

ATMA Sample Question – I

Annexure - I

ATMA SAMPLE TEST

Questions: 60 (Q.1-60)

Time: 60 Minutes

If you score 39 or more in these sample questions following instructions within the time allotted in each section separately without consulting the key and/or any other help, you will do well in the actual test.

General Instructions :

You will find below 60 Questions as samples to acquaint yourself with the nature of the AIMS Test for Management Admissions (ATMA). These questions are drawn from different sources including previous tests held since February 2000. ATMA contains 170 Questions spread over Six Sections—Analytical Reasoning Skills, Quantitative Skills, and Verbal Skills. Each section is timed separately - 30 minutes each. Total time for the test is 3 hours. Please refer to Para 6.1 in this Bulletin once again for details.

Please note that in the actual test, the Six sections may not appear in the same order as stated above. Again, the test may or may not contain the types of questions given in the sample test. The Test could also include other types of questions that are not shown in the sample test.

For each question, choose the best answer from the alternatives numbered (1), (2), (3) and (4), and then darken the oval corresponding to the question in the answer sheet as specified in paras 7.1 and 7.2 of this Bulletin.

SAMPLE QUESTIONS

The Test contains Questions on three abilities or skills. These are:

- Analytical Reasoning Skills
- Quantitative Skills
- Verbal Skills

ANALYTICAL REASONING SKILLS

The Questions on Analytical Skills examine the logical thinking abilities of a candidate. Do remember that a particular Question is less important than the reasoning task you are asked to perform. No specialized knowledge of any particular field is required for answering the questions, and no knowledge of the terminology and conventions of formal logic is presumed.

In the Questions on Analytical Skills you need to analyse the situations on which each Question is based and then select the answer choice that is most appropriate response to the question.



Each set of Questions or group of Questions is based on a passage or set of conditions. In answering some of the Questions, it may be useful to draw a rough diagram: For each Question, select the best answer from the choices given, Darken the corresponding oval in the answer sheet.

QUANTITATIVE SKILLS

The ATMA Quantitative Skills Questions measure your ability to reason Quantitatively, solve Quantitative problems, and interpret graphic data.

Types of multiple – choice Questions include :

1. Problem-Solving
2. Data Sufficiency

Problem – Solving and Data Sufficiency Questions require basic knowledge of:

1. Arithmetic
2. Elementary algebra
3. Commonly known concepts of Geometry

For each Question in Quantitative Skills sections, select the correct or the best of the answer choices numbered (1), (2), (3) and (4) and darken the oval corresponding to your choice in the answer sheet.

Number: All numbers are real numbers.

Figures: Position of points, angles, regions, etc., can be assumed to be positive.

Lines drawn as straight can be assumed to be straight.

Figures that accompany questions are intended to provide information useful in answering the questions.

However, unless it is stated a specific figure is not drawn to scale; the diagrams and figures are drawn as accurately as possible. You should solve these problems NOT by estimating sizes by sight or by measurement, but using your knowledge of mathematics.

VERBAL SKILLS

The ATMA Verbal Skills sections measure your ability to read and comprehend written material in English language, to reason and evaluate arguments, and to correct written material to conform standard written English. Because the Verbal sections include reading sections from different context areas, you may be generally familiar with some of the material, however, neither the written passages nor the questions assume detailed knowledge of the topics discussed.

Types of Multiple Choice questions used in Verbal sections include :

- > Reading comprehension
- > Sentence Correction
- > Word meaning – antonyms, synonyms, analogies - your ability to recognize relationships among words and concepts, parallel relationships, etc.,
- > Sentence completions – your ability to recognize words or phrases that both logically and stylistically complete the meaning of a sentence.

In brief, the questions in Verbal Skills sections test your recognition of correct grammatical usage, vocabulary, and familiarities with words, your understanding and comprehension of the language (English) while reading and your ability to write clearly and briefly.

SECTION - I

QUANTITATIVE SKILLS

Time: 10 Minutes

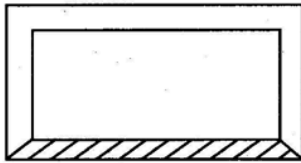
Directions for Q. Nos. 1-5

Choose the correct answer from the answer choices and then darken the corresponding oval in the answersheet.

