below represents Economy Class passengers. The circle represents working Executives and the triangle represents the Indians.



193. A signature hotel is launching a service for Executives who travel Economy Class but are not Indians. Which segments should it concentrate in the diagram above?

- (1) 7 (2) 6
 (3) 5 and 6 (4) None of the above

194. A travel agency wishes to target passengers who are Executives and who travel by Economy Class. Which segments in the diagram should it aim?

- (1) 6 and 5 (2) 6 and 7

- (3) 2, 5 and 8 (4) None of the above

195. The Indian Executives who do not travel by Economy Class are represented by the space numbered:

- (1) 7 (2) 3 (3) 2 (4) None of the above

196. The Airline Company wishes to target Economy Class, non-Executive passengers for In-flight Duty Free Shopping. Which area must it focus on?

- (1) 6 and 5 (2) 6 and 2
 (2) 1 and 2 (4) None of the above

197. Manish is Chitra's son, Chitra and Simran are sisters, Dibleen is Simran's mother. Sagar is the son of Dibleen. Which of the following statements is true?

- (1) Sagar and Manish are cousins
 (2) Sagar is the paternal uncle of Manish
 (3) Simran is Manish's grandmother
 (4) Chitra and Sagar are siblings

198. A + B means A is the boss of B; A – B means A is the subordinate of B; and A * B means A is the colleague of B. Given Devesh – Shirish + Kartik, which of the following is certainly true?

- (1) Shirish is the boss
 (2) Devesh is the boss
 (3) Kartik is the boss
 (4) None of the above

199. A group of students is organized in two rows, crossing each other. If a student is tenth from all ends, how many students are there in the group?

- (1) 27 (2) 47 (3) 37 (4) 39

200. A grocer sells half of the eggs that he has and another half an egg to Anurag. Then he sells half of the balance eggs and another half an egg to Deepak. Then he sells half of the balance eggs and another half an egg to Shivani. In the end he is left with just 7 eggs and he claims that he never broke an egg. How many eggs did he start with?

- (1) 66 (2) 63 (3) 33 (4) 68