



Examination Orientation Practice Items



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TEST QUESTION FORMATS

- A. MULTIPLE CHOICE FORMAT – SINGLE ONE BEST ANSWER
- B. SCENARIO SETS – SINGLE ONE BEST ANSWER

A. MULTIPLE CHOICE FORMAT – SINGLE ONE BEST ANSWER

This is the most traditional and frequently used format; multiple choice. It consists of a statement or question forwarded by four options that are in random or numerical order. The response options in this format are lettered (e.g. A, B, C, D). Examinees are required to select the best answer to the question. Other options may be partially correct but there is only ONE BEST answer.

STRATEGIES FOR ANSWERING SINGLE ONE BEST ANSWER TEST QUESTIONS

Read each questions carefully. It is important to understand what is being asked.

Try to generate an answer and then look for it in the option list.

Alternatively, read each option carefully, eliminating those that are clearly incorrect

Of the remaining options, select the one that is most correct

If unsure about an answer, it is better to guess, since unanswered questions are automatically counted as wrong answers.

EXAMPLES OF SINGLE ONE BEST ANSWER TEST QUESTIONS

The Capital of the United States of America is

- A. New York, New York.
- B. Buffalo, New York
- C. Albany, New York
- D. Washington, D.C.

ANSWER D

The following two statements come from a county health department's strategic plan. The response options for the next two items are the same. Select one answer for each item.

The health department is committed to protecting and promoting the health of the country's residents. Which of the following components of a strategic plan does this statement represent?

- A. objective
- B. vision
- C. mission
- D. goal

ANSWER C

Reduce the number of teenagers who begin to smoke. Which of the following components of a strategic plan does this statement represent?

- A. goal
- B. mission
- C. objective
- D. vision

ANSWER A

B. SCENARIO SETS – SINGLE ONE BEST ANSWER

This item format consists of a series of items related to a common scenario. Scenario sets list how many items are related to that scenario. There is no need to memorize the information contained in the scenario, because the questions appear in sequence and the scenario appears with each question. The following is an example of how scenario set items will appear.

There are three questions that refer to this scenario. The questions appear in sequence and the scenario appears with each question.

The new director of a county health department is getting acquainted with her staff. After several weeks of observing how her two associate directors supervise their subordinates, she notes striking differences in their management styles.

One associate director manages employees by assuming that they are highly motivated. He tells members of his staff that they can time-shift their work hours to accommodate their family schedules as long as they get their work done. This director's approach to management exemplifies which of the following leadership theories?

- A. Contingency theory
- B. House's path goal theory
- C. McGregor's theory Y
- D. Theory Z

ANSWER C

The other associate director assumes that employees find no satisfaction in their work and are exclusively motivated by their salaries. This associate director's approach to management exemplifies which of the following leadership theories?

- A. McGregor's theory
- B. Contingency theory
- C. Theory Z
- D. House's path goal therapy

ANSWER A

The director wants to adopt a management strategy that will meet the needs of all personnel in her department, including the two associate directors and their diverse staffs and responsibilities. The most appropriate leadership style for this director is one informed by which of the following theories?

- A. Theory Z
- B. McGregor's theory
- C. House's path to goal therapy
- D. Contingency therapy

ANSWER D

C. SAMPLE QUESTIONS

The following pages include 13 sample test questions. These questions are the same as those you may install on your computer from the NBPHE website.

These sample questions are illustrative of the types of questions used in the NBPHE examination. Although the questions exemplify content on the examination, they may not reflect the content coverage on individual examinations.

In the actual examination, questions may appear randomly in the examination; they will not be grouped according to type or specific content. In the actual examination, the questions will be presented one at a time in a format designed for easy on-screen reading.

1. A community-based study of a program to increase physical activity is conducted, and the findings are evaluated. A small p -value with an estimate is reported. Which of the following is the best interpretation of this result?
 - A. It is likely the estimate differs from the true value because of bias.
 - B. It is likely the estimate differs randomly and systematically from the norm.
 - C. It is unlikely the estimate differs from the average because of chance.
 - D. It is unlikely the estimate differs from the null value because of random variability

ANSWER D

There are three questions that refer to this scenario. The questions appear in sequence and the scenario appears with each question.

A pilot study is conducted to examine whether a new drug effectively decreases cholesterol levels over a 6-week period. Twelve participants are enrolled, and serum cholesterol levels are measured before and after the 6-week treatment period. Investigators plan to use a paired t -test to examine whether the drug was effective in reducing cholesterol levels.

2. The paired t -test is more appropriate for analysis of the results than a two-sample t -test for which of the following reasons?
 - A. dependence between the pre-test and post-test measurements
 - B. potential non-normality of the responses
 - C. heterogeneous variances of the two groups

D. non-randomness of the timing of the measurements

ANSWER A

A pilot study is conducted to examine whether a new drug effectively decreases cholesterol levels over a 6-week period. Twelve participants are enrolled, and serum cholesterol levels are measured before and after the 6-week treatment period. Investigators plan to use a paired t -test to examine whether the drug was effective in reducing cholesterol levels.

3. Which of the following are the degrees of freedom for this paired t -test?
- A. 10
 - B. 11
 - C. 12
 - D. 13

ANSWER B

A pilot study is conducted to examine whether a new drug effectively decreases cholesterol levels over a 6-week period. Twelve participants are enrolled, and serum cholesterol levels are measured before and after the 6-week treatment period. Investigators plan to use a paired t -test to examine whether the drug was effective in reducing cholesterol levels.

