SAMPLE ASHOKA APTITUDE TEST

QUANTITATIVE APTITUDE

1) If numerator of a fraction is increased by 200% and denominator by 250%, the resultant fraction is $\frac{3}{14}$. What is the original fraction?

A) $\frac{3}{14}$

B) $\frac{2}{3}$

C) $\frac{1}{6}$

D) none of these

Answer: D

2) A man standing at a point P is watching the top of a tower, which makes an angle of elevation of 30° with the man's eye. The man walks some distance towards the tower to watch its top and the angle of the elevation becomes 45°. What is the distance between the base of the tower and the point P?

A) 9 units

B) 33 units

C) Data inadequate

D) 12 units

Answer: C

3) ₹1000 is to be divided among A, B and C so that A gets twice as B and B gets thrice as C. The share of C will be

A) 600

B) 300

C) 200

D) 100

Answer: D

4) A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?

   A) 120 metres

   B) 180 metres

   C) 324 metres

   D) 150 metres

Answer: D

5) Ten years ago, P was half of Q's age. If the ratio of their present ages is 3 : 4, what will be the total of their present ages?

   A) 45

   B) 40

   C) 35

   D) 30

Answer: C

6) Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes and 10 minutes, respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical solutions P, Q and R, respectively. What is the proportion of the solution R in the liquid in the tank after 3 minutes?

   A) $\dfrac{6}{11}$

   B) $\dfrac{5}{11}$

   C) $\dfrac{7}{11}$

   D) $\dfrac{8}{11}$

Answer: A

7) Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse from the ships is 30° and 45°, respectively. If the lighthouse is 100 m high, the distance between the two ships is:

A) 300 m

B) 173 m

C) 273 m

D) 200 m

Answer: **C**

8) A bag contains 25 paise, 50 paise and ₹1 coins. There are 220 coins in all and the total amount in the bag is ₹160. If there are thrice as many ₹1 coins as there are 25 paise coins, then what is the number of 50 paise coins?

A) 60
B) 40
C) 120
D) 80

Answer: A

9) A basket contains 5 red, 3 green and 7 black balls. If a ball is drawn at random from the basket, what is the probability that it will be
(i) red? (ii) black?

A) $\dfrac{1}{15}$ and $\dfrac{7}{15}$

B) $\dfrac{1}{3}$ and $\dfrac{7}{15}$

C) $\dfrac{1}{5}$ and $\dfrac{7}{15}$

D) $\dfrac{2}{5}$ and $\dfrac{7}{15}$

Answer: B

10) The total area of a circle and a square is equal to 5450 sq.cm. The diameter of the circle is 70 cms. What is the sum of the circumference of the circle and the perimeter of the square?

A) 360 cm
B) 270 cm
C) 380 cm
D) none

Answer: C

DATA INTERPRETATION

DIRECTIONS: *Refer to the following table to answer the question that follows.*

NUMBER OF STUDENTS APPEARED AND QUALIFIED UNDER VARIOUS DISCIPLINES AT GRADUATE LEVEL DURING 2010 TO 2015

Year	Arts		Commerce		Science		Medicine		Engineering		Total	
	A*	Q**	A*	Q**	A*	Q**	A*	Q**	A*	Q**	A*	Q**
2010	1394	495	2006	600	980	400	760	330	1114	530	6254	2355
2011	1155	430	2150	680	1040	440	804	340	922	480	6071	2370
2012	1008	376	1740	630	1022	480	670	340	1030	492	5470	2318
2013	1030	380	1794	582	930	392	794	350	981	450	5529	2154
2014	1592	558	2300	805	1285	500	940	380	822	481	6939	2724
2015	918	539	3686	1060	1420	488	820	390	1142	580	7986	3057

*A-Appeared
**Q-Qualified

1. What is the difference between total students appeared over the six years in Science and Engineering disciplines?

(1) 666
(2) 313
(3) 646
(4) 676

Right answer: 1

DIRECTIONS: *Refer to the following table to answer the question that follows.*

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*A-Appeared
**Q-Qualified

2. What is the percentage increase/decrease in the number of qualified students in Commerce discipline from the year 2011 to 2012?

(1) 23.56%
(2) 7.94%
(3) 7.35%
(4) 19.07%

Right answer: 3

DIRECTIONS: *Refer to the following table to answer the question that follows.*

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**Q-Qualified

3. What is the percent of the total number of qualified students to the total number of appeared students for all the years in Arts?