Q.1. If $x < 3$ and $3y = 4x$, then which of the following must be true ?

- (1) $y < 3$ (2) $y > 2$ (3) $y = 4$ (4) $y < 4$

Q.2.



Perpendicular distance between the corresponding sides of the two rectangles is x cms. What is the area of the shaded portion in sq. cm. if length of the inner rectangle is y cms.,

$y = 2x + 5$ and $y - x = 15$

- (1) 350 (2) 650 (3) 250 (4) 300

Q.3. Car I starts running from Point A towards Point B at a uniform speed of 60 kmph. After one hour Car II starts running from Point B towards Point A at a uniform speed of 40 kmph. If both the cars meet at a common point 1 hour 30 minutes after Car I started running, what is the distance between two points A and B ?

- (1) 150 km (2) 130 km (3) 210 km (4) 180 km

Q.4. For any positive integer n , $n > 1$ the number of positive primes (not necessarily distinct) whose product is n is defined as the length of the integer n . What is the length of 75 ?

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

Q.5. If n is a positive integer such that $(-5)^{2n-6} = (5)^{10}$, then $n =$

- (1) 6 (2) -8 (3) 8 (4) -6

Directions for Q. Nos. 6-7

Choose the correct answer from the answer choices and then darken the corresponding oval in the answersheet.

Q.6. If X , Y and Z are consecutive odd numbers with $X < Y < Z$, then which of the following must be definitely true ?

I. $X \times Z = Y^2$

II. $X + Z = 2Y$

III. $X + Y$ is an even no.

- (1) Only I (2) Only II (3) Only III (4) Both II and III

Q.7. If $b - d = 4$ and $d < 4$ then which of the following must be true ?

I. $b < 8$

II. $b + d = 12$

III. $b \times d < 28$

(1) Only I

(2) Only II

(3) Only III

(4) Both I and III

Directions for Q. Nos. 8-10

In each of the problems, a Question is followed by statements marked (A) & (B) containing certain data pertaining to the problem. You need to determine whether the data provided by the statements are sufficient to answer the Question from the four answer choices. Choose the correct answer for each Question based upon the statement data & then darken corresponding oval in the answersheet.

Choose 1 if the question can be answered by statement (A) or (B) alone but not by other statement.

Choose 2 if the question can be answered by either statement alone.

Choose 3 if the question can be answered by both the statements (A) and (B) together but cannot be answered by using either statement alone.

Choose 4 if the question cannot be answered even by using both statements together.

Q.8. What is the area of circle inscribed inside a square ?

A. Area of the square is 196 cm^2

B. Perimeter of the circle is 44 cms

1) (A) or (B) alone, but not by other statement

2) Either statement

3) Both statements together

4) Cannot be answered.

Q.9. Is working capital of Bank X more than the working capital of Bank Y ?

A. Working capital of Bank X was less than the working capital of Bank Y 5 years ago.

B. Working capital of Banks X and Y have grown over last 5 years at compounded rate of 5% and 6% respectively

1) (A) or (B) alone, but not by other statement

2) Either statement

3) Both statements together

4) Cannot be answered.

Q.10. Rakesh and Vineet procured some notebooks for distribution among children of a school. How many notebooks did they procure ?

A. No. of notebooks Rakesh procured was twice the no. procured by Vineet.

B. No. of notebooks procured by Vineet was one-third of the total notebooks procured

1) (A) or (B) alone, but not by other statement

2) Either statement

3) Both statements together

4) Cannot be answered.

SECTION - II

ANALYTICAL REASONING ABILITY

Q.1-2. Find out which of the Assumptions is/are IMPLICIT in the given statement.

Q.11. Statement : Management Institutions in India can certainly mould the potential of youth for creation of wealth and thereby overall progress of the country.

Assumption I : Youth possess the required potential

Assumption II : Creation of wealth and progress of a country are desirable

(1) Only Assumption I is implicit (2) Only Assumption II is implicit

(3) Either Assumptions I or II is implicit (4) Both Assumptions are implicit

Q.12. Statement : Many IT companies in the USA have found that Indian students graduating in Arts and Commerce disciplines possess almost equivalent capabilities for solving IT problems as their Science discipline counterparts do.

