

Sample Paper for:
NTS Graduate Admission Test (GAT)
For M. Phil. & PhD

Purpose of this sample paper is to familiarize the test taker with the question types that appear on the actual test. The number of questions and the proportion of the questions do not as the number of questions on the actual test.

Quantitative Ability

Directions:

Solve each quantitative ability problem and indicate the best of the answer choices given.

Numbers: All numbers used are real numbers.

Figures: A figure accompanying a quantitative ability problem solving question is intended to provide information useful in solving the problem. Figures are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale. Straight lines may sometimes appear jagged. All figures lie on a plane unless otherwise indicated.

1. A rectangle is 14 cm long and 10 cm wide. If the length is reduced by x cm and its width is increased also by x cm so as to make it a square then its area changes by :
 - A. 4
 - B. 144
 - C. 12
 - D. 2
 - E. None of the above.

Answer: A

2. A motorcycle stunts man belonging to fair rides over the vertical walls of a circular well at an average speed of 54 km/h for 5 minutes.

If the radius of the well is 5 meters then the distance traveled is:

- A. 2.5 km
- B. 3.5 km
- C. 4.5 km
- D. 5.5 km
- E. None of the above

Answer: C

3. If 1 cm on a map corresponds to an actual distance of 40 km. And the distance on the map between Bombay and Calcutta is 37.5 cm. the actual distance between them is :

- A. 375 km
- B. 3750 km
- C. 1500 km
- D. 1375 km
- E. None of the above

Answer: C

4. A box contains 90 nuts each of 100 gm and 100 bolts each of 150 gm. If the entire box weighs 35.5 kg., then the weight of the empty box is :

- A. 10 kg
- B. 10.5 kg
- C. 11 kg
- D. 11.5 kg
- E. None of the above

Answer: D

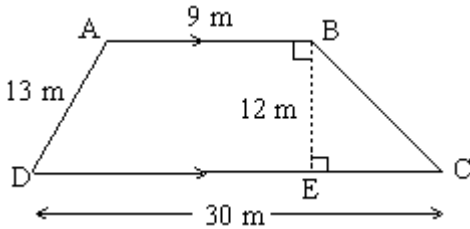
5. If the radius of a circle is increased by 20% then the area is increased by :

- A. 44%
- B. 120%
- C. 144%
- D. 40%

E. None of the above

Answer: A

6. A plot of land is in the shape of a trapezium whose dimensions are given in the figure below :

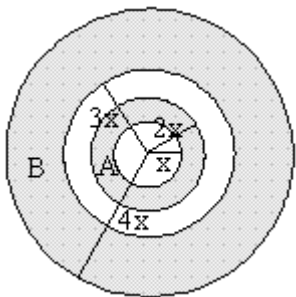


Hence the perimeter of the field is

- A. 50 m
- B. 64 m
- C. 72 m
- D. 84 m
- E. None of the above

Answer: c

7. Four concentric (having the same center) circles with radii, x , $2x$, $3x$ and $4x$ are drawn to



form two rings A and B as shown in the figure.

Ratio of the area of inner ring A to the area of outer ring B is

- A. 1 : 2
- B. 1 : 4
- C. 2 : 3
- D. 3 : 7
- E. None of the above

Answer: D

8. If $3/p = 6$ and $3/q = 15$ then $p - q = ?$

- A. $1/3$
- B. $2/5$
- C. $3/10$
- D. $5/6$
- E. None of the above

Answer: C

9. A father is three times as old as his son. After fifteen years the father will be twice as old as his son's age at that time. Hence the father's present age is

- A. 36
- B. 42
- C. 45
- D. 48
- E. None of the above

Answer: C

10. Tom, Dick and Harry went for lunch to a restaurant. Tom had \$100 with him, Dick had \$60 and Harry had \$409. They got a bill for \$104 and decided to give a tip of \$16. They further decided to share the total expenses in the ratio of the amounts of money each carried. The amount of money which Tom paid more than what Harry paid is

- A. 120
- B. 200
- C. 60
- D. 24
- E. 36

Answer: E

Verbal Ability

Sentence Completion

Directions:

Each sentence below has one or two blanks. Each blank shows that something has been omitted. Under each sentence five words are given as choice. Choose the

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one correct word for each blank that best fits the meaning of the sentences as a whole.