(1) 37.66%
(2) 27.14%
(3) 16.75%
(4) 39.14%

Right answer: 4

DIRECTIONS: *Refer to the following table to answer the question that follows.*

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Year	Arts		Commerce		Science		Medicine		Engineering		Total	
	A*	Q**	A*	Q**	A*	Q**	A*	Q**	A*	Q**	A*	Q**
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*A-Appeared
**Q-Qualified

4. The number of students appeared in Medicine discipline in the year 2014 is what percentage of the total number of students appeared in rest of the disciplines together during that year?

(1) 6.33%
(2) 13.55%
(3) 15.67%
(4) 5.48%

Right answer: 3

DIRECTIONS: *Refer to the following table to answer the question that follows.*

NUMBER OF STUDENTS APPEARED AND QUALIFIED UNDER VARIOUS DISCIPLINES AT GRADUATE LEVEL DURING 2010 TO 2015

Year	Arts		Commerce		Science		Medicine		Engineering		Total	
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*A-Appeared
**Q-Qualified

5. Which of the following disciplines has the maximum percentage of qualified students in the year 2013?
(1) Arts
(2) Commerce
(3) Science
(4) Engineering

Right answer: 4

DIRECTIONS: *Refer to the following line graph to answer the question that follows.*

The line diagram below shows the number of mobiles manufactured by two companies over the years (number in lakhs).
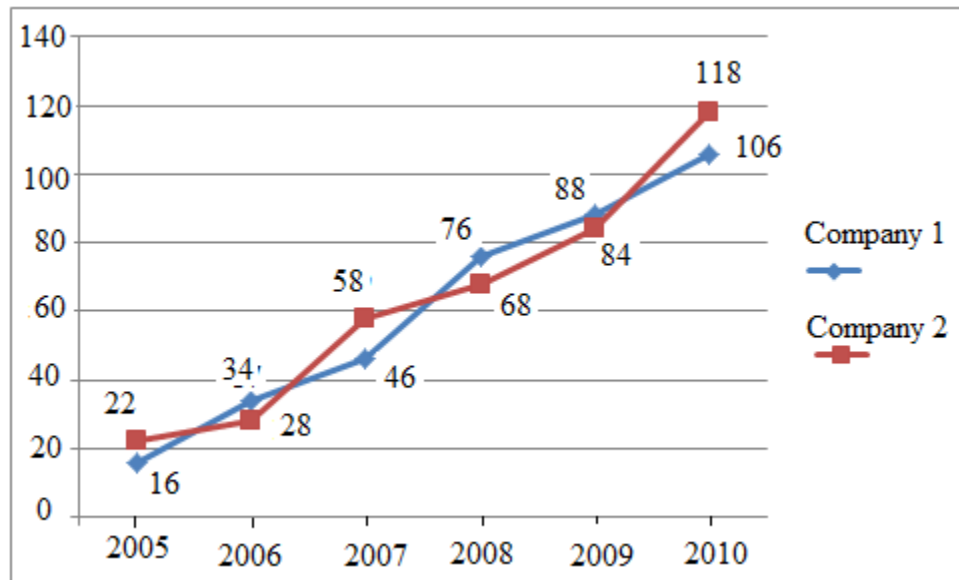
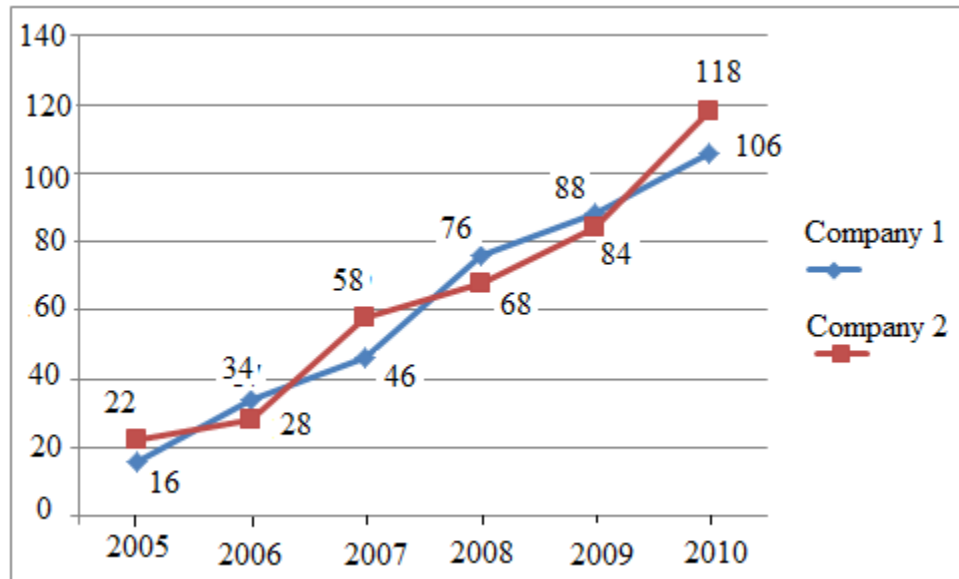6) What is the percentage of increase in the number of mobiles for company 1 from 2006 to 2009?