Assumption I : Capabilities required for solving IT problems can be identified and quantified

Assumption II : Science graduates in India don't have better capabilities than those possessed by Arts and Commerce graduates

(1) Only Assumption I is implicit (2) Only Assumption II is implicit

(3) Either Assumptions I or II is implicit (4) Both Assumptions are implicit

Q.13-14. Find out which of the Inference/Conclusions can definitely be drawn from the given statement.

Q.13. Statement : Fed up with the intermittent load shedding and frequent interruptions due to power supply failure in our State, many private manufacturing units have decided to shift to certain other States.

Inference I : Govt. owned manufacturing units in our State are not facing the problems of load shedding and the like.

Inference II : Those other States must be having have the facility for uninterrupted power supply to those migrating manufacturing units.

(1) Only Conclusion I can be drawn (2) Only Conclusion II can be drawn

(3) Either Conclusions I or II can be drawn (4) Neither Conclusion I nor II can be drawn

Q.14. Statement : There is no convincing evidence to prove beyond any reasonable doubt that certain changes occurs in animal behavior just prior to a natural calamity

Conclusion I : Observation of animal behavior can be used to predict natural calamity

Conclusion II : Observation of animal behavior cannot be used to predict natural calamity

- (1) Only Conclusion I can be drawn
- (2) Only Conclusion II can be drawn
- (3) Either Conclusions I or II can be drawn
- (4) Neither Conclusion I nor II can be drawn

Q.15. Which of the following, if true, would best support the conclusion that some ingredient of the sweetener was responsible for the experimental results?

- (1) The Quality of sweetener consumed by the individuals in the experimental group is considered safe by medical authorities.
- (2) The amino acid referred to in the conclusion is a component of all proteins, some of which must be consumed for adequate nutrition.
- (3) Most consumers of the sweetener do not consume as much of the sweetener as the experimental group members did.
- (4) The two groups of subjects were evenly matched with regard to cognitive abilities prior to the experiments.

Q.16. Which of the following, if true, would best help explain how the sweetener might produce the observed effects?

- (1) A high level of amino acid in the blood inhibits the synthesis of a substance required for normal brain functioning.
- (2) Because of the sweetener being used primarily as a food additive, adverse reactions to it are rarely noticed by consumers.
- (3) Subjects in the experiments did not know whether they were consuming the sweetener or a harmless substance.
- (4) The amino acid that is a constituent of the sweetener is also sold separately as a dietary supplement.

Q.17. Automobile Dealer's Advertisement

The Highway Traffic Safety Institute reports that the XL1000 has the fewest injuries per accident of any car in its class. This shows that the XL1000 is one of the safest cars available today.

Which of the following, if true, most seriously WEAKENS the argument in the advertisement?

- (1) The Highway Traffic Safety Institute issues reports only once in a year.
- (2) The difference between the number of injuries per accident for XL1000 and that of other cars in its class is Quite pronounced.
- (3) In recent years many more XL1000s have been sold than have any other kind of cars in its class.
- (4) Cars in the class to which the XL1000 belongs are more likely to be involved in accidents than are other types of cars.

- Q.18.** The large amount of Carbon Dioxide (CO₂) now being released into the atmosphere burning fossil fuel will not, in fact, result in green house effects ————— an increase in average global temperatures. Since plants use CO₂ in large quantities if the supply is increased, they are able to grow larger and multiply more rigorously, and atmospheric CO₂ concentrations will eventually become stable.

Which of the following, if true, would most seriously WEAKENS the conclusion that a green house effect will not result from current release of large amounts of CO₂ into the atmosphere?

- (1) When plant decays, they produce methane, another gas that can have a marked green house effect.
- (2) The expected rise in average global temperatures, has not yet been observed.
- (3) Since the beginning of the Industrial Revolution (1790) increased atmospheric concentrations of CO₂ have resulted in agricultural productivity.
- (4) Ocean waters absorb CO₂ at a greater rate when the atmospheric concentration of CO₂ is higher.

- Q.19-20.** Find out data provided in which of the statements are sufficient to answer the given question.

- Q.19.** Who is the youngest among five friends P, Q, R, S & T ?

Statement (A) : T is younger than S, but older than R

Statement (B) : Q and P are both older than S

- (1) A alone but not B alone is sufficient (2) B alone but not A alone is sufficient
- (3) Either A alone or B alone is sufficient (4) Both A and B together are needed

- Q.20.** Which code word stands for "Industrious" in the coded sentence "aim low nigh" which means "We are industrious" ?

