

# 8

## LAS101: Critical Thinking, Reading, and Writing Final Mock Exam

curated by The Peanuts

Name.....ID.....Section.....Seat No.....

**Conditions:** Closed Book

**Directions:**

1. This exam has 18 pages (including this page).
2. Write your name clearly at the top.
3. Do NOT use notes, textbooks, ChatGPT, or your friend who claims to be naturally logical.
4. Manage your time wisely. This is a mock exam, but your stress will be very real.
5. If you find yourself committing a fallacy, please correct it immediately. Or blame your subconscious, just identify which fallacy that is.
6. Analogical arguments are allowed. Comparing this exam to a nightmare is valid but unhelpful.

*For solution, **click here**.*

## **Part 1: MCQs**

**1. Which of the following is an example of a necessary condition?**

- a) Eating junk food will cause weight gain
- b) If you don't have oxygen, you cannot survive
- c) Throwing a stone at a window will break it
- d) Studying hard guarantees getting an A

**2. In an analogical argument, the original analogue being compared to is called:**

- a) Secondary analogue
- b) Primary analogue
- c) Middle term
- d) Target analogue

**3. Which principle strengthens an analogical argument?**

- a) Few primary analogues
- b) Irrelevant similarities
- c) Diversity among primary analogues
- d) Vague conclusion

**4. “If you are a SIIT student, then you are a Thammasat University student.” This statement represents:**

- a) A necessary condition
- b) A sufficient condition
- c) Both necessary and sufficient
- d) Neither necessary nor sufficient

**5. Mill’s Method of Agreement looks for:**

- a) What things were the same when the effect happened
- b) What things were missing when the effect did not happen
- c) The difference between two cases
- d) Multiple causes for a single effect

**6. The “Chicken and Egg” fallacy occurs when:**

- a) We assume causation from temporal sequence
- b) We assume one event causes another just because they occur together
- c) We use too small a sample size
- d) We ignore disconfirming evidence

**7. In a representative sample, the sample should be:**

- a) As large as possible
- b) Similar to the larger population in relevant respects
- c) Randomly selected without any criteria
- d) Composed of volunteers only

**8. Which pair of sentences expresses the SAME proposition?**

- a) “The cat is on the mat” and “The mat is under the cat”
- b) “Some students passed” and “All students passed”
- c) “Jack is tall” and “Jack is married”
- d) “The book is red” and “The book is thick”

**9. “Academic scholars who work as teaching assistants often stay late.” This clause is:**

- a) Restrictive (no commas needed)
- b) Nonrestrictive (commas needed)
- c) Neither restrictive nor nonrestrictive
- d) Both restrictive and nonrestrictive

**10. In the sentence “Unless it rains, we will play basketball,” which propositions are asserted?**

- a) It will rain AND we will play basketball
- b) It will NOT rain AND we will play basketball
- c) IF it does not rain, THEN we will play basketball
- d) It might rain OR we might play basketball

**11. “Life is a journey” is an example of:**

- a) Literal language
- b) A metaphor
- c) A connotation
- d) A restrictive clause

**12. In a Standard Categorical Proposition, the copula must be:**

- a) A form of "to be" verb
- b) An action verb
- c) An adjective
- d) A quantifier

**13. "All whales are mammals." In this proposition, which term is distributed?**

- a) Only the predicate "mammals"
- b) Only the subject "whales"
- c) Both subject and predicate
- d) Neither subject nor predicate

**14. The proposition "Some students are not athletes" is of which form?**

- a) A (Universal Affirmative)
- b) E (Universal Negative)
- c) I (Particular Affirmative)
- d) O (Particular Negative)

**15. In Standard Categorical Propositions, "some" means:**

- a) Exactly one
- b) At least one
- c) More than half
- d) Almost all

**16. Which quantifier would be used to translate “Every student must attend” into standard form?**

- a) Some
- b) No
- c) All
- d) A few

**17. In the Modern Square of Opposition, which relationship is recognized?**

- a) Contrary
- b) Subcontrary
- c) Contradictory only
- d) All of the above

**18. In a Venn diagram for categorical propositions, shading represents:**

- a) At least one member exists
- b) No members exist in that area
- c) All members exist in that area
- d) The conclusion of an argument

