

Analytical Section : Analytical Reasoning

Analytical Reasoning

This course provides extensive practice in test-taking strategies and verbal skills with individual feedback to raise your score on the General Management Admissions Test.

The focus of the course is on the Analytical Reasoning section, but it also deals with the Logical Reasoning Section to the extent that understanding and responding to those questions depends on language skills

Question 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 Jack's 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

Ans : (d)

2. How many of them occupy cottages next to a vacant cottage ?

- (a) 2
- (b) 3
- (c) 4
- (d) 5
- (e) 6

Ans : (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

Ans : (c)

Questions 4 - 7

An employee has been assigned the task of allotting offices to six of the staff members. The offices are numbered 1 - 6. The offices are arranged in a row and they are separated from each other by six foot high dividers. Hence voices, sounds and cigarette

smoke flow easily from one office to another.

Miss Robert's needs to use the telephone quite often throughout the day. Mr. Mike and Mr. Brown need adjacent offices as they need to consult each other often while working. Miss. Hardy, is a senior employee and has to be allotted the office number 5, having the biggest window. .

Mr. Donald requires silence in the offices next to his. Mr. Tim, Mr. Mike and Mr. Donald are all smokers. Miss Hardy finds tobacco smoke allergic and consecutively the offices next to hers to be occupied by non-smokers.

Unless specifically stated all the employees maintain an atmosphere of silence during office hours.

4. The ideal candidate to occupy the office furthest from Mr. Brown would be

- (a) Miss Hardy
- (b) Mr. Mike
- (c) Mr. Tim
- (d) Mr. Donald
- (e) Mr. Robert

Ans : (d)

5. The three employees who are smokers should be seated in the offices.

- (a) 1, 2 and 4
- (b) 2, 3 and 6
- (c) 1, 2 and 3
- (d) 1, 2 and 3
- (e) 1, 2 and 6

Ans : (d)

Questions 6 - 7 refers to the following [table](#):

PERCENT CHANGE IN DOLLAR AMOUNT OF SALES
IN CERTAIN RETAIL STORES FROM 1977 TO 1979

Percent change **6**. In 1979, for which of the stores was the dollar amount of sales greater than that of any of the others shown?

- (a) P
- (b) Q
- (c) R
- (d) S
- (e) It cannot be determined from the information given.

Ans : (e)

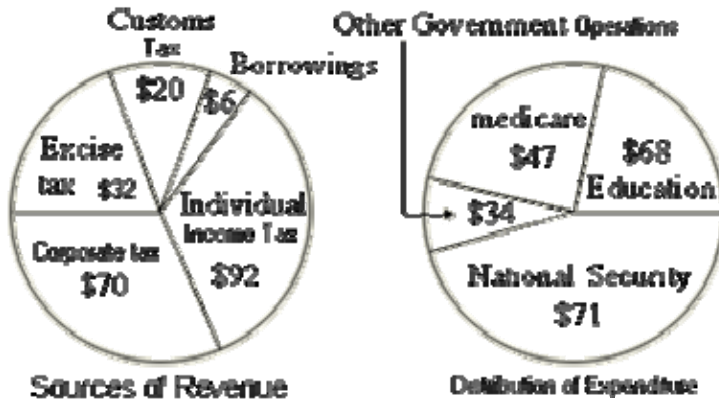
7. In store T, the dollar amount of sales for 1978 was approximately what percent of the dollar amount of sales for 1979?

- (a) 86%
- (b) 92%
- (c) 109%
- (d) 117%
- (e) 122%

Ans : (c)

Questions 8 - 9 refers to the following Figure:

REVENUE AND EXPENDITURE OF THE U.S. IN 1987 (IN BILLION)



8. Of every dollar received by the federal government, how much (in cents) is from corporate sources?

- (a) 32
- (b) 70
- (c) 30
- (d) 35
- (e) 29

Ans : (a)

9. what percentage of the federal revenue is derived from borrowings?

- (a) 0.2%
- (b) 0.02%
- (c) 2.7%
- (d) 1.2%
- (e) 2.5%

Ans : (c)

Questions 10 - 11 refers to the following table:

DIRECTIONS:

The following question are based on the bellow table, which shows per capita Mean Expenditure, Per capita Food expenditure, Number of Households and Per capita cereal consumption, in both quantity and value, for different expenditure classes of rural India. The sampled 41597 households are divided into 12 expenditure classes, starting from less than Rs.65 per month per capita and ending at more than Rs.385 per capita per month.