4. If the p -value were calculated to be 0.015, which of the following would be the most appropriate interpretation of this p -value?
- A. The probability of seeing results as unusual as the observed under the alternative hypothesis is very small.
 - B. The probability of seeing results as unusual as the observed under the null hypothesis very small.
 - C. The probability that the alternative hypothesis is false is very small.
 - D. The probability that the alternative hypothesis is true is very small.

ANSWER B

5. Which of the following statements best describes an intent-to-treat analysis?
- A. Analyses compare characteristics of participants who did and did not adhere to the randomized treatment.
 - B. Analyses exclude all participants who did not adhere to the assigned randomized treatment.
 - C. Analyses maintain the original randomized assignment of treatments in the definition of intervention and control groups.
 - D. Analyses reorganize participants into intervention and control groups based on their actual participation.

ANSWER C

6. A study is conducted to examine whether elderly women in at-home care settings maintain more cognitive ability than women who are residents of skilled nursing care facilities. Two

groups of 30 elderly women were recruited independently: one group included women living at home with a caregiver, and the second group included women living in skilled nursing care facilities. The women were asked to perform a task and received scores on the execution of the task (higher scores indicated higher cognitive functioning). Which of the following is the most appropriate approach for analyzing these data?

- A. chi-square (χ^2) test
- B. correlation analysis
- C. paired t -test
- D. two-sample t -test

ANSWER D

7. A study is conducted to evaluate the relationship between pet ownership and having depressive symptoms. Seventy participants are recruited. Each subject is identified as a current pet owner or a non-pet owner. Participants are categorized as having or not having symptoms of depression. Which of the following is the most appropriate method to evaluate the association between pet ownership and having depressive symptoms in this population?

- A. paired t -test
- B. two-sample t -test
- C. chi-square (χ^2) test
- D. correlation analysis

ANSWER C

8. The epidemic of methyl mercury poisoning in Minamata, Japan, in the 1950s illustrated contamination of which of the following?

- A. water
- B. fish
- C. soil
- D. feed grain

ANSWER B

There are two questions that refer to this scenario. The questions appear in sequence and the scenario appears with each question.

The Ministry of Health of a developing country is considering the nationwide implementation of a test using biomarkers to screen for breast cancer. The test is delivered in health clinics in two similar regions of the country, with the following results:

	Region A	Region B
Sensitivity	70%	80%
Specificity	85%	95%

9. The positive and negative predictive values are different between the two regions. Which of the following is the most likely cause of the difference in the test's predictive values between the two regions?

- A. The prevalence of disease is different between the two regions.
- B. The test is detecting the disease earlier in its natural history in one of the regions.
- C. The test was not administered in similar conditions in the two regions.
- D. Length-biased sampling has occurred.

ANSWER C

The Ministry of Health of a developing country is considering the nationwide implementation of a test using biomarkers to screen for breast cancer. The test is delivered in health clinics in two similar regions of the country, with the following results:

	Region A	Region B
Sensitivity	70%	80%
Specificity	85%	95%

10. Which of the following is the most likely cause of the difference in the test's sensitivity and specificity between the two regions?
- A. The test is detecting the disease earlier in its natural history in one of the regions.
 - B. Length-biased sampling has occurred.
 - C. The test was not administered in similar conditions in the two regions.
 - D. The prevalence of disease is different between the two regions

ANSWER D

There are three questions that refer to this scenario. The questions appear in sequence and the scenario appears with each question.

A study investigated the effects of exposure to radioactive fallout from the Hanford Nuclear Site in Washington State in the 1940s and 1950s and subsequent development of thyroid cancer among persons exposed as children and adolescents. Scientists used birth data from the study area to trace and contact subjects to participate in the study. Screening consisted of thyroid palpation, ultrasonography of the thyroid gland, and measurement of thyroid hormone concentrations in serum and urine. Individual thyroid radiation doses were estimated from interview data concerning place of residence and dietary history. As a result of screening, 19 subjects were diagnosed with thyroid cancer.

11. Which of the following terms best describes this type of study design?
- A. case-control
 - B. ecological
 - C. retrospective cohort
 - D. cross-sectional

ANSWER C

A study investigated the effects of exposure to radioactive fallout from the Hanford Nuclear Site in Washington State in the 1940s and 1950s and subsequent development of thyroid cancer among persons exposed as children and adolescents. Scientists used birth data from

the study area to trace and contact subjects to participate in the study. Screening consisted of thyroid palpation, ultrasonography of the thyroid gland, and measurement of thyroid hormone concentrations in serum and urine. Individual thyroid radiation doses were estimated from interview data concerning place of residence and dietary history. As a result of screening, 19 subjects were diagnosed with thyroid cancer.

12. Which of the following is the most appropriate measure of effect for this type of study?
- A. prevalence odds ratio
 - B. odds ratio
 - C. correlation coefficient
 - D. risk ratio

ANSWER D

A study investigated the effects of exposure to radioactive fallout from the Hanford Nuclear Site in Washington State in the 1940s and 1950s and subsequent development of thyroid cancer among persons exposed as children and adolescents. Scientists used birth data from the study area to trace and contact subjects to participate in the study. Screening consisted of thyroid palpation, ultrasonography of the thyroid gland, and measurement of thyroid hormone concentrations in serum and urine. Individual thyroid radiation doses were estimated from interview data concerning place of residence and dietary history. As a result of screening, 19 subjects were diagnosed with thyroid cancer.

13. Which of the following terms is most appropriate to describe the cases of thyroid cancer identified during the first screening in this study?
- A. prevalent
 - B. interval
 - C. recurrent
 - D. incident

ANSWER A