Затверджено на засіданні кафедри теорії та історії держави і права від 30 серпня 2023 р., протокол № 1

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Індивідуальні завдання для студентів 1-го курсу освітнього ступеня «Бакалавр» з нормативної навчальної дисципліни «Загальні навчальні правничі компетентності» на перший семестр 2023-2024 н. р. (спеціальність 081 Право, денна форма навчання) ОПП «Міжнародне та європейське право»

Індивідуальне завдання з вибіркової навчальної дисципліни «Загальні навчальні правничі компетентності» передбачає аргументований розв'язок задачі, яку студент обирає із запропонованого нижче переліку. При цьому покроковий алгоритм розв'язування задачі слід відобразити письмово. Завдання являють собою типові ситуації на аналітичне мислення чи задачі на логічне мислення, сформульовані англійською мовою, відповіді та їх обґрунтування на які проте дозволяється давати українською мовою.

**1.** Charlie makes a soup by adding exactly six kinds of foods – kale, lentils, mushrooms, onions, tomatoes, and zucchini – to a broth, one food at a time. No food is added more than once. The order in which Charlie adds the foods to the broth must be consistent with the following: If the mushrooms are added third, then the lentils are added last.

If the zucchini is added first, then the lentils are added at some time before the onions. Neither the tomatoes nor the kale is added fifth.

The mushrooms are added at some time before the tomatoes or the kale, but not before both.

- 1) Which one of the following could be the order in which the foods are added to the broth?
- (A) kale, mushrooms, onions, lentils, tomatoes, zucchini
- (B) kale, zucchini, mushrooms, tomatoes, lentils, onions
- (C) lentils, mushrooms, zucchini, kale, onions, tomatoes
- (D) zucchini, lentils, kale, mushrooms, onions, tomatoes
- (E) zucchini, tomatoes, onions, mushrooms, lentils, kale
- 2) Which one of the following foods CANNOT be added first?
- (A) kale
- (B) lentils
- (C) mushrooms
- (D) onions
- (E) tomatoes
- 3) If the lentils are added last, then which one of the following must be true?
- (A) At least one of the foods is added at some time before the zucchini.
- (B) At least two of the foods are added at some time before the kale.
- (C) The mushrooms are added third.
- (D) The zucchini is added third.
- (E) The tomatoes are added fourth.

- 4) Which one of the following could be an accurate partial ordering of the foods added to the broth?
- (A) lentils: second; mushrooms: third
- (B) mushrooms: fourth; lentils: last
- (C) onions: second; mushrooms: fifth
- (D) zucchini: first; lentils: last
- (E) zucchini: first; mushrooms: second
- 5) If the zucchini is added first, then which one of the following CANNOT be true?
- (A) The kale is added second.
- (B) The tomatoes are added second.
- (C) The lentils are added third.
- (D) The lentils are added fourth.
- (E) The onions are added fourth.
- **2.** There are exactly six groups in this year's Civic Parade: firefighters, gymnasts, jugglers, musicians, puppeteers, and veterans. Each group marches as a unit; the groups are ordered from first, at the front of the parade, to sixth, at the back. The following conditions apply:

At least two groups march behind the puppeteers but ahead of the musicians.

Exactly one group marches behind the firefighters but ahead of the veterans.

The gymnasts are the first, third, or fifth group.

- 1) Which one of the following could be an accurate list of the groups in the Civic Parade in order from first to last?
- (A) firefighters, puppeteers, veterans, musicians, gymnasts, jugglers
- (B) gymnasts, puppeteers, jugglers, musicians, firefighters, veterans
- (C) veterans, puppeteers, firefighters, gymnasts, jugglers, musicians
- (D) jugglers, puppeteers, gymnasts, firefighters, musicians, veterans
- $(E) \ musicians, \ veterans, \ jugglers, \ firefighters, \ gymnasts, \ puppeteers$
- 2) If the gymnasts march immediately ahead of the veterans, then which one of the following could

be the fourth group?

- (A) gymnasts
- (B) jugglers
- (C) musicians
- (D) puppeteers
- (E) veterans
- 3) If the veterans march immediately behind the puppeteers, then which one of the following could be the second group?
- (A) firefighters
- (B) gymnasts
- (C) jugglers
- (D) musicians
- (E) veterans
- 4)If the jugglers are the fifth group, then which one of the following must be true?
- (A) The puppeteers are the first group.
- (B) The firefighters are the first group.
- (C) The veterans are the second group.
- (D) The gymnasts are the third group.
- (E) The musicians are the sixth group.
- 5) Which one of the following groups CANNOT march immediately behind the gymnasts?
- (A) firefighters
- (B) jugglers
- (C) musicians

(D) puppeteers
(E) veterans
3. Exactly seven products – P, Q, R, S, T, W, and X – are each to be advertised exactly once in a section of a catalog. The order in which they will be displayed is governed by the following conditions:
Q must be displayed in some position before W.
R must be displayed immediately before X.

T cannot be displayed immediately before or immediately after W.

S must be displayed either first or seventh.

Either Q or T must be displayed fourth.

- 1) Which one of the following CANNOT be the product that is displayed first?
- (A) P
- (B) Q
- (C) R
- (D) T
- (E) X
- 2) If X is displayed immediately before Q, then which one of the following could be true?
- (A) T is displayed first.
- (B) R is displayed fifth.
- (C) Q is displayed last.
- (D) Q is displayed second.
- (E) P is displayed second.
- 3) If P is displayed second, then which one of the following could be displayed third?
- (A) R
- (B) S
- (C) T
- (D) W
- (E) X
- 4) Which one of the following could be true?
- (A) Q is displayed fifth.
- (B) Q is displayed seventh.
- (C) R is displayed third.
- (D) W is displayed third.
- (E) X is displayed fifth.
- 5) If R is displayed sixth, then which one of the following must be displayed fifth?
- (A) P
- (B) Q
- (C) T
- (D) W
- (E) X
- **4.** Exactly eight computer processor chips F, G, H, J, K, L, M, and O are ranked according to their speed from first (fastest) to eighth (slowest). The ranking must be consistent with the following:

There are no ties.

Either F or G is ranked first.

M is not the slowest.

H is faster than J, with exactly one chip intermediate in speed between them.

K is faster than L, with exactly two chips intermediate in speed between them.

- O is slower than both J and L.
- 1) Which one of the following could be true?

- (A) F is ranked first and M is ranked eighth.
- (B) G is ranked fifth and O is ranked eighth.
- (C) J is ranked third and L is ranked seventh.
- (D) K is ranked second and H is ranked third.
- (E) M is ranked seventh and L is ranked eighth.
- 2) H CANNOT be ranked
- (A) second
- (B) third
- (C) fourth
- (D) fifth
- (E) sixth
- 3) If O is faster than F, then which one of the following chips could be ranked second?
- (A) G
- (B) H
- (C) M
- (D) J
- (E) L
- 4) If M is faster than J, then the fastest ranking J could have is
- (A) second
- (B) third
- (C) fourth
- (D) fifth
- (E) sixth
- 5) Which one of the following must be true?
- (A) J is ranked no faster than fifth.
- (B) K is ranked no faster than third.
- (C) L is ranked no faster than fifth.
- (D) M is ranked no faster than third.
- (E) O is ranked no faster than eighth.
- **5.** At a children's festival, exactly four songs are performed, each exactly once: "Night's All Right,"

"Question Man," "Rhino Rock," and "Sammy." The songs are performed consecutively, each on

different one of exactly four instruments: flute, guitar, harmonica, or keyboard. The songs are performed in accordance with the following:

The first song performed is not performed on the flute.

If "Sammy" is performed on the keyboard, then "Rhino Rock" is performed on the harmonica. If "Question Man" is performed on the keyboard, then "Night's All Right" is performed on the flute.

The song performed on the keyboard immediately follows "Rhino Rock" and immediately precedes "Night's All Right."

- 1) Which one of the following could be an accurate matching of the four songs performed at the festival with the instruments on which they are performed, listed in order from the first song performed to the last?
- (A) "Night's All Right": guitar; "Question Man": keyboard; "Sammy": guitar; "Rhino Rock": flute
- (B) "Question Man": guitar; "Rhino Rock": harmonica; "Sammy": keyboard; "Night's All Right": flute
- (C) "Rhino Rock": flute; "Question Man": keyboard; "Night's All Right": harmonica; "Sammy": guitar
- (D) "Sammy": harmonica; "Night's All Right": guitar; "Question Man": keyboard; "Rhino

Rock": flute

- (E) "Sammy": harmonica; "Rhino Rock": guitar; "Question Man": flute; "Night's All Right": keyboard
- 2) Which one of the following could be true?
- (A) "Question Man" immediately follows the song performed on the keyboard.
- (B) "Night's All Right" immediately precedes the song performed on the keyboard.
- (C) "Question Man" immediately precedes the song performed on the guitar.
- (D) "Rhino Rock" immediately precedes the song performed on the harmonica.
- (E) "Sammy" immediately precedes the song performed on the guitar.
- 3) Which one of the following CANNOT be true of the song performed on the flute?
- (A) It immediately precedes "Question Man."
- (B) It immediately follows "Question Man."
- (C) It immediately precedes "Rhino Rock."
- (D) It immediately follows "Night's All Right."
- (E) It immediately follows "Sammy."
- 4) If "Rhino Rock" is the second song performed at the festival, then which one of the following could be true?
- (A) The first song performed is performed on the keyboard.
- (B) The third song performed is performed on the guitar.
- (C) The third song performed is performed on the flute.
- (D) "Night's All Right" is performed on the guitar.
- (E) "Rhino Rock" is performed on the guitar.
- 5) If "Question Man" is the third song performed at the festival, then each of the following could be true EXCEPT:
- (A) "Question Man" is performed on the guitar.
- (B) "Question Man" is performed on the keyboard.
- (C) "Rhino Rock" is performed on the guitar.
- (D) "Sammy" is performed on the guitar.
- (E) "Sammy" is performed on the harmonica.
- **6.** A tour group plans to visit exactly five archaeological sites. Each site was discovered by exactly

one of the following archaeologists – Ferrara, Gallagher, Oliphant – and each dates from the eighth, ninth, or tenth century (A.D.). The tour must satisfy the following conditions:

The site visited second dates from the ninth century.

Neither the site visited fourth nor the site visited fifth was discovered by Oliphant.

Exactly one of the sites was discovered by Gallagher, and it dates from the tenth century.

If a site dates from the eighth century, it was discovered by Oliphant.

The site visited third dates from a more recent century than does either the site visited first or that visited fourth.

- 1) Which one of the following could be an accurate list of the discoverers of the five sites, listed in the order in which the sites are visited?
- (A) Oliphant, Oliphant, Gallagher, Oliphant, Ferrara
- (B) Gallagher, Oliphant, Ferrara, Ferrara, Ferrara
- (C) Oliphant, Gallagher, Oliphant, Ferrara, Ferrara
- (D) Oliphant, Oliphant, Gallagher, Ferrara, Gallagher
- (E) Ferrara, Oliphant, Gallagher, Ferrara, Ferrara
- 2) If exactly one of the five sites the tour group visits dates from the tenth century, then which one

of the following CANNOT be a site that was discovered by Ferrara?

- (A) the site visited first
- (B) the site visited second

- (C) the site visited third
- (D) the site visited fourth
- (E) the site visited fifth
- 3) Which one of the following could be a site that dates from the eighth century?
- (A) the site visited first
- (B) the site visited second
- (C) the site visited third
- (D) the site visited fourth
- (E) the site visited fifth
- 4) Which one of the following is a complete and accurate list of the sites each of which CANNOT

be the site discovered by Gallagher?

- (A) third, fourth, fifth
- (B) second, third, fourth
- (C) first, fourth, fifth
- (D) first, second, fifth
- (E) first, second, fourth
- 5) The tour group could visit at most how many sites that were discovered by Ferrara?
- (A) one
- (B) two
- (C) three
- (D) four
- (E) five
- 7. Each day of a five-day workweek (Monday through Friday), Anastasia parks for the entire day in

exactly one of three downtown parking lots -X, Y, and Z. One of the lots costs \$10 for the day, another costs \$12, and the other costs \$15. Anastasia parks in each of the three lots at least once during her workweek. The following conditions must apply:

On Thursday, Anastasia parks in the \$15 lot.

Lot X costs more than lot Z.

The lot Anastasia parks in on Wednesday costs more than the one she parks in on Friday. Anastasia parks in lot Z on more days of the workweek than she parks in lot X.

- 1) Which one of the following could be a complete and accurate list of which lot Anastasia parks in each day, listed in order from Monday through Friday?
- (A) Y, Z, X, Y, Z
- (B) Y, Z, Z, Y, X
- (C) Z, Z, X, X, Y
- (D) Z, Z, X, X, Z
- (E) Z, Z, X, Z, Y
- 2) Anastasia CANNOT park in the \$15 lot on which one of the following days?
- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday
- (E) Friday
- 3) If lot Z is the \$12 lot, then on which one of the following days must Anastasia park in lot Y?
- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday
- (E) Friday

- 4) Anastasia CANNOT park in lot Z on which one of the following days?
- (A) Monday
- (B) Tuesday
- (C) Wednesday
- (D) Thursday
- (E) Friday
- 5) Which one of the following could be a complete and accurate list of the days on which Anastasia parks in the \$10 lot?
- (A) Monday
- (B) Tuesday
- (C) Monday, Tuesday
- (D) Monday, Wednesday
- (E) Monday, Thursday
- **8.** One afternoon, a single thunderstorm passes over exactly five towns Jackson, Lofton, Nordique,

Oceana, and Plattesville – dropping some form of precipitation on each. The storm is the only source of precipitation in the towns that afternoon. On some towns, it drops both hail and rain; on

the remaining towns, it drops only rain. It passes over each town exactly once and does not pass over any two towns at the same time. The following must obtain:

The third town the storm passes over is Plattesville.

The storm drops hail and rain on the second town it passes over.

The storm drops only rain on both Lofton and Oceana.

The storm passes over Jackson at some time after it passes over Lofton and at some time after it passes over Nordique.