**19. “No S are P” distributes:**

- a) Only S
- b) Only P
- c) Both S and P
- d) Neither S nor P

**20. In the proposition “All students are hardworking people,” which area of the Venn diagram is shaded?**

- a) The area of S outside P
- b) The area of P outside S
- c) The overlapping area
- d) No area is shaded

**21. If “All S are P” is true, then according to the Modern Square of Opposition, “Some S are not P” is:**

- a) True
- b) False
- c) Undetermined
- d) Possibly true

**22. In a standard categorical syllogism, the middle term:**

- a) Appears in the conclusion
- b) Appears once in each premise but not in the conclusion
- c) Appears only in the major premise
- d) Appears only in the minor premise

**23. A syllogism with mood AEE and Figure 2 has the structure:**

- a) All M are P; No S are M; No S are P
- b) All P are M; No S are M; No S are P
- c) All M are P; No M are S; No S are P
- d) All S are M; No M are P; No S are P

**24.** According to the rules of validity, if the middle term is not distributed in at least one premise, the syllogism commits:

- a) Illicit major
- b) Illicit minor
- c) Undistributed middle
- d) Negative premise fallacy

**25.** “Some P are M. All M are S. Some S are P.” What is the mood and figure of this syllogism?

- a) IAI-1
- b) IAI-4
- c) AII-2
- d) IIA-3

**26.** Which rule states that “The premises cannot both be negative”?

- a) Rule 1
- b) Rule 2
- c) Rule 3
- d) Rule 4

**27. In SWOT analysis, “New technology” would be classified as:**

- a) Strength
- b) Weakness
- c) Opportunity
- d) Threat

**28. A commercial shows a student drinking an energy drink, then immediately getting an A on an exam. This advertisement most likely commits which fallacy?**

- a) Appeal to authority
- b) Questionable cause
- c) Hasty generalization
- d) Circular reasoning

**29. The weasel word “virtually” in “Leaves dishes virtually spotless” serves to:**

- a) Strengthen the claim
- b) Make the claim more scientific
- c) Weaken the claim while appearing to be positive
- d) Provide statistical evidence

**30. Which of the following represents a SO (Strength-Opportunity) strategy in TOWS analysis?**

- a) Using company strengths to take advantage of external opportunities
- b) Reducing weaknesses by exploiting opportunities
- c) Using strengths to counteract threats
- d) Minimizing weaknesses and avoiding threats

## Part 2: Constructed Responses

### Question 1

A university cafeteria wants to determine what caused a food poisoning outbreak. Below is the data from affected and unaffected students:

Student	Chicken	Salad	Rice	Dessert	Sick?
Student A	Yes	Yes	Yes	No	Yes
Student B	No	Yes	Yes	Yes	Yes
Student C	Yes	Yes	No	No	Yes
Student D	Yes	No	Yes	Yes	No
Student E	No	No	Yes	Yes	No

- a) Which Mill's Method would be most appropriate to use here?
  
  
  
  
  
  
  
  
- b) Based on the data, what is the likely cause of the food poisoning? Explain your reasoning.
  
  
  
  
  
  
  
  
- c) State whether the identified cause is a necessary condition, sufficient condition, both, or neither. Justify your answer.

## Question 2

a) Identify whether each pair expresses the SAME or DIFFERENT propositions. If different, explain why.

i. “The students, who study hard, get good grades.”  
“The students who study hard get good grades.”

ii. “Bob is a policeman.” / “Bob is a cop.”

iii. “SIIT students are Thammasat students.” / “Thammasat students are SIIT students.”

b) For the *first pair* in part (a), draw diagrams to illustrate the difference between restrictive and nonrestrictive clauses.