(Round to the nearest whole number)

(1) 158%

(2) 159%

(3) 155%

(4) 160%

Right answer: 2

DIRECTIONS: *Refer to the following line graph to answer the question that follows.*

The line diagram below shows the number of mobiles manufactured by two companies over the years (number in lakhs).


7) Find the ratio of the number of mobiles manufactured by company 1 to company 2 in 2008.

(1) 19 : 17
(2) 38 : 35
(3) 18 : 17
(4) 17 : 19

Right answer: 1

DIRECTIONS: Refer to the following line graph to answer the question that follows.

The line diagram below shows the number of mobiles manufactured by two companies over the years (number in lakhs).
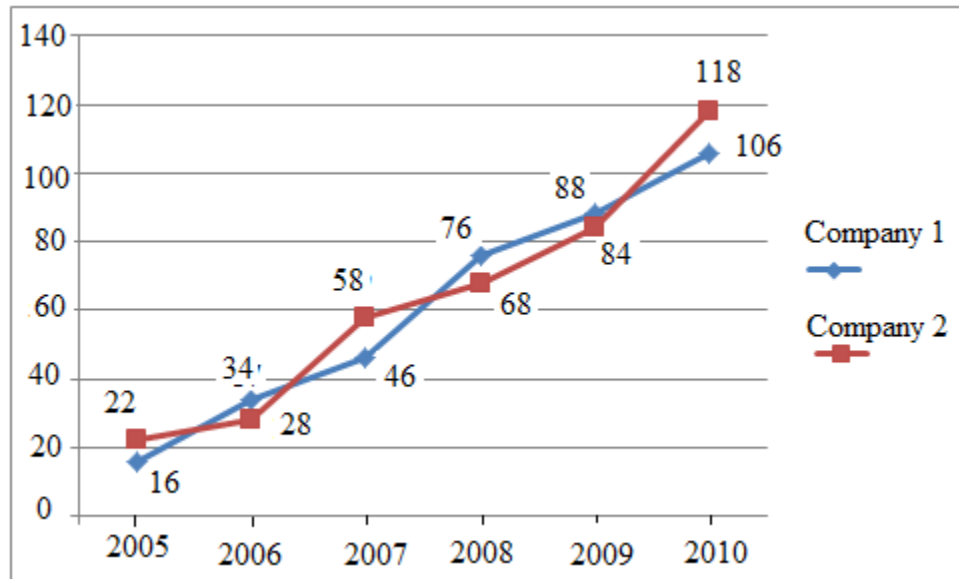
8) Find the average number of mobiles manufactured by company 2 for all the six years.
(1) 6,500,000 mobiles
(2) 7,020,000 mobiles
(3) 6,300,000 mobiles
(4) 6,230,000 mobiles