PER CAP. EXP. CLASS	PER CAP. MEAN EXP.	PER CAP. FOOD EXP.	NO. HSS.	TOTAL CEREALS PER CAP QUANT	PER CAP VALUE
FROM TO	(Rs)	(Rs)		(Kg)	(Rs)
Less than 65	53.71	39.51	1,400	9.75	23.49
65 80	73.25	54.44	2,142	11.82	31.2
80 95	87.74	64.87	3,175	12.85	34.88
95 110	102.56	74.41	4,067	13.64	38.42
110 125	117.45	84.33	4,076	14.19	40.69
125 140	132.58	93.17	3,710	14.64	42.12
140 160	149.3	102.5	4,394	15.1	42.92
160 180	169.67	113.69	3,516	15.4	45.24
180 215	195.36	126.74	4,023	15.9	46.07
215 280	212.77	147.68	4,772	16.3	47.92
280 385	321.32	177.64	3,289	16.91	51.06
More than 385	628.92	262.28	2,483	20.32	62.3
ALL CLASSES	198.1	100.82	41,597	14.47	41.33

10. According to the results of this sample [survey](#), what is the proportion of total expenditure on food to total expenditure for all the sampled households taken together?

- (a) 58%
- (b) 36.7%
- (c) 63.3%
- (d) 71%
- (e) Cannot be determined

Ans : (c)

11. What is the difference, approximately, between the gross expenditure of the sampled households in the Rs.95-110 expenditure class and in the Rs.180-215 expenditure class?

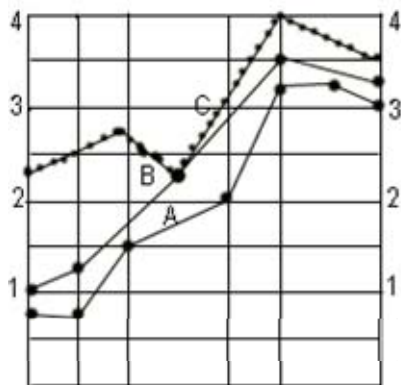
- (a) 372000
- (b) 448000
- (c) 496000
- (d) 93.8
- (e) 52.3

Ans : (a)

Questions 12 - 13 refers to the following Graph:

GRAPH SHOWS EXPENDITURE ON ARMS BY DIFFERENT COUNTRIES (VALUE IN DOLLARS '000 MILLIONS)

EXPENDITURE ON ARMS BY
different countries (\$'000 millions)



1976 1977 1978 1979 1980 1981 1982 1983

A, B and C → Countries

1, 2, 3, 4 → Expenditure
(in dollars '000 millions)

12. The amount spent by country C in 1983 is what percentage more than the amount spent by Countries A and B together in 1977? (Find approximately)

- (a) 50%
- (b) 179%
- (c) 75%
- (d) 13%
- (d) 70%

Ans : (c)

13. Which of the following statements must be true?

- i. Country A spends minimum amount of its [budget](#) on arms.
- ii. Throughout, Country C has spent the maximum amount on arms during the years shown.
- iii. An examination of the information for the last 3 years reveals that generally all 3 countries are reducing their expenditure on arms.

- (a) i only.
- (b) i and ii only
- (c) i and iii only
- (d) ii and iii only
- (e) None of the statements above.

Ans : (e)

Logical Reasoning (Verbal)

Question Format

Each 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.

Each reading passage is based on actual Bureau of Labor Statistics documents but is not necessarily a completely accurate representation of BLS work. It is important that you **accept every fact in the reading passage as true**, when you evaluate the response choices offered. You should use **only** the information in the passage as the basis for accepting or rejecting any response choices. Be careful not to allow any "facts" that are not clearly stated in the reading passage, or any outside knowledge you may have of the "facts", to influence your thinking.

The lead-in phrase following each reading passage prompts you to select from among five response choices, labeled A through E, so that a complete and valid sentence is formed. The lead-in may ask you to select the statement that is a **necessary** consequence of the facts given, (that is, a conclusion that must be true from the facts given). This lead-in takes the general form:

"From the information given above it can be validly concluded that..."

You should respond here by selecting the alphabetical designator (A-E) of the statement that satisfies the stated condition, that is, a "valid conclusion."

Alternatively, the phrase may ask you to identify a conclusion that **is not necessarily true** (in that sense, "false,") given the facts contained in the reading passage. This kind of lead-in generally reads as follows:

"From the information given above it CANNOT be validly concluded that..."

Here you should choose the letter (A-E) next to the statement that is not adequately supported as necessarily true by reasoning from the facts you were given in the reading passage.

If additional conditions are clearly stated in the sentence-completion instructions, then take them into account when making your answer choice. For example, if the instructions said:

*"From the information given above it can be validly concluded that, **in the State of Nevada in 1999...**"*

your response choice should be valid for "the State of Nevada in 1999," in addition to following validly from the reading passage

itself. Do not assume any of these additional limiting conditions. Only apply those that are stated.