- 1) Which one of the following could be the order, from first to fifth, in which the storm passes over the towns?
- (A) Lofton, Nordique, Plattesville, Oceana, Jackson
- (B) Lofton, Oceana, Plattesville, Nordique, Jackson
- (C) Nordique, Jackson, Plattesville, Oceana, Lofton
- (D) Nordique, Lofton, Plattesville, Jackson, Oceana
- (E) Nordique, Plattesville, Lofton, Oceana, Jackson
- 2) If the storm passes over Oceana at some time before it passes over Jackson, then each of the following could be true EXCEPT:
- (A) The first town the storm passes over is Oceana.
- (B) The fourth town the storm passes over is Lofton.
- (C) The fourth town the storm passes over receives hail and rain.
- (D) The fifth town the storm passes over is Jackson.
- (E) The fifth town the storm passes over receives only rain.
- 3) If the storm drops only rain on each town it passes over after passing over Lofton, then which one of the following could be false?
- (A) The first town the storm passes over is Oceana.
- (B) The fourth town the storm passes over receives only rain.
- (C) The fifth town the storm passes over is Jackson.
- (D) Jackson receives only rain.
- (E) Plattesville receives only rain.
- 4) If the storm passes over Jackson at some time before it passes over Oceana, then which one of the following could be false?
- (A) The storm passes over Lofton at some time before it passes over Jackson.
- (B) The storm passes over Lofton at some time before it passes over Oceana.
- (C) The storm passes over Nordique at some time before it passes over Oceana.

- (D) The fourth town the storm passes over receives only rain.
- (E) The fifth town the storm passes over receives only rain.
- 5) If the storm passes over Oceana at some time before it passes over Lofton, then which one of the following must be true?
- (A) The third town the storm passes over receives only rain.
- (B) The fourth town the storm passes over receives only rain.
- (C) The fourth town the storm passes over receives hail and rain.
- (D) The fifth town the storm passes over receives only rain.
- (E) The fifth town the storm passes over receives hail and rain.
- **9.** A study sponsored by a consumer group tests exactly five of seven cold medications -F, G, H, I.
- K, L, and M and ranks the medications tested from first (best) to fifth (worst). There are no ties.

The following conditions must apply:

L ranks second.

Either F or G ranks first.

I is tested.

H ranks better than G if both are tested.

K ranks better than F if both are tested.

If M is tested, both F and H are also tested.

1) Which one of the following could be the five cold medications that the study ranks, listed from

first to fifth?

- (A) F, I, L, H, G
- (B) F, L, G, H, M
- (C) F, L, I, H, M
- (D) F, L, I, H, M
- (E) F, L, K, I, G
- 2) Which one of the following could be true of the study?
- (A) G ranks better than M.
- (B) H ranks better than F.
- (C) I ranks better than F.
- (D) K ranks better than G.
- (E) M ranks better than G.
- 3) Which one of the following cold medications must be among those tested in the study?
- (A) F
- (B) G
- (C) H
- (D) K
- (E) M
- 4) Which one of the following is a complete and accurate list of the cold medications any one of which could be the cold medication ranked fifth?
- (A) F, G, H, M
- (B) G, H, I, M
- (C) G, H, L, M
- (D) F, G, H, I, K
- (E) F, G, H, I, M
- 5) If I ranks third, each of the following could also be true of the study EXCEPT:
- (A) M ranks better than H.
- (B) K ranks better than G.
- (C) I ranks better than F.

- (D) H ranks better than M.
- (E) G ranks better than K.
- 10. At each of six consecutive stops -1,2,3,4,5, and 6 that a traveler must make in that order as part of a trip, she can choose one from among exactly four airlines L, M, N, and O on which to

continue. Her choices must conform to the following constraints:

Whichever airline she chooses at a stop, she chooses one of the other airlines at the next stop.

She chooses the same airline at stop 1 as she does at stop 6.

She chooses the same airline at stop 2 as she does at stop 4.

Whenever she chooses either L or M at a stop, she does not choose N at the next stop.

At stop 5, she chooses N or O.

1) Which one of the following could be an accurate list of the airlines the traveler chooses at each

stop, in order from 1 through 6?

- (A) L, M, M, L, O, L
- (B) M, L, O, M, O, M
- (C) M, N, O, N, O, M
- (D) M, O, N, O, N, M
- (E) O, M, L, M, O, N
- 2) If the traveler chooses N at stop 5, which one of the following could be an accurate list of the airlines she chooses at stops 1,2, and 3, respectively?
- (A) L, M, N
- (B) L, O, N
- (C) M, L, N
- (D) M, L, O
- (E) N, O, N
- 3) If the only airlines the traveler chooses for the trip are M, N, and O, and she chooses O at stop 5, then the airlines she chooses at stops 1,2, and 3, must be, respectively,
- (A) M, O, and N
- (B) M, N, and O
- (C) N, M, and O
- (D) N, O, and M
- (E) O, M, and N
- 4) Which one of the following CANNOT be an accurate list of the airlines the traveler chooses at stops 1 and 2, respectively?
- (A) L, M
- (B) L, O
- (C) M, L
- (D) M, O
- (E) O, N
- 5) If the traveler chooses O at stop 2, which one of the following could be an accurate list of the airlines she chooses at stops 5 and 6, respectively?
- (A) M, N
- (B) N, L
- (C) N, O
- (D) O, L
- (E) O, N
- 11. Each of the seven members of the board of directors Guzman, Hawking, Lepp, Miyauchi, Upchurch, Wharton, and Zhu serves on exactly one of two committees the finance committee or

the incentives committee. Only board members serve on these committees. Committee membership

is consistent with the following conditions:

If Guzman serves on the finance committee, then Hawking serves on the incentives committee.

If Lepp serves on the finance committee, then Miyauchi and Upchurch both serve on the incentives committee.

Wharton serves on a different committee from the one on which Zhu serves.

Upchurch serves on a different committee from the one on which Guzman serves.

If Zhu serves on the finance committee, so does Hawking.

1) Which one of the following could be a complete and accurate list of the members of the finance

committee?

- (A) Guzman, Hawking, Miyauchi, Wharton
- (B) Guzman, Lepp, Zhu
- (C) Hawking, Miyauchi, Zhu
- (D) Hawking, Upchurch, Wharton, Zhu
- (E) Miyauchi, Upchurch, Wharton
- 2) Which one of the following pairs of board members CANNOT both serve on the incentives committee?
- (A) Guzman and Hawking
- (B) Guzman and Wharton
- (C) Hawking and Wharton
- (D) Miyauchi and Upchurch
- (E) Miyauchi and Wharton
- 3) What is the maximum number of members on the finance committee?
- (A) two
- (B) three
- (C) four
- (D) five
- (E) six
- 4) If Miyauchi and Wharton both serve on the finance committee, then which one of the following

could be true?

- (A) Guzman and Lepp both serve on the finance committee.
- (B) Guzman and Upchurch both serve on the incentives committee.
- (C) Hawking and Zhu both serve on the finance committee.
- (D) Lepp and Upchurch both serve on the incentives committee.
- (E) Zhu and Upchurch both serve on the finance committee.
- 5) If Guzman serves on the incentives committee, then which one of the following must be true?
- (A) Hawking serves on the finance committee.
- (B) Lepp serves on the incentives committee.
- (C) Miyauchi serves on the finance committee.
- (D) Wharton serves on the incentives committee.
- (E) Zhu serves on the finance committee.
- 12. An album contains photographs picturing seven friends: Raimundo, Selma, Ty, Umiko, Wendy,

Yakira, Zack. The friends appear either alone or in groups with one another, in accordance with the following:

Wendy appears in every photograph that Selma appears in.

Selma appears in every photograph that Umiko appears in.

Raimundo appears in every photograph that Yakira does not appear in.

Neither Ty nor Raimundo appears in any photograph that Wendy appears in.

- 1) Which one of the following could be a complete and accurate list of the friends who appear together in a photograph?
- (A) Raimundo, Selma, Ty, Wendy
- (B) Raimundo, Ty, Yakira, Zack
- (C) Raimundo, Wendy, Yakira, Zack
- (D) Selma, Ty, Umiko, Yakira
- (E) Selma, Ty, Umiko, Zack
- 2) If Ty and Zack appear together in a photograph, then which one of the following must be true?
- (A) Selma also appears in the photograph.
- (B) Yakira also appears in the photograph.
- (C) Wendy also appears in the photograph.
- (D) Raimundo does not appear in the photograph.
- (E) Umiko does not appear in the photograph.
- 3) What is the maximum number of friends who could appear in a photograph that Yakira does not

appear in?

- (A) six
- (B) five
- (C) four
- (D) three
- (E) two
- 4) If Umiko and Zack appear together in a photograph, then exactly how many of the other friends

must also appear in that photograph?

- (A) four
- (B) three
- (C) two
- (D) one
- (E) zero
- 5) If exactly three friends appear together in a photograph, then each of the following could be true EXCEPT:
- (A) Selma and Zack both appear in the photograph.
- (B) Ty and Yakira both appear in the photograph.
- (C) Wendy and Selma both appear in the photograph.
- (D) Yakira and Zack both appear in the photograph.
- (E) Zack and Raimundo both appear in the photograph.
- **13.** A summer program offers at least one of the following seven courses: geography, history, literature, mathematics, psychology, sociology, zoology. The following restrictions on the program

must apply:

If mathematics is offered, then either literature or sociology (but not both) is offered.

If literature is offered, then geography is also offered but psychology is not.

If sociology is offered, then psychology is also offered but zoology is not.

If geography is offered, then both history and zoology are also offered.

- 1) Which one of the following could be a complete and accurate list of the courses offered by the summer program?
- (A) history, psychology
- (B) geography, history, literature
- (C) history, mathematics, psychology
- (D) literature, mathematics, psychology

- (E) history, literature, mathematics, sociology
- 2) If the summer program offers literature, then which one of the following could be true?
- (A) Sociology is offered.
- (B) History is not offered.
- (C) Mathematics is not offered.
- (D) A total of two courses are offered.
- (E) Zoology is not offered.
- 3) If history is not offered by the summer program, then which one of the following is another course that CANNOT be offered?
- (A) literature
- (B) mathematics
- (C) psychology
- (D) sociology
- (E) zoology
- 4) If the summer program offers mathematics, then which one of the following must be true?
- (A) Literature is offered.
- (B) Psychology is offered.
- (C) Sociology is offered.
- (D) At least three courses are offered.
- (E) At most four courses are offered.
- 5) Which one of the following must be false of the summer program?
- (A) Both geography and psychology are offered.
- (B) Both geography and mathematics are offered.
- (C) Both psychology and mathematics are offered.
- (D) Both history and mathematics are offered.
- (E) Both geography and sociology are offered.
- **14.** A panel of five scientists will be formed. The panelists will be selected from among three botanists -F, G, and H three chemists -K, L, and M and three zoologists -P, Q, and R. Selection is governed by the following conditions:

The panel must include at least one scientist of each of the three types.

If more than one botanist is selected, then at most one zoologist is selected.

F and K cannot both be selected.

K and M cannot both be selected.

If M is selected, both P and R must be selected.

- 1) Which one of the following is an acceptable selection of scientists for the panel?
- (A) F, G, K, P, Q
- (B) G, H, K, L, M
- (C) G, H, K, L, R
- (D) H, K, M, P, R
- (E) H, L, M, P, Q
- 2) If M is the only chemist selected for the panel, which one of the following must be true?
- (A) F and G are both selected.
- (B) G and H are both selected.
- (C) H and P are both selected.
- (D) F, G, and H are all selected.
- (E) P, Q, and R are all selected.
- 3) If four of the scientists selected are F, L, Q, and R, which one of the following must be the fifth

scientist selected?

- (A) G
- (B) H

- (C) K
- (D) M
- (E) P
- 4) If P is the only zoologist selected, which one of the following must be true?
- (A) If K is selected, G cannot be selected.
- (B) If L is selected, F cannot be selected.
- (C) If exactly one chemist is selected, it must be K.
- (D) If exactly two chemists are selected, F cannot be selected.
- (E) If exactly two chemists are selected, G cannot be selected.
- 5) If both G and H are among the scientists selected, then the panel must include either
- (A) F or else K
- (B) F or else M
- (C) K or else M
- (D) M or else Q
- (E) P or else Q

## **15.** The Export Alliance consists of exactly three nations:

Nation X, Nation Y, and Nation Z. Each nation in the Alliance exports exactly two of the following

five crops: oranges, rice, soybeans, tea, and wheat. Each of these crops is exported by at least one

of the nations in the Alliance. The following conditions hold:

None of the nations exports both wheat and oranges.

Nation X exports soybeans if, but only if, Nation Y does also.

If Nation Y exports rice, then Nations X and Z both export tea.

Nation Y does not export any crop that Nation Z exports.

- 1) Which one of the following could be an accurate list, for each of the nations, of the crops it exports?
- (A) Nation X: oranges, rice; Nation Y: oranges, tea; Nation Z: soybeans, wheat
- (B) Nation X: oranges, tea; Nation Y: oranges, rice; Nation Z: soybeans, wheat
- (C) Nation X: oranges, wheat; Nation Y: oranges, tea; Nation Z: rice, soybeans
- (D) Nation X: rice, wheat; Nation Y: oranges, tea; Nation Z: oranges, soybeans
- (E) Nation X: soybeans, rice; Nation Y: oranges, tea; Nation Z: soybeans, wheat
- 2) If Nation X exports soybeans and tea, then which one of the following could be true?
- (A) Nation Y exports oranges.
- (B) Nation Y exports rice.
- (C) Nation Y exports tea.
- (D) Nation Z exports soybeans.
- (E) Nation Z exports tea.
- 3) If Nation Z exports tea and wheat, then which one of the following must be true?
- (A) Nation X exports oranges.
- (B) Nation X exports tea.
- (C) Nation X exports wheat.
- (D) Nation Y exports rice.
- (E) Nation Y exports soybeans.
- 4) It CANNOT be the case that both Nation X and Nation Z export which one of the following crops?
- (A) oranges
- (B) rice
- (C) soybeans
- (D) tea
- (E) wheat

- 5) Which one of the following pairs CANNOT be the two crops that Nation Y exports?
- (A) oranges and rice
- (B) oranges and soybeans
- (C) rice and tea
- (D) rice and wheat
- (E) soybeans and wheat
- **16.** Each side of four cassette tapes Tapes 1 through 4 contains exactly one of the following four

genres: folk, hip-hop, jazz, and rock. The following conditions must apply:

Each genre is found on exactly two of the eight sides.

Tape 1 has jazz on at least one side, but neither hip-hop nor rock.

Tape 2 has no jazz.

Folk is not on any tape numbered exactly one higher than a tape that has any rock on it.