### **Question 3**

Reformulate the following statements into Standard Categorical Proposition form. Identify the form (A, E, I, O) and underline the distributed terms.

- a) “Most politicians cannot be trusted.”
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
- b) “It is not true that all students dislike homework.”
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
- c) “Every smartphone user faces security risks.”

Using the Modern Square of Opposition, determine if the following immediate inference is valid.

**Premise:** “All discounted items are products on sale today.”

**Conclusion:** “Therefore, it is false that some discounted items are not products on sale today.”

**Step 1:** Identify the forms of the premise and conclusion

**Step 2:** Use the Modern Square to determine validity

## **Question 4**

Complete the following syllogism using the given terms. Then identify the mood and figure.

**Given terms:**

- Major term: valuable items
- Minor term: imported products
- Middle term: luxury goods

**Required mood and figure:** EIO-2

Write your complete syllogism here:

Major Premise: \_\_\_\_\_

Minor Premise: \_\_\_\_\_

Conclusion: \_\_\_\_\_

Analyze the following syllogism for validity.

All social media influencers are content creators.

Some content creators are not honest advertisers.

Some honest advertisers are not social media influencers.

a) Identify the major term (P), minor term (S), and middle term (M).

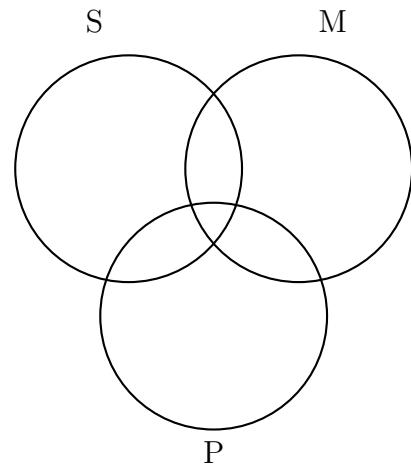
b) State the mood and figure of this syllogism.

c) Double-underline all distributed terms.

d) Test the syllogism using the 5 Rules of Validity. List which rules are followed and which (if any) are violated.

Rules Followed	Rules Violated

e) Draw the Venn diagram for this syllogism (combined premises and conclusion). Based on your diagram, is the syllogism valid or invalid? Explain.



## **Question 5**

Analyze the following advertisement scenario:

*A cosmetics company launches an ad campaign featuring a famous actress. The ad shows the actress using their new “Age-Defying Miracle Serum” and claims: “Virtually eliminates wrinkles in up to 4 weeks! 9 out of 10 women saw improvement. Jennifer Lopez trusts this brand - shouldn’t you?”*

**a)** Identify and explain THREE logical fallacies or rhetorical devices used in this advertisement.

**b)** What weasel words are used, and how do they weaken the claims?

**c)** Suggest how a critical thinker should evaluate this advertisement before making a purchase decision. List at least 3 questions they should ask.

## Reference Tables

### Rules of Validity for Categorical Syllogisms

Category	Rule	Violation
Distribution	1. The middle term must be distributed in at least one of the premises.	Undistributed middle term
Distribution	2. If either the major or the minor term in the conclusion is distributed, it must be distributed in the premise in which it occurs.	Illicit major term, illicit minor term
Negation	3. The premises cannot both be negative.	Two negative premises
Negation	4. If either premise is negative, the conclusion must be negative; and if the conclusion is negative, one premise must be negative.	Negative premise, affirmative conclusion OR Affirmative premises, negative conclusion
Quantity	5. If the conclusion is particular, one premise must be particular.	Universal premises, particular conclusion

### Figures of Standard Categorical Syllogisms

	1st	2nd	3rd	4th
Major	M — P	P — M	M — P	P — M
Minor	S — M	S — M	M — S	M — S
Conclusion	S — P	S — P	S — P	S — P

### Distribution in Standard Categorical Propositions

Form	Structure	Subject Distributed?	Predicate Distributed?
A	All S are P	YES	NO
E	No S are P	YES	YES
I	Some S are P	NO	NO
O	Some S are not P	NO	YES