In all cases, there will be a *single* correct response alternative. *None* of the questions here (or on the actual assessment) have multiple correct answers.

Test-Taking Tips for Logical Reasoning

Before you try to answer a few sample questions, here are some general test-taking tips that should help you with the Logical Reasoning section.

1. Study the question carefully. A brief explanation of why each choice is correct or incorrect follows each practice question. If you understand this reasoning for the practice items, you will do well on the actual assessment.
2. NEVER assume or use any information that the question fails to give you. This is NOT an assessment of how much you know about economics in general! Consider ONLY the information given in each reading passage when choosing among the alternative responses.
3. Read both the factual passage and the sentence completion instruction carefully. Both must be considered in making your choice.
4. Be sure to read all the response choices carefully before choosing one.
5. In questions that ask you to select a valid conclusion, always choose the one conclusion that must definitely follow from the information you are given. In questions that ask you to find the invalid alternative, choose the one conclusion that does not definitely follow from the information.
6. Pay special attention to words like "all," "some," or "none" when you read the factual information each question gives you. Other qualifying words such as "other than," "only" or "unless" are important, too. These words can play a critical part in precisely specifying the facts to be used in your reasoning.
7. Pay attention to negative prefixes also, such as *non-*, *un-*, or *dis-*. These can be crucial to specifying the basic facts in the paragraph.
8. "Test-taking" courses or your college instructors may have advised you to avoid any response choices that contain the quantifiers "all" or "none." In both the practice questions here and in the actual economist assessment, these words are NOT signs of incorrect response choices. They will appear in both correct and incorrect response choices.
9. Pay close attention to the word "ONLY" and to the phrase "IF AND ONLY IF." Saying "The door will open IF AND ONLY IF both keys are used" sets up a highly specific condition that must be met. There is exactly one way to open the door—you must use both keys. By contrast, if the sentence says, "The door will open if the key is used," there may be several ways to open the door besides by using the key.
10. The questions in the assessment will vary in difficulty level, and difficult questions will be mixed in with easier ones throughout the assessment. When you encounter a question that is difficult for you, try drawing diagrams or other schematic notes on the "scratch" paper provided to support and confirm your thought processes. Also, bear in mind that you can stop working on a difficult question temporarily and return to it later.

Sample Questions

Question 1

Although most of the fastest growing jobs in today's economy will require a college degree, many of the new jobs being created—from home health aide to desktop publisher—require knowledge other than that gained from earning a degree. For workers in those jobs, good basic skills in reading, communication, and mathematics play an important role in getting a job and developing a career.

From the information given above it can be validly concluded that, in today's economy,

- A) skills in reading, communication, and mathematics play an important role in developing a career as a desktop publisher
- B) the majority of the new jobs being created require knowledge other than that gained from earning a college degree
- C) a job as a home health aide will rely more on communication skills than on basic skills in reading and mathematics
- D) if a job is one of the fastest growing jobs, it will require a college degree
- E) desktop publisher jobs and home health aide jobs are not among the fastest growing jobs

Which letter corresponds to the correct response? _____

Question 2

According to the National Agricultural Aviation Society (NAAS), without the use of crop protection products to control insects, weeds, and diseases, crop yields per acre will drop by more than 50 percent. The first aerial application of insecticide occurred in 1921, and it was a huge success. By contrast, in today's economy all aircraft that are classified as aerial applicators do more than just apply insecticide; today, they also spread seed and apply fertilizer.

From the information given above it CANNOT be validly concluded that

- A) in today's economy, if an aerial applicator is used, then it will be able to spread seed and to apply fertilizer
- B) according to the NAAS, if crop yields per acre never drop by more than 50 percent, then crop protection products have been used to control insects, weeds, and diseases
- C) in today's economy, any aircraft that cannot be used to apply fertilizer cannot be classified as an aerial applicator
- D) in 1921, if an aircraft was used for the application of insecticide, then it was not also used to spread seed
- E) according to the NAAS, if crop yields per acre drop by more than 50 percent, then crop protection products have not been used to control insects, weeds, and diseases.

Which letter corresponds to the correct response? _____

Question 3

No national productivity measures are available for underground industries that may exist but remain unreported. On the other hand, at least some industries that are run entirely by self-employed industrialists are included in national productivity measures.

From the information given above, it can be validly concluded that

- A) there are at least some industries run entirely by self-employed industrialists that are underground industries
- B) no industries that are run entirely by self-employed industrialists operate underground
- C) there are at least some industries other than those run entirely by self-employed industrialists that are underground industries
- D) there are at least some industries run entirely by self-employed industrialists that are not underground industries
- E) there are at least some underground industries for which national productivity measures are available

Which letter corresponds to the correct response? _____