Statement (A) : In that code language "aim bow high" means "He is industrious"

Statement (B) : In that code language "nigh low cos" means "We are busy"

- (1) A alone, but not B alone is sufficient (2) B alone, but not A alone is sufficient
- (3) Either A alone or B alone is sufficient (4) Neither A alone nor B alone is sufficient

SECTION - III
SAMPLE QUESTIONS FOR ATMA
VERBAL SKILLS

- Q.21-23. Given below is a paragraph followed by some questions. Study the same and answer the questions.
- "When work is done under compulsion, and everything is done with a sigh of relief, how can we improve the quality of our life? Let's add celebration to what we do. Let's shift from our attitude of "I am required to do it" to "I want to do it."
- Q.21. Which of the following is implied in the above paragraph ?
- (A) If work is done as a choice, it becomes enjoyable.
(B) Quality of life is adversely affected if compulsion is transformed to choice.
(C) It can be inferred that sigh of relief is an outcome of action under external force.
(1) A and B only (2) A and c only (3) B and C only (4) All three
- Q.22. Which of the following best describes "celebration" as used in the passage ?
- (A) Demonstration of enjoyment
(B) Sense of intrinsic motivation
(C) Observing festivities with rejoice
(1) Only A (2) Only B (3) Only C (4) Either A or C
- Q.23. Which of the following is the probable reaction of people to compulsion ?
- (A) Reluctance (B) Sigh of relief (C) A pessimistic attitude
(1) Only A (2) Only B (3) Only C (4) All the three
- Q.24-25. Fill in the two blanks in each question with the appropriate pair of words in the same sequence to complete the sentence meaningfully :
- Q.24. Low income clients _____ loans for investment in income generating activities as well as _____ requirements.
- (1) remit _____ repayment (2) repay _____ various
(3) give _____ similar (4) need _____ consumption
- Q.25. Many transformation efforts _____ because the great ideas and strategies never make it far enough down in the organization to have an _____ on the people who relate directly to customers or make the company's products.
- (1) succeed _____ impression (2) fail _____ illusion
(3) boomerang _____ urge (4) stall _____ impact

Q.26-28. Pick out the word that is most **SIMILAR** in meaning to the word printed in **bold** :

- | | | | |
|--------------|----------------------|------------------|-----------------|
| Q.26. | Culmination | (1) Illumination | (2) Conclusion |
| | | (3) Enthusiasm | (4) Realization |
| Q.27. | Alleviation | (1) Enhancing | (2) Escalation |
| | | (3) Acceleration | (4) Mitigation |
| Q.28. | Procrastinate | (1) Reactivate | (2) Adjourn |
| | | (3) Nullify | (4) Dominate |

Q.29-30. Pick out the word that is most **OPPOSITE** of the word printed in **bold** :

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|--------------|----------------------|------------------|---------------------|
| Q.29. | Confrontation | (1) Conflict | (2) Consensus |
| | | (3) Disagreement | (4) Disillusionment |
| Q.30. | Predecessor | (1) Ancestor | (2) Antecedent |
| | | (3) Successor | (4) Forerunner |

SECTION - IV

ANALYTICAL REASONING ABILITY

Q.31-32. Study the statement given in each statement and decide the course of action that logically follows assuming everything in the statement to be true. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc.

Q.31. The village was cut-off from the city for more than a week's time due to heavy rains and flood, causing shortage of essential commodities.

Course of Action I : Govt. should immediately arrange for supply of food, clothes and medicines to the villagers.

Course of Action II : Govt. should appeal to the villagers to keep cool and inform them about the support that is being provided.

- | | |
|--------------------------|---------------------|
| (1) Only I follows | (2) Only II follows |
| (3) Both I and II follow | (4) None follows |

Q.32. A large number of people are expected to gather to have a glimpse of the renowned saint on his visit to the city.

Course of Action I : Followers of the saint and organizers of his visit should arrange for controlling the crowd and also introduce security.

Course of Action II : Only a restricted number of people should be allowed to reach near the saint.