1. **A child should not be _____ as being either very shy or over confident.**
- A. categorized
 - B. instructed
 - C. intoned
 - D. distracted
 - E. refrained

Answer: A

2. **President Anwar el Sadat of Egypt, disregarding _____ criticism in the Arab world and in his own Government, _____ accepted Prime Minister Menahem Begin's invitation to visit Israel in order to address the Israeli parliament.**
- A. acrimonious - formally
 - B. blemished - stiffly
 - C. categorical - previously
 - D. malignant - plaintively
 - E. charismatic - meticulously

Answer: A

3. **In his usual _____ manner, he had insured himself against this type of loss.**
- A. pensive
 - B. providential
 - C. indifferent
 - D. circumspect
 - E. caustic

Answer: D

4. **We never believed that he would resort to _____ in order to achieve his goal; we always regarded him as a _____ man.**
- A. charm - insincere
 - B. necromancy - pietistic
 - C. logic - honorable
 - D. prestidigitation - articulate
 - E. subterfuge - honest

5 Answer: E

5. **The Sociologist responded to the charge that her new theory was _____ by pointing out that it did not in fact contradict accepted sociological principles.**
- A. unproven
 - B. banal
 - C. superficial
 - D. complex
 - E. heretical

Answer: E

Reading Comprehension

Directions:

Each reading comprehension passage in this section is followed by questions based on the content of the reading passage. Read the passage carefully and chose the best answer to each question. The questions are to be answered on the basis of what is stated or implied in the passage.

Passage

But man is not destined to vanish. He can be killed, but he cannot be destroyed, because his soul is deathless and his spirit is irrepressible. Therefore, though the situation seems dark in the context of the confrontation between the superpowers, the silver lining is provided by amazing phenomenon that the very nations which have spent incalculable resources and energy for the production of deadly weapons are desperately trying to find out how they might never be used. They threaten each other, intimidate each other and go to the brink, but before the total hour arrives they withdraw from the brink.

1. **The main point from the author's view is that**
- A. Man's soul and spirit cannot be destroyed by superpowers.
 - B. Man's destiny is not fully clear or visible.
 - C. Man's soul and spirit are immortal.
 - D. Man's safety is assured by the delicate balance of power in terms of nuclear weapons.
 - E. Human society will survive despite the serious threat of total annihilation.

Answer: E

2. **The phrase 'Go to the brink' in the passage means**

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- A. Retreating from extreme danger.
- B. Declare war on each other.
- C. Advancing to the stage of war but not engaging in it.
- D. Negotiate for peace.
- E. Commit suicide.

Answer: C

3. In the author's opinion

- A. Huge stockpiles of destructive weapons have so far saved mankind from a catastrophe.
- B. Superpowers have at last realized the need for abandoning the production of lethal weapons.
- C. Mankind is heading towards complete destruction.
- D. Nations in possession of huge stockpiles of lethal weapons are trying hard to avoid actual conflict.
- E. There is a Silver lining over the production of deadly weapons.

Answer: D

4. 'Irrepressible' in the second line means

- A. incompatible
- B. strong
- C. oppressive
- D. un-restrain able
- E. inspirited

Answer: D

5. A suitable title for the above passage is

- A. Destruction of mankind is inevitable.
- B. Man's desire to survive inhibits use of deadly weapons.
- C. Mounting cost of modern weapons.
- D. Threats and intimidation between super powers.
- E. Cowardly retreat by man

Answer: B

Analogies

Directions:

Each of the GRE sample analogy questions below consists of two words that have a certain relationship to each other, followed by five

lettered pairs of related words. Select the lettered pair of words.

1. ANGLE : DEGREE

- A. area : square inch
- B. milk : quart
- C. society : classes
- D. letter : alphabet
- E. time : minutes

Answer: A

2. CONFIRMED : INVETERATE

- A. knowledge : supposed
- B. financial : bankrupt
- C. immature : callow
- D. credible : incredible
- E. careful: punishing

Answer: B

3. LULLABY : BARCAROLE

- A. birth : marriage
- B. night : morning
- C. cradle : gondola
- D. song : poem
- E. carol : sonneteer

Answer: C

4. ZOOLOGY : ANIMALS

- A. ecology : pollution
- B. botany : plants
- C. chemistry : atoms
- D. history : people
- E. mathematics : geometry

Answer: A

5. DORY : VAN

- A. dairy : cow
- B. fish : vehicle
- C. freighter : caisson
- D. runners : wheels
- E. Danish : Dutch

Answer: C

- D. conjoin
- E. laud

Directions:

Each of the GRE sample antonyms questions consists of a word followed by five words or phrase as choices. Choose the word or phrase which is most nearly opposite in meaning to the word in capitals and shade the alphabets marked in the grid on your answer sheet.

1. **ABOMINATE :**

- A. loathe
- B. despise
- C. adore
- D. abhor
- E. attach

Answer: C

2. **OBSEQUIOUS :**

- A. servile
- B. first
- C. fawning
- D. supercilious
- E. improper

Answer: D

3. **OROTUND :**

- A. not resonant
- B. not reddish
- C. not eager
- D. pompous
- E. loud

Answer: A

4. **RECANT :**

- A. entangle
- B. rescue
- C. fail
- D. assert
- E. predict

Answer: D

5. **UPBRAID :**

- A. defer
- B. vacillate
- C. sever

Answer: E

Analytical Ability

Logical Reasoning

Directions:

Each logical reasoning question in this part of the assessment starts with a reading passage containing the information to be used to choose between correct and incorrect logical conclusions. These conclusions are based on the information in the passage. After this reading passage, you are given a lead-in phrase that tells you to choose from among five different responses. These possible responses are generated by correctly or incorrectly applying logical thought to the information in the passage at the beginning of the question. They can be thought of as different ways of completing a sentence that begins with the lead-in phrase.