- 1) Which one of the following could be an accurate matching of tapes with the musical genres found on them?
- (A) Tape 1: folk and jazz; Tape 2: folk and jazz; Tape 3: hip-hop and rock; Tape 4: hip-hop and rock
- (B) Tape 1: folk and jazz; Tape 2: folk and rock; Tape 3: hip-hop and jazz; Tape 4: hip-hop and rock
- (C) Tape 1: folk and jazz; Tape 2: folk and rock; Tape 3: two sides of jazz; Tape 4: two sides of hip-hop
- (D) Tape 1: hip-hop and jazz; Tape 2: folk and hip-hop; Tape 3: folk and jazz; Tape 4: two sides of rock
- (E) Tape 1: two sides of jazz; Tape 2: folk and rock; Tape 3: hip-hop and rock; Tape 4: folk and hip-hop
- 2) Which one of the following must be true?
- (A) If Tape 1 has two sides of jazz, Tape 4 has at least one side of rock.
- (B) If Tape 2 has two sides of folk, Tape 3 has at least one side of hip-hop.
- (C) If Tape 2 has two sides of rock, Tape 4 has at least one side of folk.
- (D) If Tape 3 has two sides of folk, Tape 2 has at least one side of jazz.
- (E) If Tape 4 has two sides of hip-hop, Tape 3 has at least one side of folk.
- 3) Which one of the following could be true?
- (A) Tape 1 has jazz on both sides while Tape 4 has folk and hip-hop.
- (B) Tape 2 has hip-hop on one side while Tape 3 has hip-hop and jazz.
- (C) Tape 3 has folk on both sides while Tape 4 has jazz and rock.
- (D) Tape 3 has jazz on one side while Tape 4 has folk on both sides.
- (E) Tapes 2 and 3 each have jazz on one side.
- 4) Which one of the following could be true?
- (A) Tape 1 has two sides of folk.
- (B) Tape 2 has both hip-hop and jazz.
- (C) Tape 4 has both folk and rock.
- (D) Tapes 1 and 4 each have a side of hip-hop.
- (E) Tapes 3 and 4 each have a side of folk.
- 5) Which one of the following CANNOT be true?
- (A) Tape 2 has rock on both sides while Tape 3 has hip-hop on both sides.
- (B) Tape 3 has rock on both sides while Tape 2 has hip-hop on both sides.
- (C) Tape 3 has rock on both sides while Tape 4 has hip-hop on both sides.
- (D) Tape 4 has rock on both sides while Tape 2 has hip-hop on both sides.
- (E) Tape 4 has rock on both sides while Tape 3 has hip-hop on both sides.
- 17. For the school paper, five students Jiang, Kramer, Lopez, Megregian, and O'Neill each

review one or more of exactly three plays: *Sunset, Tamerlane*, and *Undulation*, but do not review any other plays. The following conditions must apply:

Kramer and Lopez each review fewer of the plays than Megregian.

Neither Lopez nor Megregian reviews any play Jiang reviews.

Kramer and O'Neill both review Tamerlane.

Exactly two of the students review exactly the same play or plays as each other.

- 1) Which one of the following could be an accurate and complete list of the students who review only *Sunset*?
- (A) Lopez
- (B) O'Neill
- (C) Jiang, Lopez
- (D) Kramer, O'Neill
- (E) Lopez, Megregian
- 2) Which one of the following must be true?
- (A) Jiang reviews more of the plays than Lopez does.
- (B) Megregian reviews more of the plays than Jiang does.
- (C) Megregian reviews more of the plays than O'Neill does.
- (D) O'Neill reviews more of the plays than Jiang does.
- (E) O'Neill reviews more of the plays than Kramer does.
- 3) If exactly three of the students review *Undulation*, which one of the following could be true?
- (A) Megregian does not review *Undulation*.
- (B) O'Neill does not review Undulation.
- (C) Jiang reviews *Undulation*.
- (D) Lopez reviews Tamerlane.
- (E) O'Neill reviews Sunset.
- 4) Which one of the following could be an accurate and complete list of the students who review *Tamerlane*?
- (A) Jiang, Kramer
- (B) Kramer, O'Neill
- (C) Kramer, Lopez, O'Neill
- (D) Kramer, Megregian, O'Neill
- (E) Lopez, Megregian, O'Neill
- 5) If Jiang does not review *Tamerlane*, then which one of the following must be true?
- (A) Jiang reviews Sunset.
- (B) Lopez reviews *Undulation*.
- (C) Megregian reviews Sunset.
- (D) Megregian reviews Tamerlane.
- (E) O'Neill reviews Undulation.
- **18.** Each of exactly six lunch trucks sells a different one of six kinds of food: falafel, hot dogs, ice

cream, pitas, salad, or tacos. Each truck serves one or more of exactly three office buildings: X, Y,

or Z. The following conditions apply:

The falafel truck, the hot dog truck, and exactly one other truck each serve Y.

The falafel truck serves exactly two of the office buildings.

The ice cream truck serves more of the office buildings than the salad truck.

The taco truck does not serve Y.

The falafel truck does not serve any office building that the pita truck serves.

The taco truck serves two office buildings that are also served by the ice cream truck.

1) Which one of the following could be a complete and accurate list of each of the office buildings that the falafel truck serves?

- (A) X
- (B) X, Z
- (C) X, Y, Z
- (D) Y, Z
- (E)Z
- 2) For which one of the following pairs of trucks must it be the case that at least one of the office buildings is served by both of the trucks?
- (A) the hot dog truck and the pita truck
- (B) the hot dog truck and the taco truck
- (C) the ice cream truck and the pita truck
- (D) the ice cream truck and the salad truck
- (E) the salad truck and the taco truck
- 3) If the ice cream truck serves fewer of the office buildings than the hot dog truck, then which one of the following is a pair of lunch trucks that must serve exactly the same buildings as each other?
- (A) the falafel truck and the hot dog truck
- (B) the falafel truck and the salad truck
- (C) the ice cream truck and the pita truck
- (D) the ice cream truck and the salad truck
- (E) the ice cream truck and the taco truck
- 4) Which one of the following could be a complete and accurate list of the lunch trucks, each of which serves all three of the office buildings?
- (A) the hot dog truck, the ice cream truck
- (B) the hot dog truck, the salad truck
- (C) the ice cream truck, the taco truck
- (D) the hot dog truck, the ice cream truck, the pita truck
- (E) the ice cream truck, the pita truck, the salad truck
- 5) Which one of the following lunch trucks CANNOT serve both X and Z?
- (A) the hot dog truck
- (B) the ice cream truck
- (C) the pita truck
- (D) the salad truck
- (E) the taco truck
- **19.** In a repair facility there are exactly six technicians: Stacy, Urma, Wim, Xena, Yolanda, and Zane. Each technician repairs machines of at least one of the following three types radios, televisions, and VCRs and no other types. The following conditions apply:

Xena and exactly three other technicians repair radios.

Yolanda repairs both televisions and VCRs.

Stacy does not repair any type of machine that Yolanda repairs.

Zane repairs more types of machines than Yolanda repairs.

Wim does not repair any type of machine that Stacy repairs.

Urma repairs exactly two types of machines.

- 1) For exactly how many of the six technicians is it possible to determine exactly which of the three types of machines each repairs?
- (A) one
- (B) two
- (C) three
- (D) four
- (E) five
- 2) Which one of the following must be true?
- (A) Of the types of machines repaired by Stacy there is exactly one type that Urma also repairs.

- (B) Of the types of machines repaired by Yolanda there is exactly one type that Xena also repairs.
- (C) Of the types of machines repaired by Wim there is exactly one type that Xena also repairs.
- (D) There is more than one type of machine that both Wim and Yolanda repair.
- (E) There is more than one type of machine that both Urma and Wim repair.
- 3) Which one of the following must be false?
- (A) Exactly one of the six technicians repairs exactly one type of machine.
- (B) Exactly two of the six technicians repair exactly one type of machine each.
- (C) Exactly three of the six technicians repair exactly one type of machine each.
- (D) Exactly one of the six technicians repairs exactly two types of machines.
- (E) Exactly three of the six technicians repair exactly two types of machines each.
- 4) Which one of the following pairs of technicians could repair all and only the same types of machines as each other?
- (A) Stacy and Urma
- (B) Urma and Yolanda
- (C) Urma and Xena
- (D) Wim and Xena
- (E) Xena and Yolanda
- 5) Which one of the following must be true?
- (A) There is exactly one type of machine that both Urma and Wim repair.
- (B) There is exactly one type of machine that both Urma and Xena repair.
- (C) There is exactly one type of machine that both Urma and Yolanda repair.
- (D) There is exactly one type of machine that both Wim and Yolanda repair.
- (E) There is exactly one type of machine that both Xena and Yolanda repair.
- **20.** There are exactly five pieces of mail in a mailbox: a flyer, a letter, a magazine, a postcard, and a

survey. Each piece of mail is addressed to exactly one of three housemates: Georgette, Jana, or Rini. Each housemate has at least one of the pieces of mail addressed to her. The following conditions must apply:

Neither the letter nor the magazine is addressed to Georgette.

If the letter is addressed to Rini, then the postcard is addressed to Jana.

The housemate to whom the flyer is addressed has at least one of the other pieces of mail addressed to her as well.

1) Which one of the following could be a complete and accurate matching of the pieces of mail to

the housemates to whom they are addressed?

(A) Georgette: the flyer, the survey

Jana: the letter Rini: the magazine

(B) Georgette: the flyer, the postcard

Jana: the letter, the magazine

Rini: the survey

(C) Georgette: the magazine, the survey

Jana: the flyer, the letter

Rini: the postcard

(D) Georgette: the survey Jana: the flyer, the magazine Rini: the letter, the postcard (E) Georgette: the survey

Jana: the letter, the magazine, the postcard

Rini: the flyer

- 2) Which one of the following is a complete and accurate list of the pieces of mail, any one of which could be the only piece of mail addressed to Jana?
- (A) the postcard
- (B) the letter, the postcard
- (C) the letter, the survey
- (D) the magazine, the survey
- (E) the letter, the magazine, the postcard
- 3) Which one of the following CANNOT be a complete and accurate list of the pieces of mail addressed to Jana?
- (A) the flyer, the letter, the magazine
- (B) the flyer, the letter, the postcard
- (C) the flyer, the letter, the survey
- (D) the flyer, the magazine, the postcard
- (E) the flyer, the magazine, the survey
- 4) Which one of the following CANNOT be a complete and accurate list of the pieces of mail addressed to Rini?
- (A) the magazine, the postcard
- (B) the letter, the survey
- (C) the letter, the magazine
- (D) the flyer, the magazine
- (E) the flyer, the letter
- 5) If the magazine and the survey are both addressed to the same housemate, then which one of the

following could be true?

- (A) The survey is addressed to Georgette.
- (B) The postcard is addressed to Rini.
- (C) The magazine is addressed to Jana.
- (D) The letter is addressed to Rini.
- (E) The flyer is addressed to Jana.
- **21.** Exactly six of an artist's paintings, entitled *Quarterion, Redemption, Sipapu, Tesseract, Vale*, and *Zelkova*, are sold at auction. Three of the paintings are sold to a museum, and three are sold to a

private collector. Two of the paintings are from the artist's first (earliest) period, two are from her second period, and two are from her third (most recent) period. The private collector and the museum each buy one painting from each period. The following conditions hold:

*Sipapu*, which is sold to the private collector, is from an earlier period than *Zelkova*, which is sold to the museum.

Quarterion is not from an earlier period than Tesseract.

*Vale* is from the artist's second period.

1) Which one of the following could be an accurate list of the paintings bought by the museum and

the private collector, listed in order of the paintings' periods, from first to third?

(A) museum: Quarterion, Vale, Zelkova

private collector: Redemption, Sipapu, Tesseract

(B) museum: Redemption, Zelkova, Quarterion

private collector: Sipapu, Vale, Tesseract

(C) museum: Sipapu, Zelkova, Quarterion

private collector: Tesseract, Vale, Redemption

(D) museum: Tesseract, Quarterion, Zelkova

private collector: Sipapu, Redemption, Vale

(E) museum: Zelkova, Tesseract, Redemption

private collector: Sipapu, Vale, Quarterion

- 2) If *Sipapu* is from the artist's second period, which one of the following could be two of the three paintings bought by the private collector?
- (A) Quarterion and Zelkova
- (B) Redemption and Tesseract
- (C) Redemption and Vale
- (D) Redemption and Zelkova
- (E) Tesseract and Zelkova
- 3) Which one of the following is a complete and accurate list of the paintings, any one of which could be the painting from the artist's first period that is sold to the private collector?
- (A) Quarterion, Redemption
- (B) Redemption, Sipapu
- (C) Quarterion, Sipapu, Tesseract
- (D) Quarterion, Redemption, Sipapu, Tesseract
- (E) Redemption, Sipapu, Tesseract, Zelkova
- 4) If *Sipapu* is from the artist's second period, then which one of the following paintings could be from the period immediately preceding *Quarterion*'s period and be sold to the same buyer as *Quarterion*?
- (A) Redemption
- (B) Sipapu
- (C) Tesseract
- (D) Vale
- (E) Zelkova
- 5) If Zelkova is sold to the same buyer as Tesseract and is from the period immediately preceding

Tesseract's period, then which one of the following must be true?

- (A) Quarterion is sold to the museum.
- (B) Quarterion is from the artist's third period.
- (C) *Redemption* is sold to the private collector.
- (D) *Redemption* is from the artist's third period.
- (E) *Redemption* is sold to the same buyer as *Vale*.
- **22.** Maggie's Deli is open exactly five days every week: Monday through Friday. Its staff, each of

whom works on at least one day each week, consists of exactly six people-Janice, Kevin, Nan, Ophelia, Paul, and Seymour. Exactly three of them – Janice, Nan, and Paul – are supervisors.

The

deli's staffing is consistent with the following:

Each day's staff consists of exactly two people, at least one of whom is a supervisor.

Tuesday's and Wednesday's staffs both include Ophelia.

Of the days Nan works each week, at least two are consecutive.

Seymour does not work on any day before the first day Paul works that week.

Any day on which Kevin works is the first day during the week that some other staff member works.

1) Which one of the following could be an accurate staffing schedule?

(A) Monday: Janice, Kevin Tuesday: Nan, Ophelia Wednesday: Nan, Paul Thursday: Kevin, Paul Friday: Janice, Seymour (B) Monday: Paul, Seymour Tuesday: Ophelia, Paul Wednesday: Nan, Ophelia Thursday: Kevin, Nan Friday: Janice, Seymour (C) Monday: Janice, Kevin Tuesday: Nan, Ophelia Wednesday: Nan, Ophelia Thursday: Kevin, Paul Friday: Paul, Seymour (D) Monday: Janice, Kevin Tuesday: Janice, Ophelia Wednesday: Nan, Ophelia Thursday: Nan, Seymour Friday: Kevin, Paul

(E) Monday: Paul, Seymour Tuesday: Ophelia, Paul Wednesday: Nan, Ophelia Thursday: Janice, Kevin Friday: Nan, Paul

- 2) If Kevin and Paul work Thursday, who must work Friday?
- (A) Janice
- (B) Kevin
- (C) Nan
- (D) Paul
- (E) Seymour
- 3) Each of the following could be true EXCEPT:
- (A) Janice works Monday and Tuesday.
- (B) Kevin and Paul work Friday.
- (C) Seymour works Monday and Friday.
- (D) Janice and Kevin work Thursday.
- (E) Paul works Monday and Friday.
- 4) Which one of the following CANNOT be the pair of staff that works Monday?
- (A) Janice and Seymour
- (B) Kevin and Paul
- (C) Paul and Seymour
- (D) Nan and Ophelia
- (E) Janice and Nan
- 5) Which one of the following could be true?
- (A) Nan works Wednesday and Friday only.
- (B) Seymour works Monday and Paul works Tuesday.
- (C) Kevin works Monday, Wednesday, and Friday.
- (D) Nan works Wednesday with Ophelia and Thursday with Kevin.
- (E) Ophelia and Kevin work Tuesday.
- **23.** Three folk groups Glenside, Hilltopper, Levon and three rock groups Peasant, Query, Tinhead each perform on one of two stages, north or south. Each stage has three two-hour performances: north at 6, 8, and 10; south at 8, 10, and 12. Each group performs individually and exactly once, consistent with the following conditions:

Peasant performs at 6 or 12.