- | | |
|---------------------------|---------------------|
| (1) Only I follows | (2) Only II follows |
| (3) Both I and II follows | (4) None follows |

- Q.33. Anybody who is a Science graduate and **less than 30 years of age** is eligible to apply for the post of Officers in organization 'X'. Which of the following information is necessary to find out whether Sudha is an eligible candidate ?
- I. Sudha was born in 1982 and has passed **M.A. Economics with 56% marks**
 II. Sudha is B.Sc. with specialization in **Biology and is 23 years old.**
- (1) Only I (2) Only II (3) Both I & II (4) Cannot be decided
- Q.34. Even though most universities retain royalties from **faculty members'** inventions, the members retain royalties from books and articles **they write**. Therefore, faculty members should retain the royalties from the educational **computer software they develop**.
- The conclusion above would be more reasonably drawn if which of the following were inserted into the argument as an additional **premise** ?
- (1) In the experience of most universities, **educational software programmes** are more marketable than books and articles.
 (2) Inventions bring more prestige to universities **than do books and articles**.
 (3) In terms of the criteria used to award royalties, **educational software programmes** are more nearly comparable to books and **articles than to inventions**.
 (4) Faculty members are more likely to produce **educational software programmes** than inventions.
- Q.35. Which of the following best completes the passage below ?
 People buy prestige when they buy a premium product. **They want to be associated** with special Mass-Marketing techniques and price-reduction **strategies** should not be used because.....
- (1) expansion of the market niche to include a **broader spectrum** of consumers will increase profits.
 (2) purchases of premium products are concerned with the **Quality** as well as with the price of the products.
 (3) continued sales depend directly on the maintenance of an aura of exclusivity.
 (4) manufacturing a premium brand **not necessarily not more costly** than manufacturing a standard brand of the same product.
- Q.36-37. Each of these questions comprises two statements numbered I and II. There may be cause and effect relationship or some other relationship between these two statements. Study both the statements and choose your answer.
- Q.36. A Heavy rains lashed the city disrupting traffic conditions.
 B More than 40% employees in most of the offices remained absent
- (1) 'A' is the effect of 'B'
 (2) 'B' is the effect of 'A'
 (3) Both 'A' and 'B' are the effects of a common cause
 (4) Both 'A' and 'B' are the effects of independent cause

- Q.37.** A Prices of all the essential commodities have risen by at least 20% over a period of last five years
- B Govt. employees have got a salary rise by at least 15%.
- (1) 'A' is the effect of 'B'
 - (2) 'B' is the effect of 'A'
 - (3) Both 'A' and 'B' are the effects of a common cause
 - (4) Both 'A' and 'B' are the effects of independent cause

Q.38-40. Each question or set of questions is based on a passage or set of conditions. In answering some of the questions, it may be useful to draw a rough diagram. For each question select the best answer choice given. Then darken the corresponding oval in the answer sheet.

- Q.38.** The sustained massive use of pesticide in farming has two effects that are especially pernicious. First, it often kills off the pests' natural enemies in the area. Second, it often unintentionally gives rise to insecticide - resistance pests, since those insects that survive a particular insecticide will be the ones most resistance to it, and they are left to breed.

From the passage above, it can be properly inferred that the effectiveness of the sustained massive use of pesticides can be extended by doing which of the following, assuming that each is a realistic probability ?

- (1) Leaving a few fields without farming any crop every year.
- (2) Periodically switching the type of insecticide used.
- (3) Breeding high-yielding varieties of crop plants.
- (4) Gradually increasing the quantities of pesticide.

- Q.39.** When polygraph test is judged inconclusive, this is no reflection on the examinee. Rather, such a judgement means that the test has failed to show whether the examinee was truthful or untruthful. Nevertheless, employers will sometimes refuse to hire a job applicant because of an inconclusive polygraph result.

Which of the following, if true, could be the conclusion on basis on the above ?

- (1) Some employers have refused to consider the results of polygraph tests when evaluating job applicants.
- (2) A polygraph test indicating that an examinee is untruthful can sometimes be mistaken.
- (3) An inconclusive polygraph test result can some times be mistaken.
- (4) Polygraph test should not be used by employers in the consideration of job applicants.

- Q.40. Dental researchers recently discovered that toothbrushes can become contaminated with bacteria that cause pneumonia and sore throat. They found that contamination usually occurs after toothbrushes have been used for four weeks. For that reason, people should replace their toothbrushes at least once in a month.