1. In Los Angeles, a political candidate who buys saturation radio advertising will get maximum name recognition.

The statement above logically conveys which of the following?

- A. Radio advertising is the most important factor in political campaigns in Los Angeles.
- B. Maximum name recognition in Los Angeles will help a candidate to win a higher percentage of votes cast in the city.
- C. Saturation radio advertising reaches every demographically distinct sector of the voting population of Los Angeles.
- D. For maximum name recognition a candidate need not spend on media channels other than radio advertising.
- E. A candidate's record of achievement in the Los Angeles area will do little to affect his or her name recognition there.

Answer: D

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2. The rate of violent crime in this state is up 30 percent from last year. The fault lies entirely in our court system: Recently our judges' sentences have been so lenient that criminals can now do almost anything without fear of a long prison term.

The argument above would be weakened if it were true that

- A. 85 percent of the other states in the nation have lower crime rates than does this state.
- B. white collar crime in this state has also increased by over 25 percent in the last year.
- C. 35 percent of the police in this state have been laid off in the last year due to budget cuts.
- D. polls show that 65 percent of the population in this state oppose capital punishment.
- E. the state has hired 25 new judges in the last year to compensate for deaths and retirements.

Answer: C

3. The increase in the number of newspaper articles exposed as fabrications serves to bolster the contention that publishers are more interested in boosting circulation than in printing the truth. Even minor publications have staffs to check such obvious fraud.

The argument above assumes that

- A. newspaper stories exposed as fabrications are a recent phenomenon.
- B. everything a newspaper prints must be factually verifiable.
- C. fact checking is more comprehensive for minor publications than for major ones.
- D. only recently have newspapers admitted to publishing intentionally fraudulent stories.
- E. the publishers of newspapers are the people who decide what to print in their newspapers.

Answer: E

4. Time and again it has been shown that students who attend colleges with low faculty/student ratios get the best-rounded education. As a result, when my children are ready to attend college, I'll

be sure they attend a school with a very small student population.

Which of the following, if true, identifies the greatest flaw in the reasoning above?

- A. A low faculty/student ratio is the effect of a well-rounded education, not its source.
- B. Intelligence should be considered the result of childhood environment, not advanced education.
- C. A very small student population does not by itself; ensure a low faculty/student ratio.
- D. Parental desires and preferences rarely determine a child's choice of a college or university.
- E. Students must take advantage of the low faculty/student ratio by intentionally choosing small classes.

Answer: C

5. All German philosophers, except for Marx, are idealists.

From which of the following can the statement above be most properly inferred?

- A. Except for Marx, if someone is an idealist philosopher, then he or she is German.
- B. Marx is the only non-German philosopher who is an idealist.
- C. If a German is an idealist, then he or she is a philosopher, as long as he or she is not Marx.
- D. Marx is not an idealist German philosopher.
- E. Aside from the philosopher Marx, if someone is a German, then he or she is an idealist.

Answer: E

Analytical reasoning

Directions:

All analytical reasoning questions are based on a passage or set of conditions. While answering a few of the analytical reasoning questions, you would find it useful to draw a rough diagram. To answer any question, choose the answer you think is most appropriate among the given options.

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Questions 1-3

Three men (Tom, Peter and Jack) and three women (Eliza, Anne and Karen) are spending a few months at a hillside. They are to stay in a row of nine cottages, each one living in his or her own cottage. There are no others staying in the same row of houses.

1. Anne, Tom and Jack do not want to stay in any cottage, which is at the end of the row.
 2. Eliza and Anne are unwilling to stay besides any occupied cottage.
 3. Karen is next to Peter and Jack.
 4. Between Anne and Jacks cottage there is just one vacant house.
 5. None of the girls occupy adjacent cottages.
 6. The house occupied by Tom is next to an end cottage.
1. Which of the above statements can be said to have been derived from two other statements?
 - A. Statement 1
 - B. Statement 2
 - C. Statement 3
 - D. Statement 5
 - E. Statement 6

Answer: D

2. How many of them occupy cottages next to a vacant cottage?
 - A. 2
 - B. 3
 - C. 4
 - D. 5
 - E. 6

Answer: C

3. Which among these statement(s) are true?
 - I. Anne is between Eliza and Jack.
 - II. At the most four persons can have occupied cottages on either side of them.
 - III. Tom stays besides Peter.
 - A. I only
 - B. II only
 - C. I and III only
 - D. II and III only
 - E. I, II and III

Answer: C