Glenside performs at some time before Hilltopper.

If any rock group performs at 10, no folk group does.

Levon and Tinhead perform on different stages.

Query performs immediately after a folk group, though not necessarily on the same stage.

- 1) Which one of the following could be a complete and accurate ordering of performances on the north stage, from first to last?
- (A) Glenside, Levon, Query
- (B) Glenside, Query, Hilltopper
- (C) Hilltopper, Query, Peasant
- (D) Peasant, Levon, Tinhead
- (E) Peasant, Query, Levon
- 2) Which one of the following groups must perform earlier than 10?
- (A) Glenside
- (B) Hilltopper
- (C) Levon
- (D) Peasant
- (E) Tinhead
- 3) Which one of the following groups could perform at 6?
- (A) Glenside
- (B) Hilltopper
- (C) Levon
- (D) Query
- (E) Tinhead
- 4) If Query performs at 12, then which one of the following could be an accurate ordering of the performances on the north stage, from first to last?
- (A) Glenside, Levon, Query
- (B) Peasant, Hilltopper, Tinhead
- (C) Peasant, Tinhead, Glenside
- (D) Peasant, Tinhead, Hilltopper
- (E) Peasant, Tinhead, Levon
- 5) If a rock group performs at 10, then which one of the following must be true?
- (A) A folk group performs at 6.
- (B) A folk group performs at 8.
- (C) A folk group performs at 12.
- (D) A rock group performs at 8.
- (E) A rock group performs at 12.
- **24.** A child eating alphabet soup notices that the only letters left in her bowl are one each of these six letters: T, U, W, X, Y, and Z. She plays a game with the remaining letters, eating them in the next three spoonfuls in accord with certain rules. Each of the six letters must be in exactly one of the next three spoonfuls, and each of the spoonfuls must have at least one and at most three of the

letters. In addition, she obeys the following restrictions:

The U is in a later spoonful than the T.

The U is not in a later spoonful than the X.

The Y is in a later spoonful than the W.

The U is in the same spoonful as either the Y or the Z, but not both.

1) Which one of the following could be an accurate list of the spoonfuls and the letters in each of them?

(A) first: Y second: T, W third: U, X, Z (B) first: T, W second: U, X, Y

third: Z (C) first: T second: U, Z third: W, X, Y (D) first: T, U, Z

second: W third: X, Y (E) first: W second: T, X, Z third: U, Y

- 2) If the Y is the only letter in one of the spoonfuls, then which one of the following could be true?
- (A) The Y is in the first spoonful.
- (B) The Z is in the first spoonful.
- (C) The T is in the second spoonful.
- (D) The X is in the second spoonful.
- (E) The W is in the third spoonful.
- 3) If the Z is in the first spoonful, then which one of the following must be true?
- (A) The T is in the second spoonful.
- (B) The U is in the third spoonful.
- (C) The W is in the first spoonful.
- (D) The W is in the second spoonful.
- (E) The X is in the third spoonful.
- 4) Which one of the following is a complete list of letters, any one of which could be the only letter in the first spoonful?
- (A) T
- (B) T, W
- (C) T, X
- (D) T, W, Z
- (E) T, X, W, Z
- 5) If the T is in the second spoonful, then which one of the following could be true?
- (A) Exactly two letters are in the first spoonful.
- (B) Exactly three letters are in the first spoonful.
- (C) Exactly three letters are in the second spoonful.
- (D) Exactly one letter is in the third spoonful.
- (E) Exactly two letters are in the third spoonful.
- **25.** 1) Because the statement "all gray rabbits are rabbits" is true, it follows by analogy that the statement "all suspected criminals are criminals" is also true.

The reasoning above is flawed because it fails to recognize that

- (A) the relationship between being a criminal and being a rabbit is not of the same kind as that between being suspected and being gray
- (B) the relationship between being suspected and being a rabbit is not of the same kind as that between being gray and being a criminal
- (C) the relationship between being a gray rabbit and being a rabbit is not of the same kind as that between being a suspected criminal and being a criminal
- (D) not all rabbits are gray
- (E) not all criminals are suspected
- 2) Patti: Most parents are eager for their preschoolers to learn as much as possible. However, instead of providing general opportunities for their children to learn, parents often direct their children's learning to their own personal concerns. Because children have a natural curiosity and thirst for knowledge, they learn an enormous amount simply through growing and adapting to the world. Therefore, this type of directed learning is unlikely to improve a child's preschool education.

Which one of the following is an assumption on which Patti's argument depends?

- (A) Parents who use the type of directed learning in question have been exposed to misguided psychological theories about children.
- (B) Children will have difficulty adapting to the world without the unique help and guidance of their parents.
- (C) The type of directed learning in question is likely to enhance the general opportunities for children to learn.
- (D) The type of directed learning in question is not a necessary part of the process of growing and adapting to the world.
- (E) General opportunities to learn are not typical of the early years of formal education.
- 3) In an experiment, scientists changed a single gene in cloned flies of a certain species. These cloned flies lacked the eye cells that give flies ultraviolet vision, even though cloned siblings with unaltered, otherwise identical genes had normal vision. Thus, scientists have shown that flies of this species lacking ultraviolet vision must have some damage to this gene.

Which one of the following is an assumption required by the argument?

- (A) The relationship between genes and vision in flies is well understood.
- (B) No other gene in the flies in the experiment is required for the formation of the ultraviolet vision cells.
- (C) Ultraviolet vision is a trait found in all species of flies.
- (D) The gene change had no effect on the flies other than the lack of ultraviolet vision cells.
- (E) Ultraviolet vision is an environmentally influenced trait in the species of flies in the experiment.
- 4) Robin: When a region's economy is faltering, many people lose their jobs. As a result, spending on consumer goods declines, leading in turn to more lost jobs and a worsening of the economy. Eventually, the economy becomes so bad that prices collapse; the lower prices encourage people to increase spending on consumer goods, and this higher spending results in economic improvement.

Terry: People cannot increase their spending if they have no jobs and no money for anything other than basic necessities, so price collapses cannot lead to economic improvement.

Which one of the following, if true, most undermines Terry's objection to Robin's analysis?

- (A) Companies hire more workers after the economy starts to improve again, and many newly hired workers then make long-deferred purchases.
- (B) Even when economic conditions are worsening, consumers realize that the economy will eventually improve.
- (C) Even people who do not lose their jobs spend less in bad economic times and thus have savings available to spend when prices collapse.
- (D) People who have lost their jobs must continue to buy some basic goods such as food, even during bad economic times.
- (E) The prices of some consumer goods remain stable, even during a general price collapse.
- 5) Health officials now recommend that people reduce their intake of foods that are high in cholesterol, such as red meat. The recent decline in the total consumption of beef indicates that many people are following this recommendation. But restaurants specializing in steak are flourishing despite an overall decline in the restaurant industry. So clearly there still are a lot of people completely ignoring the health recommendation.

The argument is vulnerable to criticism on which one of the following grounds?

- (A) It neglects to consider whether restaurants that specialize in steak try to attract customers by offering steak dinners at low prices.
- (B) It assumes without warrant that people who eat steak at steak restaurants do not need to reduce their intake of foods that are high in cholesterol.
- (C) It presupposes that the popularity of restaurants that specialize in steaks is a result of a decrease in the price of beef.
- (D) It mistakes the correlation of the decline in beef consumption and the decline in the

restaurant industry for a causal relation.

- (E) It fails to consider whether the people who patronize steak restaurants have heeded the health officials by reducing their cholesterol intake in their at-home diets.
- **26.** 1) If violations of any of a society's explicit rules routinely go unpunished, then that society's people will be left without moral guidance. Because people who lack moral guidance will act in many different ways, chaos results. Thus, a society ought never to allow any of its explicit rules to be broken with impunity.

The reasoning in the argument is most vulnerable to criticism on the grounds that the argument (A) takes for granted that a society will avoid chaos as long as none of its explicit rules are routinely violated with impunity

- (B) fails to consider that the violated rules might have been made to prevent problems that would not arise even if the rules were removed
- (C) infers, from the claim that the violation of some particular rules will lead to chaos, that the violation of any rule will lead to chaos
- (D) confuses the routine nonpunishment of violations of a rule with sometimes not punishing violations of the rule
- (E) takes for granted that all of a society's explicit rules result in equally serious consequences when broken
- 2) Ethicist: In general it is wrong to use medical treatments and procedures of an experimental nature without the patient's consent, because the patient has a right to reject or accept a treatment on the basis of full information about all the available options. But knowledge of the best treatment for emergency conditions can be gained only if consent to experimental practices is sometimes bypassed in medical emergencies. So some restricted nonconsensual medical research should be allowed.

Which one of the following is an assumption required by the ethicist's argument?

- (A) Doctors often do not know what is best for their own patients in emergency situations.
- (B) If patients knew that experimental treatments were being used in medical emergencies, it could adversely affect the outcome of that research.
- (C) Nonconsensual medical research should be allowed only if the research is highly likely to yield results that will benefit the patient.
- (D) In cases where the best treatment option is unknown, a patient ceases to have the right to know the treatment plan and the alternatives.
- (E) The right of patients to informed consent is outweighed in at least some medical emergencies by the possible benefits of research conducted without their consent.
- 3) Gas station owner: Increased fuel efficiency reduces air pollution and dependence on imported oil, which has led some people to suggest that automobile manufacturers should make cars smaller to increase their fuel efficiency. But smaller cars are more likely to be seriously damaged in collisions and provide less protection for their occupants. Greater fuel efficiency is not worth the added risk to human lives; therefore, manufacturers should not seek to increase fuel efficiency.

The reasoning in the gas station owner's argument is flawed because the argument

- (A) presumes, without providing justification, that it would be impossible to reduce the likelihood of dangerous accidents for small cars
- (B) concludes, on the basis of the claim that one means to an end is unacceptable, that the end should not be pursued
- (C) draws a conclusion about what should be done from premises all of which are about factual matters only
- (D) presupposes the truth of what it sets out to prove
- (E) presumes, without providing justification, that increasing fuel efficiency is the only way to reduce air pollution
- 4) In Western economies, more energy is used to operate buildings than to operate

transportation.

Much of the decline in energy consumption since the oil crisis of 1973 is due to more efficient use of energy in homes and offices. New building technologies, which make lighting, heating, and ventilation systems more efficient, have cut billions of dollars from energy bills in the West. Since energy savings from these efficiencies save several billion dollars per year today, we can conclude that 50 to 100 years from now they will save more than \$200 billion per year (calculated in current dollars).

On which one of the following assumptions does the argument rely?

- (A) Technology used to make buildings energy efficient will not become prohibitively expensive over the next century.
- (B) Another oil crisis will occur in the next 50 to 100 years.
- (C) Buildings will gradually become a less important consumer of energy than transportation.
- (D) Energy bills in the West will be \$200 billion lower in the next 50 to 100 years.
- (E) Energy-efficient technologies based on new scientific principles will be introduced in the next 50 to 100 years.
- 5) Editorialist: Some people propose that, to raise revenues and encourage conservation, our country's taxes on oil, gasoline, and coal should be increased. Such a tax increase, however, would do more harm than good. By raising energy costs, the tax increase would decrease our competitiveness with other countries. Many families would be unfairly burdened with higher transportation costs. Finally, by reducing the demand for energy, the tax increase would reduce the number of energy production jobs.

Each of the following, if true, would weaken the editorialist's argument EXCEPT:

- (A) The editorialist's country's budget deficit will decrease if the energy tax increase is implemented, thus benefiting the economy.
- (B) Higher gasoline prices tend to lead to a cleaner environment, because people do less nonessential driving.
- (C) The proposed tax increase would be larger for some energy sources than for others.
- (D) Higher gasoline prices will encourage people to carpool, which will reduce individual transportation costs.
- (E) The government would use the increase in tax revenue to create many more jobs than would be lost in the energy production sector.
- 27. 1) Reporter: A team of scientists has recently devised a new test that for the first time accurately

diagnoses autism in children as young as 18 months old. When used to evaluate 16,000 children at their 18-month checkup, the test correctly diagnosed all 10 children later confirmed to be autistic, though it also wrongly identified 2 children as autistic. Autistic children can therefore now benefit much earlier in life than before from the treatments already available.

Which one of the following is an assumption on which the reporter's argument depends?

- (A) No test intended for diagnosing autism at such an early age existed before the new test was devised.
- (B) A diagnostic test that sometimes falsely gives a positive diagnosis can still provide a reasonable basis for treatment decisions.
- (C) The new test can be used to evaluate all children, regardless of the level of development of their verbal skills.
- (D) Those children incorrectly identified as autistic will not be adversely affected by treatments aimed at helping autistic children.
- (E) There was no reliable evidence that autism could affect children so young until the advent of the new test.
- 2) Renting cars from dealerships is less expensive than renting cars from national rental firms. But to take advantage of dealership rates, tourists must determine which local dealerships offer

rentals, and then pay for long taxi rides between the airport and those dealerships. So renting from dealerships rather than national rental firms is generally more worthwhile for local residents than for tourists.

Each of the following, if true, strengthens the argument EXCEPT:

- (A) To encourage future business, many car dealerships drop off and pick up rental cars for local residents at no charge.
- (B) Tourists renting cars from national rental firms almost never need to pay for taxi rides to or from the airport.
- (C) Travel agents generally are unable to inform tourists of which local car dealerships offer rentals.
- (D) Many local residents know of local car dealerships that offer low-priced rentals.
- (E) For local residents, taxi rides to car dealerships from their homes or workplaces are usually no less expensive than taxi rides to national rental firms.
- 3) Paleontologists recently discovered teeth from several woolly mammoths on an isolated Arctic

island where no mammoth fossils had previously been found. The teeth were 25 percent smaller on average than adult mammoth teeth that have been found elsewhere, but they are clearly adult mammoth teeth. Therefore, provided that the teeth are representative of their respective populations, woolly mammoths that lived on the island were smaller on average than those that lived elsewhere.