Which of the following, if true, would most weaken the conclusion above ?

- (1) The dental researchers found that, after six weeks of use, greater length of use of a toothbrush did not correlate with a higher number of bacteria being present.
- (2) The dental researchers found that people who rinsed their toothbrushes thoroughly in hot water after each use were as likely to have contaminated toothbrushes as were people who only rinsed their toothbrushes hurriedly in cold water after each use.
- (3) The dental researchers failed to investigate contamination of toothbrushes by viruses, yeasts, and other pathogenic micro-organisms.
- (4) The dental researchers found that among people who used toothbrushes contaminated with bacteria that cause pneumonia and sore throat, the incidence of these diseases no higher than among people who used uncontaminated toothbrushes.

SECTION - V

VERBAL SKILLS

No. of Questions 10 (Q 41-50)

Time: 10 Minutes

Directions for Questions 41-44:

Each Question is based on the passage below. After reading the passage, choose the best answer to each Question from the answer choices given below and darken the corresponding oval in the answer sheet. Base your answer on information that is either stated or implied in the passage.

Passage:

Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple. It matters in which plane the embryo is cut. If it is cut in a plane different from the one used by early investigators, it will not form two whole embryos.

A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversely committed to their fates, and what are the "morphogenetic determinants" that tell a cell what to become?

But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively. Recent discoveries in molecular biology, however, have opened up prospects for a resolution of the debate. Now investigators think they know at least some of the molecules that act as morphogenetic determinants in early development. They have been able to show that, in a sense, cell determination begins even before an egg is fertilized.

Studying sea urchins, biologist Paul Gross found that an unfertilized egg contains substances that function as morphogenetic determinants. They are located in the cytoplasm of the egg cell, i.e., in that part of the cell's protoplasm that lies outside of the nucleus. In the unfertilized egg the substances are inactive and are not distributed homogeneously. When the egg is fertilized, the substance become

active and, presumably, govern the behaviour of the genes they interact with. Since the substances **are unevenly** distributed in the egg, when the fertilized egg divides, the resulting cells are different **from the start** and so can qualitatively differ in their own gene activity.

The substances that Gross studied are maternal messenger RNA's ——— products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that **these** particular RNA's direct, large part, the synthesis of histones, a class of proteins that bind to **DNA**. Once synthesized, the histones move into the cell nucleus, where sections of DNA wrap around them to form a structure that resembles beads or knots, on a string. The beads are DNA segments wrapped around histones; the string is the intervening DNA. And it is the structure of **these** beaded DNA strings that guides the fate of the cells in which they are located.

Questions 41-44 are based on the above passage.

Q.41. The main topic of the passage is

- (1) The main contribution of modern embryology to molecular biology.
- (2) The early development of embryos of lower marine organisms like sea urchins.
- (3) The role of molecular biology in disproving older theories of embryonic development.
- (4) Cell determination as an issue in the study of embryonic development.

Q.42. It can be inferred from the passage that the morphogenic determinants present in the early embryo are

- (1) identical to those that were already present in the unfertilized egg.
- (2) evenly distributed unless the embryo is not developing normally.
- (3) inactive until the embryo cells become irreversibly committed to their final function.
- (4) present in larger quantities than is necessary for development of a single individual.

Q.43. According to the passage, when biologists believed that the cells in the early embryo were undetermined, they made which of the following mistake ?

- (1) They assumed that different ways of separating an embryo into two parts would be equivalent as far as the fate of the two parts was concerned.
- (2) They assumed that the results of experiments on embryo did not depend on the particular animal species used for such experiments.
- (3) They did not realize that there was a connection between the issue of cell determination and the outcome of separation experiment.
- (4) They assumed that it was crucial to perform the separation experiment at an early stage in the embryo's life.

Q.44. It can be inferred from the passage that which of the following is dependent on the fertilization of an egg.

- (1) Determination of the egg cell's potential for division.
- (2) Generation of all of a cell's morphogenetic determinants.
- (3) Synthesis of proteins called histones.
- (4) Division of a cell into its nucleus and the cytoplasm.