Right answer: 3

DIRECTIONS: Refer to the following pie chart and answer the question that follows. The pie chart showing the percentage of vegetables sold in a vegetables shop.
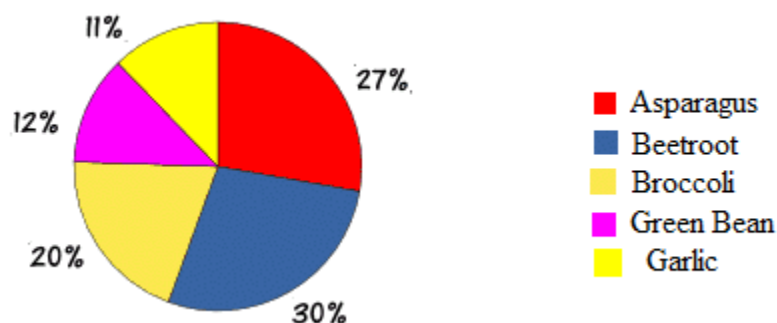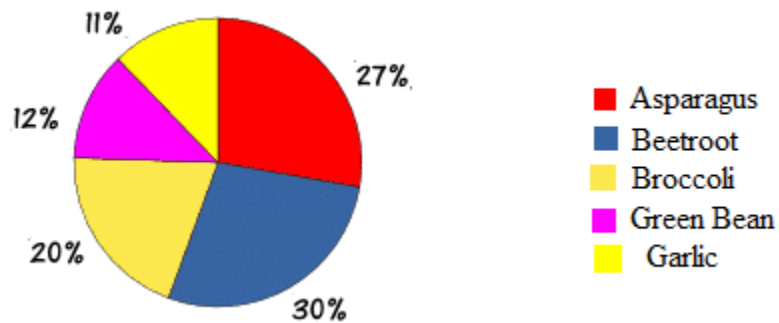
9) The total number of vegetables sold is 600,000 kg. How many kg of beetroot were sold if 1 kg contains 6 beetroots?
(1) 18,000 kg
(2) 40,000 kg
(3) 30,000 kg
(4) 60,000 kg

Right answer: 3

DIRECTIONS: Refer to the following pie chart and answer the question that follows. The pie chart showing the percentage of vegetables sold in a vegetables shop.

10) Find the central angle which is equivalent to the green bean.
(1) 42.2°
(2) 43.2°
(3) 43°
(4) 43.4°

Right answer: 2

VERBAL ABILITY

Direction for questions 1 to 4: Each sentence below has one or two blanks, each blank indicating that something has been omitted. Beneath the sentence are four lettered words or sets of words. Choose the word or set of words for each blank that best fits the meaning of the sentence as a whole.

1. Her concern for the earthquake victims _____ her reputation as a callous person.
   - (a) restored
   - (b) rescinded
   - (c) created
   - (d) roved
   - (e) belied

2. The author presumably believes that all businessmen are _____, for her main characters, whatever qualities they may lack, are virtual paragons of _____.
   - (a) clever, ingenuity
   - (b) covetous, greed
   - (c) virtuous, deceit
   - (d) successful, ambition
   - (e) cautious, achievement

3. Lacking sacred scriptures or _____, Shinto is more properly regarded as a legacy of traditional practices and basic values than as a formal system of belief.
   - (a) followers
   - (b) customs
   - (c) dogma
   - (d) relics
   - (e) faith

4. Male sperm whales are normally _____ creatures; however, when they are jealously guarding their territory, they have been known to _____ ships.
   - (a) docile, attack
   - (b) aggressive, strike
   - (c) large, assault
   - (d) peaceful, ignore
   - (e) powerful, assail

Direction for questions 5 to 11: Read the passages given below and solve the questions based on it.

Passage 1

2008 was a year of crises. First, we had a food crisis, particularly threatening to poor consumers, especially in Africa. Along with that came a record increase in oil prices, threatening all oil-importing countries. Finally, rather suddenly in the fall, came the global economic downturn, and it is now gathering speed at a frightening rate. The year 2009 seems likely to offer a sharp intensification of the downturn, and many economists are anticipating a full-scale depression, perhaps even one as large as in the 1930s. While substantial fortunes have suffered steep declines, the people most affected are those who were already worst off.

The question that arises most forcefully now concerns the nature of capitalism and whether it needs to be changed. Some defenders of *unfettered* capitalism who resist change are convinced that capitalism is being blamed too much for short-term economic problems—problems they variously attribute to bad governance (for example by the Bush administration) and the bad behavior of some individuals (or what John McCain described during the presidential campaign as "the greed of Wall Street"). Others do, however, see truly serious defects in the existing economic arrangements and want to reform them, looking for an alternative approach that is increasingly being called "new capitalism."

The idea of old and new capitalism played an energizing part at a symposium called "New World, New Capitalism" held in Paris in January and hosted by the French president Nicolas Sarkozy and the former British prime minister Tony Blair, both of whom made eloquent presentations on the need for change. So did German Chancellor Angela Merkel, who talked about the old German idea of a "social market"—one restrained by a mixture of consensus-building policies—as a possible blueprint for new capitalism (though Germany has not done much better in the recent crisis than other market economies).