Which one of the following, if assumed, would allow the conclusion to be properly drawn?

- (A) Neither tooth size nor overall body size is completely uniform among adult members of most species, including woolly mammoths.
- (B) The tooth wear that naturally occurs in many animals over the course of their adult years did not result in a significant change in tooth size among adult woolly mammoths as they aged.
- (C) Unusually small mammoth teeth found at locations other than the island have always been those of juvenile mammoths rather than adult mammoths.
- (D) Tooth size among adult woolly mammoths was always directly proportional to the overall size of those mammoths.
- (E) Woolly mammoths of the kind that lived on the island had the same number and variety of teeth as mammoths that lived elsewhere had.
- 4) Editorialist: Some people argue that highway speed limits should be increased to reflect the actual average speeds of highway drivers, which are currently 10 to 20 percent higher than posted speed limits. Any such increase would greatly decrease highway safety, however; as past experience teaches, higher average highway speeds would result, since even though most drivers who currently violate posted speed limits would obey higher ones, almost all drivers who obey current speed limits would likely increase their speed.

Which one of the following, if true, most seriously weakens the editorialist's argument?

- (A) Some drivers who obey current speed limits would not change their speeds after the introduction of the new speed limits.
- (B) Uniformity of speeds among vehicles is more important for highway safety than is a low average highway speed.
- (C) Most drivers who drive 10 to 20 percent faster than current speed limits have never been involved in a highway accident.
- (D) Some drivers who violate current speed limits would also violate higher speed limits.
- (E) Most drivers who violate current speed limits determine their speeds by what they believe to be safe in the situation.
- 5) Essayist: People once believed that Earth was at the center of the universe, and that, therefore, Earth and its inhabitants were important. We now know that Earth revolves around a star at the outskirts of a spiral arm of one of countless galaxies. Therefore, people's old belief that Earth and its inhabitants were important was false.

A flaw in the essayist's argument is that the argument

- (A) presumes, without providing justification, that only true statements can have good reasons to be believed
- (B) neglects to consider that a statement that was believed for questionable reason may nevertheless have been true
- (C) fails to consider that there can be no reason for disbelieving a true statement
- (D) overlooks the fact that people's perception of their importance changed from century to century
- (E) neglects the fact that people's perception of their importance varies from culture to culture
- **28.** 1) In 1963, a young macaque monkey was observed venturing into a hot spring to retrieve food

which had fallen in. Soon, other macaques began to enter the spring, and over a few years this behavior was adopted by the entire troop. Prior to 1963, no macaques had ever been observed in the hot spring; by 1990, the troop was regularly spending time there during the winters. Thus, these macaques are able to adopt and pass on new patterns of social behavior, and are not complete captives of their genetic heritage.

Which one of the following is an assumption required by the argument above?

- (A) Mutations in the genetic heritage of a certain variety of macaques can occur over a time span as short as a few years or decades.
- (B) New patterns of behavior that emerge in macaque populations over the course of a few years or decades are not necessarily genetically predetermined.
- (C) Only when behaviors become typical among an animal population can we conclude that a genetic alteration has occurred in that variety or species.
- (D) The social behaviors of macaques are completely independent of their genetic heritage.
- (E) The macaques' new pattern of behavior will persist over several generations.
- 2) Economist: Some sociologists argue that because capitalism intrinsically involves competition,

it weakens the ties between the people of a community. Although this may formerly have been true, modern capitalism requires that there be large corporations. Thus, modern capitalism promotes, rather than weakens, communal ties.

Which one of the following is an assumption on which the economist's argument depends?

- (A) Few economic systems are more successful than modern capitalism in fostering communal ties between citizens.
- (B) Modern capitalism is designed primarily to distribute goods and services, not to create communal ties between people.
- (C) Corporations that compete with each other must develop some ties to each other in order to reach agreement on the rules of the competition.
- (D) Having large corporations in a modern capitalist system promotes the strength of communal ties.
- (E) An economic system that does not encourage large corporations will be less successful economically than one that does.
- 3) Consumer advocate: A recent study concluded that top-loading washing machines are superior overall to front-loaders. But front-loaders have the controls and access in front. This is more convenient for wheelchair users, some of whom find it highly inconvenient to remove laundry from top-loaders. So for some consumers front-loaders are superior.

Which one of the following is an assumption upon which the consumer advocate's argument depends?

- (A) For some consumers the convenience of front-loaders outweighs the advantages of toploaders
- in assessing which is superior.
- (B) Washing machines of a given type should be compared only with washing machines of that

type.

- (C) Convenience is the only important factor in determining which type of washing machine is superior.
- (D) Retrieving clothes from a top-loader is convenient for people who do not use wheelchairs.
- (E) Retrieving clothes from front-loaders is inconvenient for people who are not wheelchair users.
- 4) Editorialist: Some people argue that we have an obligation not to cut down trees. However, there can be no obligation to an entity unless that entity has a corresponding right. So if we have an obligation toward trees, then trees have rights. But trees are not the sort of things that can have rights. Therefore, we have no obligation not to cut down trees.

The editorialist's argument depends on assuming which one of the following?

- (A) If an entity has a right to certain treatment, we have an obligation to treat it that way.
- (B) Any entity that has rights also has obligations.
- (C) Only conscious entities are the sort of things that can have rights.
- (D) Avoiding cutting down trees is not an obligation owed to some entity other than trees.
- (E) One does not always have the right to cut down the trees on one's own property.
- 5) When students receive negative criticism generated by computer programs, they are less likely to respond positively than when the critic is a human. Since the acceptance of criticism requires that one respond positively to it, students are more likely to learn from criticism by humans than from criticism by computers.

Which one of the following is an assumption on which the argument depends?

- (A) Students are more likely to learn from criticism that they accept than from criticism they do not accept.
- (B) Unlike human critics, computers are incapable of showing compassion.
- (C) Students always know whether their critics are computers or humans.
- (D) Criticism generated by computers is likely to be less favorable than that produced by human critics in response to the same work.
- (E) Criticism generated by computers is likely to be no more or less favorable than that produced by human critics in response to the same work.
- **29.** 1) Environmentalist: Many people prefer to live in regions of natural beauty. Such regions often

experience an influx of new residents, and a growing population encourages businesses to relocate to those regions. Thus, governmentally mandated environmental protection in regions of natural beauty can help those regions' economies overall, even if such protection harms some older local industries.

Which one of the following is an assumption on which the environmentalist's argument depends?

- (A) Regions of natural beauty typically are beautiful enough to attract new residents only until governmentally mandated environmental protection that damages local industries is imposed.
- (B) The economies of most regions of natural beauty are not based primarily on local industries that would be harmed by governmentally mandated environmental protection.
- (C) If governmentally mandated environmental protection helps a region's economy, it does so primarily by encouraging people to move into that region.
- (D) Voluntary environmental protection usually does not help a region's economy to the degree that governmentally mandated protection does.
- (E) A factor harmful to some older local industries in a region need not discourage other business from relocating to that region.
- 2) The development of new inventions is promoted by the granting of patent rights, which restrict

the right of anyone but the patent holders to profit from these inventions for a specified period.

Without patent rights, anyone could simply copy another's invention; consequently, inventors would have no financial incentive for investing the time and energy required to develop new products. Thus, it is important to continue to grant patent rights, or else no one will engage in original development and consequently no new inventions will be forthcoming.

Which one of the following is an assumption on which the argument depends?

- (A) Financial reward is the only incentive that will be effective in motivating people to develop new inventions.
- (B) When an inventor sells patent rights to a manufacturer, the manufacturer makes less total profit on the invention than the inventor does.
- (C) Any costs incurred by a typical inventor in applying for patent rights are insignificant in comparison to the financial benefit of holding the patent rights.
- (D) Patent rights should be granted only if an inventor's product is not similar to another invention already covered by patent rights.
- (E) The length of a patent right is usually proportional to the costs involved in inventing the product.
- 3) Some argue that because attaining governmental power in democracies requires building majority coalitions, it is a necessary evil that policymakers do not adhere rigorously to principle when dealing with important issues, but rather shift policies as they try to please different constituents at different times. But it is precisely this behavior that allows a democracy to adapt more easily to serve public interests, and thus it is more a benefit than an evil.

Which one of the following is an assumption required by the argument?

- (A) Government policymakers cannot retain power if they ignore any of the various factions of their original winning coalition.
- (B) Democracies are more likely than nondemocratic forms of government to have policymakers who understand the complexity of governmental issues.
- (C) In the formulation of government policy, the advantage conferred by adaptability to diverse or fluctuating public interests outweighs the detriment associated with a lack of strict fidelity to principle.
- (D) In dealing with an important issue, policymakers in a democracy appeal to a principle in dealing with an issue only when that principle has majority support.
- (E) Democracies appear to be more flexible than nondemocratic forms of government, but are not actually so.
- 4) The corpus callosum the thick band of nerve fibers connecting the brain's two hemispheres of a musician is on average larger than that of a nonmusician. The differences in the size of corpora callosa are particularly striking when adult musicians who began training around the age of seven are compared to adult nonmusicians. Therefore, musical training, particularly when it begins at a young age, causes certain anatomic brain changes.

Which one of the following is an assumption on which the argument depends?

- (A) The corpora callosa of musicians, before they started training, do not tend to be larger than those of nonmusicians of the same age.
- (B) Musical training late in life does not cause anatomic changes to the brain.
- (C) For any two musicians whose training began around the age of seven, their corpora callosa are approximately the same size.
- (D) All musicians have larger corpora callosa than do any nonmusicians.
- (E) Adult nonmusicians did not participate in activities when they were children that would have stimulated any growth of the corpus callosum.
- 5) In addition to the labor and materials used to make wine, the reputation of the vineyard where the grapes originate plays a role in determining the price of the finished wine. Therefore, an expensive wine is not always a good wine.

Which one of the following is an assumption on which the argument depends?

(A) The price of a bottle of wine should be a reflection of the wine's quality.

- (B) Price is never an accurate indication of the quality of a bottle of wine.
- (C) The reputation of a vineyard does not always indicate the quality of its wines.
- (D) The reputation of a vineyard generally plays a greater role than the quality of its grapes in determining its wines' prices.
- (E) Wines produced by lesser-known vineyards generally are priced to reflect accurately the wines' quality.
- **30.** 1) Bram Stoker's 1897 novel *Dracula* portrayed vampires the "undead" who roam at night to

suck the blood of living people – as able to turn into bats. As a result of the pervasive influence of this novel, many people now assume that a vampire's being able to turn into a bat is an essential part of vampire myths. However, this assumption is false, for vampire myths existed in Europe long before Stoker's book.

Which one of the following is an assumption on which the argument depends?

- (A) At least one of the European vampire myths that predated Stoker's book did not portray vampires as strictly nocturnal.
- (B) Vampire myths in Central and South America, where real vampire bats are found, portray vampires as able to turn into bats.
- (C) Vampire myths did not exist outside Europe before the publication of Stoker's *Dracula*.
- (D) At least one of the European vampire myths that predated Stoker's book did not portray vampires as able to turn into bats.
- (E) At the time he wrote *Dracula*, Stoker was familiar with earlier European vampire myths.
- 2) Columnist: The relief from the drudgery of physical labor that much modern technology affords

its users renders them dependent on this technology, and, more importantly, on the elaborate energy systems required to run it. This leads to a loss of self-sufficiency. Clearly, then, in addition to undermining life's charm, much modern technology diminishes the overall wellbeing of its users.

Which one of the following is an assumption required by the columnist's argument?

- (A) Physical labor is essential to a fulfilling life.
- (B) Self-sufficiency contributes to a person's well-being.
- (C) People are not free if they must depend on anything other than their own capacities.
- (D) Anything causing a loss in life's charm is unjustifiable unless this loss is compensated by some gain.
- (E) Technology inherently limits the well-being of its users.
- 3) Moralist: Immoral actions are those that harm other people. But since such actions eventually harm those who perform them, those who act immorally do so only through ignorance of some of their actions' consequences rather than through a character defect.

Which one of the following is an assumption required by the moralist's argument?

- (A) People ignorant of their actions' consequences cannot be held morally responsible for those consequences.
- (B) An action harms those who perform it only if it also eventually harms others.
- (C) Only someone with a character defect would knowingly perform actions that eventually harm others.
- (D) Those who, in acting immorally, eventually harm themselves do not intend that harm.
- (E) None of those who knowingly harm themselves lack character defects.
- 4) A reason Larson cannot do the assignment is that she has an unavoidable scheduling conflict. On the other hand, a reason Franks cannot do the assignment is that he does not quite have the assertiveness the task requires. So, the task must be assigned to Parker, the only supervisor in the shipping department other than Larson and Franks.

The argument depends on assuming which one of the following?

(A) Larson has the assertiveness the task requires.

- (B) The task cannot be assigned to anyone other than a supervisor in the shipping department.
- (C) Franks would be assigned the task if Franks had the assertiveness the task requires.
- (D) The task cannot be assigned to anyone who has any kind of scheduling conflict.
- (E) No one who is not a supervisor in the shipping department has the assertiveness this task requires.
- 5) Although we could replace the beautiful but dilapidated old bridge across Black River with
- a concrete skyway, we should instead replace it with a cable bridge even though this would be more expensive than building a concrete skyway. The extra cost is clearly justified by the importance of maintaining the beauty of our river crossing.

Which one of the following is an assumption on which the argument depends?

- (A) It is no more costly to maintain a cable bridge than a concrete skyway.
- (B) A concrete skyway would not have any practical advantages over a cable bridge.
- (C) The beauty of the river crossing must be preserved.
- (D) If the new cable bridge is built, most people who see it will think the extra money well spent.
- (E) Building a cable bridge across Black River would produce a more aesthetically pleasing result than building a concrete skyway.
- **31.** 1) Art theft from museums is on the rise. Most stolen art is sold to wealthy private collectors. Consequently, since thieves steal what their customers are most interested in buying, museums ought to focus more of their security on their most valuable pieces.

The argument depends on assuming which one of the following?

- (A) Art thieves steal both valuable and not-so-valuable art.
- (B) Art pieces that are not very valuable are not very much in demand by wealthy private collectors.
- (C) Art thieves steal primarily from museums that are poorly secured.
- (D) Most museums provide the same amount of security for valuable and not-so-valuable art.
- (E) Wealthy private collectors sometimes sell their stolen art to other wealthy private collectors.
- 2) Physics professor: Some scientists claim that superheated plasma in which electrical resistance fails is a factor in causing so-called "ball lightning." If this were so, then such lightning would emit intense light and, since plasma has gaslike properties, would rise in the air. However, the instances of ball lightning that I observed were of low intensity and floated horizontally before vanishing. Thus, superheated plasma with failed electrical resistance is never a factor in causing ball lightning.