Directions for Questions 45-47

For each of these questions, four or five sentences lettered A to D/E are given. These sentences, if arranged in a logical sequence, will form a coherent and meaningful paragraph. Choose the most logical order from among the given choices (1),(2),(3) and (4) to construct a coherent paragraph, then darken the corresponding oval in the answer sheet.

- Q.45. (A) The developed world has been forced to give in the demand to end agricultural export subsidies by 2013.
- (B) The deep divisions that were evident in the negotiations leading up to and during, the ministerial meetings are sufficient to show that this success is by no means a foregone conclusion.
- (C) And, more important for a development round of trade negotiations, the little progress that has been achieved is in the direction of opening markets for the benefit of more vulnerable economies.
- (D) The WTO's Hong Kong ministerial has done just about enough to keep alive the prospects of a successful completion of the Doha Development Round.
- (E) But the self- imposed new deadlines for finalizations of modalities for the negotiations suggest a desire on the part of all concerned to make the round work.
- (1) DAEBC (2) DCEAB (3) ADCBE (4) DBECA
- Q.46. (A) India may be one of the World's two fastest growing economies, its future prospect may be making both Dalal Street and Wall Street droll.
- (B) India is, at the same time, a country which produces millions of employment seekers every year but precious little employment.
- (C) Jobs in the once bloated public sector are necessarily decreasing and restrictive labour laws, in part, ensure that the private organized sector hasn't made good the deficit.
- (D) And the situation getting worse with every passing year.
- (E) The cumulative result is an unemployment situation that is a social time bomb, with scarcity driven parochialism providing the fuse.
- (1) ABDCE (2) ABECD (3) BACDE (4) ABCDE
- Q.47. (A) When faced with a threatening context, the psychological stress and anxiety may induce a rigid cognitive response on the part of individuals.
- (B) In many cases, strategic decision making occurs in the context of a threatening situation ——— the organization must deal with poor financial performance, deteriorating competitive position and/on a dramatic shift in customer requirements.
- (C) Over confidence bias becomes a factor in many situations as well.
- (D) Consequently, we may not recognize when we need to solicit input and advice from others, or we downplay the doubts that others display regarding our judgements and decisions.
- (E) Most of us tend to overestimate our own capabilities.
- (1) CEDBA (2) EBDAC (3) ADBEC (4) BCDEA

Directions for Questions 48-50

In each of the following Questions, a related pair of words or phrases is followed by four numbered pairs of words or phrases. Select the numbered pair that best expresses a relationship similar to that expressed in the original pair and darken the corresponding oval in the answer sheet.

Q.48. DRAINING : EMPTYING ::

- | | |
|------------------------|---------------------|
| (1) accuse : subtly | (2) relent: energy |
| (3) migrating : moving | (4) legal : justice |

Q.49. STILL : FLOWING ::

- | | |
|------------------------|---------------------------|
| (1) explosive: destroy | (2) resent: blind |
| (3) ample : little | (4) synthesis: substitute |

Q.50. MALINGERER: DUTY::

- | | |
|------------------------|----------------------------|
| (1) recluse: humanity | (2) rebel : responsibility |
| (3) scholar : pendency | (4) miser : wealth |

SECTION - VI

QUANTITATIVE SKILLS

Directions for Q. Nos. 51-54

Choose the correct answer from the answer choices and then darken the corresponding oval in the answersheet.

Q.51. The product of two positive integers is 21. If the sum of the numbers is subtracted from the sum of the squares of the two numbers, the result is 420. What is the difference between the two numbers ?

- | | | | |
|--------|-------|--------|-------------------|
| (1) 11 | (2) 4 | (3) 22 | (4) None of these |
|--------|-------|--------|-------------------|

Q.52. If $(3^x)(3^y) = 81$ and $(8)^x(2)^y = 64$, then (x,y) is

- | | | | |
|------------|------------|------------|------------|
| (1) (2, 3) | (2) (2, 1) | (3) (3, 1) | (4) (1, 3) |
|------------|------------|------------|------------|

Q.53. Mobile phone, if sold at a price less than the current price by USD 4, you can buy 10 more pieces of mobile phones for amount of USD 800. No. of mobile phones that can be purchased at current price is

- | | | | |
|--------|--------|--------|--------|
| (1) 40 | (2) 50 | (3) 35 | (4) 45 |
|--------|--------|--------|--------|

Q.54. In a geometric progression, first term is 7 and fourth term is 56. Its seventh term is –

- | | | | |
|---------|---------|---------|---------|
| (1) 224 | (2) 448 | (3) 132 | (4) 312 |
|---------|---------|---------|---------|

Directions for Questions 55-58

In each of the problems, a Question is followed by statements marked (A) & (B) containing certain data pertaining to the problem. You need to determine whether the data provided by the statements are sufficient to answer the Question from the four answer choices. Choose the correct answer for each Question based upon the statement data & then darken corresponding oval in the answersheet.