Ideas about changing the organization of society in the long run are clearly needed, quite apart from strategies for dealing with an immediate crisis. I would separate out three questions from the many that can be raised. First, do we really need some kind of "new capitalism" rather than an economic system that is not monolithic, draws on a variety of institutions chosen pragmatically, and is based on social values that we can defend ethically? Should we search for a new capitalism or for a "new world"—to use the other term mentioned at the Paris meeting—that would take a different form?

The second question concerns the kind of economics that is needed today, especially in light of the present economic crisis. How do we assess what is taught and championed among academic economists as a guide to economic policy—including the revival of Keynesian thought in recent months as the crisis has grown fierce? More particularly, what does the present economic crisis tell us about the institutions and priorities to look for? Third, in addition to working our way toward a better assessment of what long-term changes are needed, we have to think—and think fast—about how to get out of the present crisis with as little damage as possible.

5. On the basis of the information provided by the passage, what can be inferred about the depression of 1930s?
   (a) It threatened the poor customers in Africa.
   (b) It threatened the oil importing countries.
   (c) It was one of the worst economic downturns.
   (d) It led to massive hunger and malnutrition.

6. According to the passage, who is likely to bear the brunt of the impending economic downturn?
   (a) The oil importing countries.

(b) The citizens of the Sub Saharan Africa.
(c) The capitalists.
(d) The poor people.

7. In the second paragraph of the passage, the word *unfettered* refers to:
(a) Fleeting   (b) Absolute
(c) Draconian   (d) Malleable

8. What is the primary purpose of the passage?
(a) To discuss the possible ways of dealing with an imminent global economic downturn.
(b) To suggest a possible replacement for capitalism.
(c) To defend the model of capitalism and its relevance.
(d) To outline the key points that might be considered for discussing the ways to deal with economic crisis.

ANSWERS

1.	(e)	2.	(a)	3.	(c)	4.	(a)	5.	(c)
6.	(d)	7.	(b)	8.	(d)				

LOGICAL REASONING

Directions for questions 1 to 5: Read the following passage below and solve the questions based on it.

There are seven professors P, Q, R, S, T, U and V teaching seven subjects History, Geography, Physics, Chemistry, Maths, Biology and English from Monday to Friday at Gaya College. Each professor teaches a different subject and not more than two subjects are taught on any one of the days.

 (i) Chemistry is taught by professor Q on Tuesday.
 (ii) Professor S teaches on Friday but neither Geography nor Physics.
(iii) Professor U teaches History but neither on Thursday nor on Friday.
(iv) Professor P teaches English on the day on which History is taught.
 (v) Professor R teaches Maths on Monday.
(vi) Geography and Chemistry are taught on the same day.
(vii) Professor V teaches on Thursday.

1. On which of the following days is English taught?
(a) Wednesday   (b) Monday
(c) Tuesday   (d) Cannot be determined

2. Which of the following subjects is taught by professor V?
(a) Biology   (b) Geography

(c) Physics   (d) Chemistry

3. On which of the following days is Geography taught?
   (a) Monday   (b) Tuesday
   (c) Wednesday   (d) Thursday

4. Which subject is taught on Friday?
   (a) Physics   (b) History
   (c) Geography   (d) Biology

5. Which of the following pairs of professors teaches on Tues day?
   (a) Q and S   (b) P and Q
   (c) Q and U   (d) None of these

Directions for questions 6 to 9: Read the following passage and solve the questions based on it.

(i) A group of five boys A, B, C, D and E and a group of five girls P, Q, R, S and T are standing in a row facing each other (not necessarily in the same order). The group of girls is facing north.

(ii) E is not at any of the ends. C is to the immediate right of B and D is to the immediate left of A, who is facing P. There are as many girls between P and Q as between R and S. A is second to the left of B, S and R are not facing either B or D.

6. Which of the following indicates the pair of students standing at the ends of the row?
   (a) CB   (b) DB
   (c) CD   (d) Cannot be determined

7. Which of the following is definitely true on the basis of the given information?
   (a) C is second to the right of D
   (b) P is third to the right of Q
   (c) S is to the immediate right of P
   (d) None of these

8. Who is standing to the immediate right of A?
   (a) E   (b) C
   (c) B   (d) Cannot be determined

9. Who is facing A?
   (a) R   (b) S
   (c)   P   (d) None of these

ANSWERS

1.	(a)	2.	(c)	3.	(b)	4.	(d)	5.	(d)
6.	(c)	7.	(d)	8.	(a)	9.	(c)		