The physics professor's conclusion follows logically if which one of the following is assumed?

- (A) Superheated plasma in which electrical resistance fails does not cause types of lightning other than ball lightning.
- (B) The phenomena observed by the physics professor were each observed by at least one other person.
- (C) Ball lightning can occur as the result of several different factors.
- (D) Superheating of gaslike substances causes bright light to be emitted.
- (E) All types of ball lightning have the same cause.
- 3) Editorial: It is clear that what is called "health education" is usually propaganda rather than education. Propaganda and education are never the same thing. The former is nothing but an attempt to influence behavior through the repetition of simplistic slogans, whereas the latter never involves such a method. Though education does attempt to influence behavior, it does so by offering information in all its complexity, leaving it up to the individual to decide how to act on that information. Sadly, however, propaganda is much more successful than education.

The conclusion drawn by the editorial follows logically if it is assumed that what is called

- "health education" usually
- (A) does not leave it up to the individual to decide how to act on information
- (B) does not offer information in all its complexity
- (C) does not involve the repetition of simplistic slogans
- (D) attempts to influence behavior solely by repeating simplistic slogans
- (E) is very successful in influencing people's behavior
- 4) The solution to any environmental problem that is not the result of government mismanagement

can only lie in major changes in consumer habits. But major changes in consumer habits will occur only if such changes are economically enticing. As a result, few serious ecological problems will be solved unless the solutions are made economically enticing.

The conclusion drawn in the argument above follows logically if which one of the following is assumed?

- (A) Few serious ecological problems are the result of government mismanagement.
- (B) No environmental problems that stem from government mismanagement have solutions that are economically feasible.
- (C) Major changes in consumer habits can be made economically enticing.
- (D) Most environmental problems that are not the result of government mismanagement are major ecological problems.
- (E) Few serious ecological problems can be solved by major changes in consumer habits.
- 5) Chapin: Commentators have noted with concern the recent electoral success by extremist parties in several democratic countries. But these successes pose no threat to democracy in those countries. The extremists have won pluralities, not majorities. Furthermore, they have won only when the moderate parties were preoccupied with arguing among themselves.

Which one of the following, if assumed, enables Chapin's conclusion to be properly drawn?

- (A) Parties that win pluralities but not majorities never directly or indirectly effect changes in their country's political arrangements.
- (B) Multiparty political systems are always more democratic than two-party political systems are.
- (C) Countries in which extremist parties win pluralities sometimes have democratic governments as strong as those in countries that lack extremist parties.
- (D) Members of moderate parties who consider extremist parties to be a serious threat to democracy will sometimes put aside their differences with each other to oppose them.
- (E) People are not always supporting a move toward an extremist government when they vote for extremist parties in democratic elections.
- **32.** 1) Air traffic controllers and nuclear power plant operators are not allowed to work exceptionally long hours, because to do so would jeopardize lives. Yet physicians in residency training are typically required to work 80-hour weeks. The aforementioned restrictions on working exceptionally long hours should also be applied to resident physicians, since they too are engaged in work of a life-or-death nature.

Which one of the following is an assumption the argument depends on?

- (A) There is no indispensable aspect of residency training that requires resident physicians to work exceptionally long hours.
- (B) Resident physicians have a more direct effect on the lives of others than do air traffic controllers and nuclear power plant operators.
- (C) The more hours one works in a week, the less satisfactorily one performs one's work.
- (D) Those who are not engaged in work that has life-or-death consequences should only sometimes be allowed to work exceptionally long hours.
- (E) Some resident physicians would like to complete their residency training without working exceptionally long hours.
- 2) Companies wishing to boost sales of merchandise should use in-store displays to catch

customers' attention. According to a marketing study, today's busy shoppers have less time for coupon-clipping and pay little attention to direct-mail advertising; instead, they make twothirds of their buying decisions on the spot at the store.

Which one of the following is an assumption that the argument requires?

- (A) Companies are increasingly using in-store displays to catch customers' attention.
- (B) Coupons and direct-mail advertising were at one time more effective means of boosting sales of merchandise than they are now.
- (C) In-store displays are more likely to influence buying decisions made on the spot at the store than to influence other buying decisions.
- (D) In-store displays that catch customers' attention increase the likelihood that customers will decide on the spot to buy the company's merchandise.
- (E) Many of today's shoppers are too busy to pay careful attention to in-store displays.
- 3) Critic: Works of literature often present protagonists who scorn allegiance to their society and who advocate detachment rather than civic-mindedness. However, modern literature is distinguished from the literature of earlier eras in part because it more frequently treats such protagonists sympathetically. Sympathetic treatment of such characters suggests to readers that one should be unconcerned about contributing to societal good. Thus, modern literature can damage individuals who appropriate this attitude, as well as damage society at large.

Which one of the following is an assumption on which the critic's argument relies?

- (A) Some individuals in earlier eras were more concerned about contributing to societal good than is any modern individual.
- (B) It is to the advantage of some individuals that they be concerned with contributing to societal good.
- (C) Some individuals must believe that their society is better than most before they can become concerned with benefiting it.
- (D) The aesthetic merit of some literary works cannot be judged in complete independence of their moral effects.
- (E) Modern literature is generally not as conducive to societal good as was the literature of earlier eras.
- 4) Traditionally, students at Kelly University have evaluated professors on the last day of class. But some professors at Kelly either do not distribute the paper evaluation forms or do so selectively, and many students cannot attend the last day of class. Soon, students will be able to use school computers to evaluate their professors at any time during the semester. Therefore, evaluations under the new system will accurately reflect the distribution of student opinion about teaching performance.

Which one of the following is an assumption required by the argument?

- (A) Professors who distribute the paper evaluation forms selectively distribute them only to students they personally like.
- (B) Students can wisely and insightfully assess a professor's performance before the end of the semester.
- (C) The traditional system for evaluating teaching performance should not be used at any university.
- (D) Nearly all professors who fail to distribute the paper evaluation forms do so because they believe the students will evaluate them unfavorably.
- (E) Dissatisfied students are in general not more likely than satisfied students to submit a computerized evaluation.
- 5) Scientist: Genetic engineering has aided new developments in many different fields. But because these techniques require the manipulation of the genetic codes of organisms, they are said to be unethical. What the critics fail to realize is that this kind of manipulation has been going on for millennia; virtually every farm animal is the result of selective breeding for desired traits. Since selective breeding is genetic engineering of a crude sort, genetic

engineering is not unethical.

Which one of the following is an assumption on which the scientist's argument depends?

- (A) The manipulation of the genetic code of organisms is never unethical.
- (B) Anything that is accomplished by nature is not unethical to accomplish with science.
- (C) The manipulation of the genetic code through selective breeding for desired traits is not unethical.
- (D) The manipulation of the genetic code through selective breeding for desired traits is important for human survival.
- (E) Science can accomplish only what is already in some sense natural, and nothing natural is unethical.
- **33.** 1) Editorialist: Despite the importance it seems to have in our lives, money does not really exist. This is evident from the fact that all that would be needed to make money disappear would be a universal loss of belief in it. We witness this phenomenon on a small scale daily in the rises and falls of financial markets, whose fluctuations are often entirely independent of concrete causes and are the results of mere beliefs of investors.

The conclusion of the editorialist's argument can be properly drawn if which one of the following is assumed?

- (A) Anything that exists would continue to exist even if everyone were to stop believing in it.
- (B) Only if one can have mistaken beliefs about a thing does that thing exist, strictly speaking.
- (C) In order to exist, an entity must have practical consequences for those who believe in it.
- (D) If everyone believes in something, then that thing exists.
- (E) Whatever is true of money is true of financial markets generally.
- 2) Fossilized teeth of an extinct species of herbivorous great ape have on them phytoliths, which are microscopic petrified remains of plants. Since only phytoliths from certain species of plants are found on the teeth, the apes' diet must have consisted only of those plants.

The argument assumes which one of the following?

- (A) None of the plant species that left phytoliths on the apes' teeth has since become extinct.
- (B) Plants of every type eaten by the apes left phytoliths on their teeth.
- (C) Each of the teeth examined had phytoliths of the same plant species on it as all the other teeth.
- (D) Phytoliths have also been found on the fossilized teeth of apes of other extinct species.
- (E) Most species of great ape alive today have diets that consist of a fairly narrow range of plants.
- 3) Film historians have made two major criticisms of Depression-era filmmakers: first, that they were too uncritical of the economic status quo; and second, that they self-indulgently created films reflecting their own dreams and desires. However, these filmmakers made their movies with an eye to profit, and so they provided what their audiences most wanted in a film: a chance to imagine being wealthy enough not to have a care in the world. Thus, the second criticism cannot be accurate.

The conclusion of the argument follows logically if which one of the following is assumed?

- (A) To avoid self-indulgence, filmmakers should take a critical stance toward the existing economic system and should allow audiences to form their own personal aspirations.
- (B) It is unjustified to demand of all filmmakers that their films engage in criticism of the economic status quo.
- (C) The people who regularly went to movies during the Depression were those likely to have been most satisfied with the economic status quo.
- (D) Depression-era filmmakers who did not make films for profit could not take radical critical stances toward then-current economic and political issues.
- (E) It cannot be self-indulgent for a filmmaker to give an audience what it most wants.
- 4) Linguist: Regional dialects, many of which eventually become distinct languages, are responses by local populations to their own particular communicative needs. So even

when the unification of the world economy forces the adoption of a universal language for use in international trade, this language itself will inevitably develop many regional dialects.

Which one of the following is an assumption that the linguist's argument requires?

- (A) No two local populations have the same communicative needs as each other.
- (B) In some regions of the world, at least some people will not engage in international trade after the unification of the world economy.
- (C) A universal language for use in international trade will not arise unless the world economy is unified.
- (D) When the unification of the world economy forces the adoption of a universal language for use in international trade, many regional dialects of other languages will be eradicated.
- (E) After the unification of the world economy, there will be variation among many different local populations in their communicative needs in international trade.
- 5) "Multiple use" refers to the utilization of natural resources in combinations that will best meet the present and future needs of the public. Designating land as a wilderness area does not necessarily violate the multiple-use philosophy, for even when such use does not provide the greatest dollar return, it can provide the greatest overall benefit from that site.

Which one of the following is an assumption required by the argument?

- (A) Natural resources should be used in combinations that will most greatly benefit present and future generations.
- (B) Designating a wilderness area prevents any exploitation of natural resources in that area.
- (C) The present and future needs of the public would best be met by designating greater numbers of wilderness areas.
- (D) The multiple-use philosophy takes into account some nonfinancial needs of the public.
- (E) The multiple-use philosophy holds that the future needs of the public are more important than the present ones.
- **34.** 1) Professor: Each government should do all that it can to improve the well-being of all the children in the society it governs. Therefore, governments should help finance high-quality day care since such day care will become available to families of all income levels if and only if it is subsidized.

Which one of the following is an assumption on which the professor's argument depends?

- (A) Only governments that subsidize high-quality day care take an interest in the well-being of all the children in the societies they govern.
- (B) Government subsidy of high-quality day care would not be so expensive that it would cause a government to eliminate benefits for adults.
- (C) High-quality day care should be subsidized only for those who could not otherwise afford it
- (D) At least some children would benefit from high-quality day care.
- (E) Government is a more efficient provider of certain services than is private enterprise.
- 2) Writer: In the diplomat's or lawyer's world, a misinterpreted statement can result in an international incident or an undeserved prison term. Thus, legal and diplomatic language is stilted and utterly without literary merit, since by design it prevents misinterpretation, which in these areas can have severe consequences.

The writer's argument requires assuming which one of the following?

- (A) Language that has literary value is more likely to be misunderstood than language without literary value.
- (B) Literary documents are generally less important than legal or diplomatic documents.
- (C) Lawyers and diplomats are much less likely to be misunderstood than are novelists.
- (D) The issues that are of interest to lawyers and diplomats are of little interest to others.
- (E) People express themselves more cautiously when something important is at stake.
- 3) Art critic: Abstract paintings are nonrepresentational, and so the only measure of their worth

their interplay of color, texture, and form. But for a painting to spur the viewer to political action, instances of social injustice must be not only represented, but also clearly comprehensible as such. Therefore, abstract painting can never be a politically significant art form.

Which one of the following is an assumption that is required by the art critic's argument?

- (A) Abstract painting cannot stimulate people to act.
- (B) Unless people view representations of social injustice, their political activity is insignificant.
- (C) Only art that prompts people to counter social injustice is significant art.
- (D) Paintings that fail to move a viewer to political action cannot be politically significant.
- (E) The interplay of color, texture, and form is not a measure of the worth of representational paintings.
- 4) There are two supposedly conflicting hypotheses as to what makes for great national leaders: one is that such leaders successfully shape public opinion, and the other is that they are adept at reacting to it. However, treating these hypotheses as mutually exclusive is evidently a mistake. All leaders who have had success getting their programs passed by their country's legislature have been adroit both in shaping and reacting to public opinion.

Which one of the following is an assumption on which the argument depends?

- (A) Having success getting programs passed by the legislature is indicative of being a great national leader.
- (B) It is impossible to successfully shape public opinion without in some way reacting to it.
- (C) To lead, one must either successfully shape public opinion or be adept at reacting to it, or both.
- (D) Having a good rapport with the members of the legislature allows a leader to shape public opinion.
- (E) To be a great leader one must not be swayed by public opinion.
- 5) Researcher: We have found that some cases of high blood pressure can be treated effectively with medicine. Since it is generally accepted that any illness caused by stress is treatable only by the reduction of stress, some cases of high blood pressure must not be caused by stress.

Which one of the following is an assumption required by the researcher's argument?

- (A) The correlation between stress and all cases of high blood pressure is merely coincidental.
- (B) The reduction of stress in a person's life can at times lower that person's blood pressure.
- (C) Reduced stress does not reduce a person's responsiveness to medicine used to treat high blood pressure.
- (D) Some conditions that are treated effectively by medicines are not also treatable through the reduction of stress.
- (E) Medicine used to treat high blood pressure does not itself reduce stress.
- **35.** 1) Almost all microbe species live together in dense, interdependent communities, supporting the environment for each other, and regulating the population balances for their different species through a complex system of chemical signals. For this reason, it is currently impossible to cultivate any one such species in isolation. Thus, microbiologists lack complete knowledge of most microbe species.

Which one of the following, if assumed, enables the argument's conclusion to be properly drawn?