- Choose 1 if the question can be answered by statement (A) alone but not by other statement (B) alone.
- Choose 2 if the question can be answered by statement (B) alone but not by other statement (A) alone.
- Choose 3 if the question can be answered by both the statements (A) and (B) together but cannot be answered by using either statement alone.
- Choose 4 if the question cannot be answered even by using both statements together.

Q.55. How many integers 'n' are there such that $r < n < s$?

(A) $s = 2r$

(B) $s + r = 15$

(1) (A) alone

(2) (B) alone

(3) Both statements together

(4) Cannot be answered

Q.56. A rectangular tank with uniform depth of 120 cms. is to be filled with water. How long will it take to fill it completely ?

(A) Length of the base of the tank is 400 cms.

(B) Water is pumped into the tank at the rate of 1500 litres per hour

(1) (A) alone

(2) (B) alone

(3) Both statements together

(4) Cannot be answered

Q.57. If a and b are consecutive positive even integers, what is the value of $a+b$?

(A) $b - a = 2$

(B) $\frac{a+b}{2} = a + 1$

(1) (A) alone

(2) (B) alone

(3) Both statements together

(4) Cannot be answered

Q.58. What is the value of x ?

(A) X & Y are odd integers less than 10 and $\frac{X}{Y}$ is also an odd integer

(B) X & Y are odd integers less than 10 and their product is less than Y^2 .

(1) (A) alone

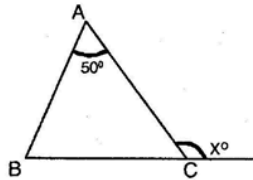
(2) (B) alone

(3) Both statements together

(4) Cannot be answered

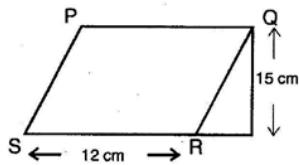
Directions for Q. Nos. 59 – 60

Q.59-60. Choose the correct answer from the answer choices and then darken the corresponding oval in the answer-sheet



Q.59. In the above figure ABC is an isosceles triangle $x =$

- (1) 130 (2) 115 (3) 65 (4) 85



Q.60 In the above figure PQRS is a parallelogram and QT is perpendicular to SR. Area of $\triangle PQR$ is
(1) 90 cm^2 (2) 60 cm^2 (3) 180 cm^2 (4) 120 cm^2

ANSWER KEY TO SAMPLE TEST QUESTIONS

ANALYTICAL REASONING SKILLS

Section - II		Section - IV	
<u>Q.11-20</u>		<u>Q.31-40</u>	
<u>Q.No.</u>	<u>Key</u>	<u>Q. No</u>	<u>Key</u>
11	4	31	3
12	1	32	1
13	2	33	2
14	3	34	3
15	4	35	3
16	1	36	2
17	4	37	4
18	1	38	2
19	4	39	3
20	3	40	4

VERBAL SKILLS

Section - III		Section - V	
<u>Q.21-30</u>		<u>Q. 41-50</u>	
<u>Q. No</u>	<u>Key</u>	<u>Q.No.</u>	<u>Key</u>
21	2	41	4
22	2	42	4
23	1	43	1
24	4	44	3
25	4	45	4
26	2	46	1
27	4	47	1
28	2	48	3
29	2	49	3
30	3	50	1

QUANTITATIVE SKILL

Section - I		Section - VI	
<u>Q. 1-10</u>		<u>Q. 51-60</u>	
<u>Q.No.</u>	<u>Key</u>	<u>Q.No.</u>	<u>Key</u>
1	4	51	4
2	1	52	4
3	3	53	1
4	2	54	2
5	3	55	3
6	4	56	4
7	1	57	4
8	2	58	1
9	3	59	2
10	4	60	1