- (A) It is currently impossible for microbiologists to reproduce the complex systems of chemical signals with which microbe communities regulate the population balances for their different species.
- (B) If it is currently impossible to reproduce the environmental supports and chemical signals in dense, interdependent communities of microbe species, then it is also impossible to

cultivate any microbe species from such a community in isolation.

- (C) No microbiologist can have complete knowledge of any species of organism unless that microbiologist can cultivate that species in isolation.
- (D) At least some microbiologists lack complete knowledge of any microbe species that live together in dense, interdependent communities.
- (E) No microbe species that normally lives together with other microbe species in dense, interdependent communities can survive outside such a community.
- 2) This stamp is probably highly valuable, since it exhibits a printing error. The most important factors in determining a stamp's value, assuming it is in good condition, are its rarity and age. This is clearly a fine specimen, and it is quite old as well.

The conclusion is properly inferred if which one of the following is assumed?

- (A) The older a stamp is, the more valuable it is.
- (B) Printing errors are always confined to a few individual stamps.
- (C) Most stamps with printing errors are already in the hands of collectors.
- (D) Rarity and age are of equal importance to a stamp's value.
- (E) Even old and rare stamps are usually not valuable if they are in poor condition.
- 3) The proposed coal-burning electric plant should be approved, since no good arguments have been offered against it. After all, all the arguments against it have been presented by competing electricity producers.

Which one of the following is an assumption on which the reasoning above depends?

- (A) The competing electricity producers would stand to lose large amounts of revenue from the building of the coal-burning electric plant.
- (B) If a person's arguments against a proposal are defective, then that person has a vested interest in seeing that the proposal is not implemented.
- (C) Approval of the coal-burning electric plant would please coal suppliers more than disapproval would please suppliers of fuel to the competing electricity producers.
- (D) If good arguments are presented for a proposal, then that proposal should be approved.
- (E) Arguments made by those who have a vested interest in the outcome of a proposal are not good arguments.
- 4) Human beings can exhibit complex, goal-oriented behavior without conscious awareness of what they are doing. Thus, merely establishing that nonhuman animals are intelligent will not establish that they have consciousness.

Which one of the following is an assumption on which the argument depends?

- (A) Complex, goal-oriented behavior requires intelligence.
- (B) The possession of consciousness does not imply the possession of intelligence.
- (C) All forms of conscious behavior involve the exercise of intelligence.
- (D) The possession of intelligence entails the possession of consciousness.
- (E) Some intelligent human behavior is neither complex nor goal-oriented.
- 5) Vanwilligan: Some have argued that professional athletes receive unfairly high salaries. But in an unrestricted free market, such as the market these athletes compete in, salaries are determined by what someone else is willing to pay for their services. These athletes make enormous profits for their teams' owners, and that is why owners are willing to pay them extraordinary salaries. Thus the salaries they receive are fair.

Vanwilligan's conclusion follows logically if which one of the following is assumed?

- (A) The fairest economic system for a society is one in which the values of most goods and services are determined by the unrestricted free market.
- (B) If professional athletes were paid less for their services, then the teams for which they play would not make as much money.
- (C) The high level of competition in the marketplace forces the teams' owners to pay professional athletes high salaries.
- (D) Any salary that a team owner is willing to pay for the services of a professional athlete is a fair salary.

- (E) If a professional athlete's salary is fair, then that salary is determined by what an individual is willing to pay for the athlete's services in an unrestricted free market.
- **36.** 1) A mathematical theorem proved by one mathematician should not be accepted until each step in its proof has been independently verified. Computer-assisted proofs generally proceed by conducting a vast number of calculations surveying all the possible types of instances in which the theorem could apply and proving that the theorem holds for each type. In most computer-assisted proofs there are astronomically many types of instances to survey, and no human being could review every step in the proof. Hence, computer-assisted proofs involving astronomically many types of instances should not be accepted.

Which one of the following is an assumption on which the argument relies?

- (A) The use of the computer to assist in the proof of mathematical theorems has greatly simplified the mathematician's task.
- (B) Most attempts to construct proofs of mathematical theorems do not result in demonstrations that the theorems are true.
- (C) Computers cannot be used to assist in generating proofs of mathematical theorems that involve only a very limited number of steps.
- (D) Any mathematical proof that does not rely on the computer cannot proceed by surveying all possible types of instances to which the candidate theorem might apply.
- (E) The use of an independent computer program does not satisfy the requirement for independent verification of each step in a proof that is extended enough to be otherwise unverifiable.
- 2) Cecile's association requires public disclosure of an officer's investments in two cases only: when an officer is authorized to disburse association funds, and when an officer sits on the board of a petrochemical company. Cecile, an officer who is not authorized to disburse funds, sits on the board of just one company, a small timber business. Therefore, there is no reason for Cecile to publicly disclose her investments at this time.

The conclusion of the argument follows logically if which one of the following is assumed? (A) Cecile will not be appointed to a position in the association that authorizes her to disburse funds.

- (B) Cecile's office and her position on the timber business's board create no conflicts of interest.
- (C) The association's requirements provide the only reasons there might be for Cecile to disclose her investments.
- (D) The timber business on whose board Cecile sits is owned by a petrochemical company.
- (E) Cecile owns no investments in the petrochemical industry.
- 3) It is due to a misunderstanding that most modern sculpture is monochromatic. When ancient sculptures were exhumed years ago, they were discovered to be uncolored. No one at the time had reason to believe, as we now do, that the sculptures had originally been colorfully painted, but that centuries of exposure to moisture washed away the paint.

Which one of the following is an assumption on which the argument depends?

- (A) The natural beauty of the materials out of which modern sculptures are made plays a part in their effect.
- (B) Modern sculpture has been influenced by beliefs about ancient sculpture.
- (C) Ancient sculptures were more susceptible to moisture damage than are modern sculptures.
- (D) Some ancient paintings known to early archaeologists depicted sculptures.
- (E) As modern sculptors come to believe that ancient sculpture was painted, they will begin to create polychromatic works.
- 4) A physician has a duty to see to the health and best medical interests of the patient. On the other

hand, the patient has a right to be fully informed about any negative findings concerning the patient's health. When this duty conflicts with this right, the right should prevail since it is a

basic right. Anything else carries the risk of treating the patient as a mere object, not as a person.

The conclusion drawn above follows logically if which one of the following is assumed?

- (A) All persons have a right to accept or reject any medical procedures proposed by a physician.
- (B) Some actions are right independently of the consequences that might ensue.
- (C) Because only persons have rights, objects do not have rights.
- (D) A person's basic rights should never be violated.
- (E) In medicine, the patient's basic right to information is stronger than most other rights.
- 5) Magazine article: Sugar consumption may exacerbate attention deficit disorder (ADD) in children. A recent study found that children produce large amounts of adrenaline within hours after consuming large amounts of sugar. This increase in adrenaline is especially noticeable if the source of sugar is candy, in which case the sugar's effects are not ameliorated by the ingestion of other foodstuffs.

Which one of the following is an assumption on which the argument in the magazine article depends?

- (A) The adrenaline level of children who do not have ADD is not increased by excessive sugar consumption.
- (B) Overproduction of adrenaline causes ADD in children.
- (C) The most effective way to treat ADD in children is to restrict their intake of sugars.
- (D) Increased adrenaline production can make ADD more severe in children.
- (E) Sugar consumed with food substances other than candy does not substantially increase the level of adrenaline in the bloodstream of children with ADD.
- **37.** 1) Economist: Some people argue that when large countries split into several small countries, the world economy is harmed by increased barriers to free trade in the form of an increased number of national tariffs. But small countries do not think of themselves as economically self-sufficient. Therefore, such division of large countries does not increase barriers to free trade.

Which one of the following, if assumed, enables the economist's conclusion to be properly drawn?

- (A) A country has the right to split into smaller countries even if some of the economic consequences of division would harm the world economy.
- (B) Increasing the number of countries in the world would strengthen rather than weaken the world economy.
- (C) All countries that impose national tariffs or other barriers to free trade think of themselves as economically self-sufficient.
- (D) There is strong evidence that national tariffs and other barriers to free trade harm the world economy.
- (E) Large countries tend to be more economically self-sufficient than small countries.
- 2) After being subjected to clinical tests like those used to evaluate the effectiveness of prescription drugs, a popular nonprescription herbal remedy was found to be as effective in treating painful joints as is a certain prescription drug that has been used successfully to treat this condition. The manufacturer of the herbal remedy cited the test results as proof that chemical agents are unnecessary for the successful treatment of painful joints.

The test results would provide the proof that the manufacturer claims they do if which one of the following is assumed?

- (A) People are likely to switch from using prescription drugs to using herbal remedies if the herbal remedies are found to be as effective as the prescription drugs.
- (B) The herbal remedy contains no chemical agents that are effective in treating painful joints.
- (C) None of the people who participated in the test of the prescription drug had ever tried using an herbal remedy to treat painful joints.

- (D) The researchers who analyzed the results of the clinical testing of the herbal remedy had also analyzed the results of the clinical testing of the prescription drug.
- (E) The prescription drug treats the discomfort associated with painful joints without eliminating the cause of that condition.
- 3) If legislators are to enact laws that benefit constituents, they must be sure to consider what the consequences of enacting a proposed law will actually be. Contemporary legislatures fail to enact laws that benefit constituents. Concerned primarily with advancing their own political careers, legislators present legislation in polemical terms; this arouses in their colleagues either repugnance or enthusiasm for the legislation.

Which one of the following is an assumption on which the argument depends?

- (A) Legislation will not benefit constituents unless legislators become less concerned with their own careers.
- (B) Legislatures that enact laws that benefit constituents are successful legislatures.
- (C) The passage of laws cannot benefit constituents unless constituents generally adhere to those laws.
- (D) Legislators considering a proposed law for which they have repugnance or enthusiasm do not consider the consequences that it will actually have.
- (E) The inability of legislators to consider the actual consequences of enacting a proposed law is due to their strong feelings about that law.
- 4) Among multiparty democracies, those with the fewest parties will have the most-productive legislatures. The fewer the number of parties in a democracy, the more issues each must take a stand on. A political party that must take stands on a wide variety of issues has to prioritize those issues; this promotes a tendency to compromise.

Which one of the following is an assumption required by the argument?

- (A) The more political parties a nation has, the more likely it is that there will be disagreements within parties.
- (B) The fewer the number of a nation's political parties, the more important it is that those parties can compromise with each other.
- (C) The tendency to compromise makes the legislative process more productive.
- (D) The legislatures of nondemocracies are less productive than are those of democracies.
- (E) Legislators in a multiparty democracy never all agree on important issues.
- 5) Typically, people who have diets high in saturated fat have an increased risk of heart disease. Those who replace saturated fat in their diets with unsaturated fat decrease their risk of heart disease. Therefore, people who eat a lot of saturated fat can lower their risk of heart disease by increasing their intake of unsaturated fat.

Which one of the following, if assumed, most helps to justify the reasoning above?

- (A) People who add unsaturated fat to their diets will eat less food that is high in saturated fat.
- (B) Adding unsaturated fat to a diet brings health benefits other than a reduced risk of heart disease.
- (C) Diet is the most important factor in a person's risk of heart disease.
- (D) Taking steps to prevent heart disease is one of the most effective ways of increasing life expectancy.
- (E) It is difficult to move from a diet that is high in saturated fat to a diet that includes very little fat.
- **38.** 1) Scientists have long thought that omega-3 fatty acids in fish oil tend to lower blood cholesterol and strongly suspected that a diet that includes a modest amount of fish would provide

substantial health benefits. Now these views have acquired strong support from a recent study showing that middle-aged people who eat fish twice a week are nearly 30 percent less likely to develop heart disease than are those who do not eat fish.

Which one of the following is an assumption required by the argument?

- (A) The test subjects in the recent study who did not eat fish were not vegetarians.
- (B) The test subjects in the recent study who ate fish twice a week did not have a diet that was otherwise conducive to the development of heart disease.
- (C) The test subjects in the recent study who did not eat fish were significantly more likely to eat red meat several times per week than were those who did eat fish.
- (D) The test subjects in the recent study who ate fish twice a week were not significantly more likely than those who did not to engage regularly in activities known to augment cardiorespiratory health.
- (E) The test subjects in the recent study who ate fish twice a week were no more likely than those who did not to have sedentary occupations.
- 2) Doctor: Medication to reduce blood pressure often has unhealthy side effects. However, lifestyle changes such as exercising more and avoiding fatty foods reduce blood pressure just as effectively as taking medication does. Therefore, it is healthier to rely on these lifestyle changes than on medication to reduce blood pressure.

Which one of the following is an assumption that the doctor's argument requires?

- (A) Other than medication, the only way to reduce blood pressure is by making lifestyle changes such as exercising more and avoiding fatty foods.
- (B) If it is healthier to rely on a lifestyle change than on medication to reduce blood pressure, then that lifestyle change reduces blood pressure at least as effectively as medication does.
- (C) The side effects, if any, of exercising more and avoiding fatty foods in order to reduce blood pressure are less unhealthy than those of taking medication to reduce blood pressure.
- (D) If an alternative to medication relieves a medical condition just as effectively as medication does, then it is always healthier to rely on that alternative than on medication to relieve that medical condition.
- (E) If two different methods of treating a medical condition have similar side effects, then it is healthier to rely on the more effective method.
- 3) Industrialist: Environmentalists contend that emissions from our factory pose a health risk to those living downwind. The only testimony presented in support of this contention comes from residents of the communities surrounding the factory. But only a trained scientist can determine whether or not these emissions are dangerous, and none of the residents are scientists. Hence our factory's emissions present no health risk.

The reasoning in the industrialist's argument is flawed because the argument

- (A) impugns the motives of the residents rather than assessing the reasons for their contention
- (B) does not consider the safety of emissions from other sources in the area
- (C) presents no testimony from scientists that the emissions are safe
- (D) fails to discuss the benefits of the factory to the surrounding community
- (E) equivocates between two different notions of the term "health risk"
- 4) In order to maintain a high standard of living, a nation must maintain a functioning infrastructure. Major investment in the improvement of its infrastructure will, over time, reward a nation with a corresponding rise in its standard of living. Hence a nation whose standard of living is on the rise can be safely assumed to be a nation that has invested heavily in improving its infrastructure.

The reasoning in the argument is flawed because the argument fails to take into account that

- (A) a nation that fails to invest in its infrastructure need not experience any resulting decline in its standard of living
- (B) many nations are unable to make the needed investments in infrastructure
- (C) the rise in a nation's standard of living that is prompted by investment in its infrastructure may take a long time to occur
- (D) a rise in a nation's standard of living need not be the result of major investments in its infrastructure
- (E) nations often experience short-term crises that require that resources be diverted to purposes other than the maintenance and improvement of infrastructure

5) Researcher: People with certain personality disorders have more theta brain waves than those without such disorders. But my data show that the amount of one's theta brain waves increases while watching TV. So watching too much TV increases one's risk of developing personality disorders.

A questionable aspect of the reasoning above is that it

- (A) uses the phrase "personality disorders" ambiguously
- (B) fails to define the phrase "theta brain waves"
- (C) takes correlation to imply a causal connection
- (D) draws a conclusion from an unrepresentative sample of data
- (E) infers that watching TV is a consequence of a personality disorder
- **39.** 1) Diplomat: Every major war in the last 200 years has been preceded by a short, sharp increase in the acquisition of weapons by the nations that subsequently became participants in those

conflicts. Clearly, therefore, arms control agreements will preserve peace.

Of the following, which one most accurately describes a reasoning flaw in the diplomat's argument?

- (A) The argument infers, merely from the claim that events of one type have for a long time consistently preceded events of a second type, that an event of the second type will not occur unless an event of the first type occurs.
- (B) The argument reasons that, simply because weapons are used in war, a rapid, dramatic increase in the acquisition of weapons will always lead to war.
- (C) The argument draws a conclusion that simply restates a claim presented in support of that conclusion.
- (D) The argument fails to consider that a short, sharp increase in the acquisition of weapons by a nation may be a response to the increased armament of neighboring nations.
- (E) The argument fails to consider that some of the minor wars that have occurred in the last 200 years may have been preceded by rapid increases in the acquisition of weapons by the nations that subsequently became participants in those wars.
- 2) People with high blood pressure are generally more nervous and anxious than are people who do not have high blood pressure. This fact shows that this particular combination of personality traits the so-called hypertensive personality is likely to cause a person with these traits to develop high blood pressure.

The reasoning in the argument is most vulnerable to criticism on the ground that the argument

- (A) fails to define the term "hypertensive personality"
- (B) presupposes that people have permanent personality traits
- (C) simply restates the claim that there is a "hypertensive personality" without providing evidence to support that claim
- (D) takes a correlation between personality traits and high blood pressure as proof that the traits cause high blood pressure
- (E) focuses on nervousness and anxiety only, ignoring other personality traits that people with high blood pressure might have
- 3) Politician: Those economists who claim that consumer price increases have averaged less than 3 percent over the last year are mistaken. They clearly have not shopped anywhere recently. Gasoline is up 10 percent over the last year; my auto insurance, 12 percent; newspapers, 15 percent; propane, 13 percent; bread, 50 percent.

The reasoning in the politician's argument is most vulnerable to criticism on the grounds that the argument

- (A) impugns the character of the economists rather than addressing their arguments
- (B) fails to show that the economists mentioned are not experts in the area of consumer prices
- (C) mistakenly infers that something is not true from the claim that it has not been shown to be so

- (D) uses evidence drawn from a small sample that may well be unrepresentative
- (E) attempts to persuade by making an emotional appeal
- 4) Technological innovation rarely serves the interests of society as a whole. This can be seen from the fact that those responsible for technological advances are almost without exception motivated by considerations of personal gain rather than societal benefit in that they strive to develop commercially viable technology.

The argument is most vulnerable to criticism on the grounds that it

- (A) contains a premise that cannot possibly be true
- (B) takes for granted that technology beneficial to society as a whole cannot be commercially viable
- (C) fails to consider the possibility that actions motivated by a desire for personal gain often do not result in personal gain
- (D) takes for granted that an action is unlikely to produce a certain outcome unless it is motivated by a desire to produce that outcome
- (E) draws a conclusion about the practical consequences of people's actions on the basis of theoretical views about what people should or should not do
- 5) Politician: Some of my opponents have argued on theoretical grounds in favor of reducing social spending. Instead of arguing that there is excessive public expenditure on social programs, my opponents should focus on the main cause of deficit spending: the fact that government is bloated with bureaucrats and self-aggrandizing politicians. It is unwarranted, therefore, to reduce social expenditure.

A reasoning flaw in the politician's argument is that the argument

- (A) does not address the arguments advanced by the politician's opponents
- (B) makes an attack on the character of opponents
- (C) takes for granted that deficit spending has just one cause
- (D) portrays opponents' views as more extreme than they really are
- (E) fails to make clear what counts as excessive spending
- **40.** 1) Astronomer: I have asserted that our solar system does not contain enough meteoroids and other cosmic debris to have caused the extensive cratering on the far side of the moon. My opponents have repeatedly failed to demonstrate the falsity of this thesis. Their evidence is simply inconclusive; thus they should admit that my thesis is correct.

The reasoning in the astronomer's argument is flawed because this argument

- (A) criticizes the astronomer's opponents rather than their arguments
- (B) infers the truth of the astronomer's thesis from the mere claim that it has not been proven false
- (C) ignores the possibility that alternative explanations may exist for the cratering
- (D) presumes that the astronomer's thesis should not be subject to rational discussion and criticism
- (E) fails to precisely define the key word "meteoroids"
- 2) Columnist: Donating items to charity may be a sign of generosity, but any generosity it may demonstrate is rarely a permanent virtue, since most donors make donations only intermittently.

Which one of the following most accurately describes a flaw in the columnist's argument?

- (A) The argument takes for granted that truly generous people are the most virtuous.
- (B) The argument attacks the character of those whose values are different from those of the columnist.
- (C) The argument takes for granted that a character trait is present only when manifested.
- (D) The argument generalizes from too small a sample of cases.
- (E) The argument takes for granted that most people donate out of generosity.
- 3) Many people say that the press should not pry into the personal lives of private individuals. But the press has the right to publish any story of interest to the public unless that story is

libelous. So, if a story about a private individual is not libelous, the press has an obligation to publish it, for such information is clearly of interest to the public.

The argument's reasoning is vulnerable to criticism on the grounds that the argument presumes, without giving warrant, that

- (A) the press can publish nonlibelous stories about private individuals without prying into their personal lives
- (B) one's having a right to do something entails one's having an obligation to do it
- (C) the publishing of information about the personal lives of private individuals cannot be libelous
- (D) if one has an obligation to do something then one has a right to do it
- (E) the press's right to publish always outweighs the individual's right not to be libeled
- 4) Over 90 percent of the human brain currently serves no purpose, as is evident from the fact that

many people with significant brain damage show no discernible adverse effects. So once humans begin to tap into this tremendous source of creativity and innovation, many problems that today seem insurmountable will be within our ability to solve.

Which one of the following most accurately describes a flaw in the argument?

- (A) The argument presumes, without providing justification, that the effects of brain damage are always easily detectable.
- (B) The argument presumes, without providing justification, that the only reason that any problem remains unsolved is a lack of creativity and innovation.
- (C) The argument infers that certain parts of the brain do nothing merely on the basis of the assertion that we do not know what they do.
- (D) The argument infers that problems will be solved merely on the basis of the claim that they will be within our ability to solve.
- (E) The argument presumes, without providing justification, that the currently unused parts of the brain are a potential source of tremendous creativity and innovation.
- 5) A recent study suggests that consuming three glasses of wine daily substantially decreases the risk of stroke. Critics of the study, defending earlier research recommending one glass of wine daily, claim that binge drinkers (who drink once a week or less, but drink three or more drinks when they do drink) are the people most likely to drink three glasses of wine in one day and are more likely to die from sudden heart attacks than are other drinkers. According to these critics, drinking three glasses of wine daily would not benefit health overall, since the decrease in the risk of stroke associated with that level of consumption is negated by its associated increased risk of sudden heart attack.

The critics' argument is most vulnerable to criticism on the grounds that it

- (A) inappropriately attributes the consequences of binge drinking to persons whose regular consumption of wine is three glasses a day
- (B) confuses the risk of sudden alcohol-induced heart attacks with other health risks
- (C) presumes, without providing justification, that there is no significant difference between wine and other alcoholic beverages in terms of health benefits and risks
- (D) fails to address specifically the reduction in risk of stroke conferred by the level of consumption in the recent study
- (E) overlooks the difference between strokes that result in death and less severe strokes
- **41.** 1) Shipping Coordinator: If we send your shipment by air express, it will arrive tomorrow morning. If we send your shipment via ground carrier, it will arrive either tomorrow or the next day. Ground carrier is less expensive than air express, so which do you prefer? Customer: If I don't choose air express, then I will not receive my shipment tomorrow, so I clearly have no choice but to spend the extra money and have it sent via air express. The customer's response can best be explained on the assumption that she has misinterpreted the shipping coordinator to mean which one of the following?

- (A) Ground carrier is as reliable a shipping method as air express.
- (B) If the shipment is sent by air express, it will arrive tomorrow.
- (C) Ground carrier is not more expensive than air express.
- (D) Unless the shipment is sent by air express, it will not arrive tomorrow.
- (E) The greater the shipping cost, the faster the shipment will arrive.
- 2) Activist: As electronic monitoring of employees grows more commonplace and invasive, we hear more and more attempted justifications of this practice by employers. Surveillance, they explain, keeps employees honest, efficient, and polite to customers. Such explanations are obviously self-serving, and so should not be taken to justify these unwarranted invasions of privacy.

A questionable technique used in the activist's argument is to

- (A) attack an argument different from that actually offered by the employers
- (B) presume that employees are never dishonest, inefficient, or rude
- (C) insist that modern business practices meet moral standards far higher than those accepted in the past
- (D) attack employers' motives instead of addressing their arguments
- (E) make a generalization based on a sample that there is reason to believe is biased
- 3) Social critic: One of the most important ways in which a society socializes children is by making them feel ashamed of their immoral behavior. But in many people this shame results in deep feelings of guilt and self-loathing that can be a severe hardship. Thus, moral socialization has had a net effect of increasing the total amount of suffering.

The social critic's argument is most vulnerable to criticism on the grounds that it

- (A) overlooks the possibility that the purported source of a problem could be modified to avoid that problem could be modified to avoid that problem without being eliminated altogether
- (B) fails to address adequately the possibility that one phenomenon may casually contribute to the occurrence of another, even though the two phenomena do not always occur together
- (C) presumes, without providing justification, that a phenomenon that supposedly increases the total amount of suffering in a society should therefore be changed or eliminated, regardless of its beneficial consequences
- (D) takes for granted that a behavior that sometimes leads to a certain phenomenon cannot also significantly reduce the overall occurrence of that phenomenon
- (E) presumes, without providing justification, that if many people have a negative psychological reaction to a phenomenon, then no one can have a positive reaction to that phenomenon
- 4) Sydonie: Parents differ in their beliefs about the rules to which their children should be subject. So any disciplinary structure in schools is bound to create resentment because it will contradict some parental approaches to raising children.

Stephanie: Your conclusion is incorrect; educational research shows that when parents list the things that they most want their children's schools to provide, good discipline is always high on the list.

Stephanie's argument is most vulnerable to criticism on the grounds that

- (A) it focuses on educational research rather than educational practice
- (B) it addresses a more general issue than that addressed in Sydonie's argument
- (C) it does not counter Sydonie's suggestion that parents have diverse ideas of what constitutes good discipline
- (D) the phrase "high on the list" is not specific enough to give useful information about what parents desire from a school
- (E) it fails to discuss educators' attitudes toward discipline in schools
- 5) In a highly publicized kidnapping case in Ontario, the judge barred all media and spectators from the courtroom. Her decision was based on the judgment that the public interest would not be served by allowing spectators. A local citizen argued, "They pleaded with the public to help find the victim; they pleaded with the public to provide tips; they aroused the public interest,

then they claimed that allowing us to attend would not serve the public interest. These actions are inconsistent."

The reasoning in the local citizen's argument is flawed because this argument

- (A) generalizes from an atypical case
- (B) trades on an ambiguity with respect to the term "public interest"
- (C) overlooks the fact that the judge might not be the one who made the plea to the public for help
- (D) attempts to support its conclusion by making sensationalistic appeals
- (E) presumes that the public's right to know is obviously more important than the defendant's right to a fair trial
- **42.** 1) Interviewer: A certain company released a model of computer whose microprocessor design

was flawed, making that computer liable to process information incorrectly. How did this happen?

Industry spokesperson: Given the huge number of circuits in the microprocessor of any modern computer, not every circuit can be manually checked before a computer model that contains the microprocessor is released.

Interviewer: Then what guarantee do we have that new microprocessors will not be similarly flawed?

Industry spokesperson: There is no chance of further microprocessors design flaws, since all microporcessors are now entirely computer-designed.

The industry spokesperson's argument is most vulnerable to criticism on the grounds that it (A) presumes, without providing justification, that the microprocessor quality-control procedures of the company mentioned are not representative of those followed throughout the industry

- (B) ignores the possibility that a microprocessor can have a flaw other than a design flaw
- (C) overlooks the possibility that a new computer model is liable to malfunction for reasons other than a microprocessor flaw
- (D) treats a single instance of a microprocessor design flaw as evidence that there will be many such flaws
- (E) takes for granted, despite evidence to the contrary, that some computers are not liable to error
- 2) The tidal range at a particular location is the difference in height between high tide and low tide. Tidal studies have shown that one of the greatest tidal ranges in the world is found in the Bay of Fundy and reaches more than seventeen meters. Since the only forces involved in inducing the tides are the sun's and moon's gravity, the magnitudes of tidal ranges also must be explained entirely by gravitational forces.

Which one of the following most accurately describes a flaw in the reasoning above?

- (A) It gives only one example of a tidal range.
- (B) It fails to consider that the size of a tidal range could be affected by the conditions in which gravitational forces act.
- (C) It does not consider the possibility that low tides are measured in a different way than are high tides.
- (D) It presumes, without providing warrant, that most activity within the world's oceans is a result of an interplay of gravitational forces.
- (E) It does not differentiate between the tidal effect of the sun and the tidal effect of the moon.
- 3) It is highly likely that Claudette is a classical pianist. Like most classical pianists, Claudette recognizes many of Clara Schumann's works. The vast majority of people who are not classical pianists do not. In fact, many people who are not classical pianists have not even heard of Clara Schumann.

The reasoning in the argument above is flawed in that it

- (A) ignores the possibility that Claudette is more familiar with the works of other composers of music for piano
- (B) presumes, without providing justification, that people who have not heard of Clara Schumann do not recognized her works
- (C) presumes, without providing justification, that classical pianists cannot also play other musical instruments
- (D) relies for its plausibility on the vagueness of the term "classical"
- (E) ignores the possibility that the majority of people who recognize many of Clara Schumann's works are not classical pianists
- 4) The first bicycle, the Draisienne, was invented in 1817. A brief fad ensued, after which bicycles practically disappeared until the 1860s. Why was this? New technology is accepted only when it coheres with the values of a society. Hence some change in values must have occurred between 1817 and 1860s.

The reasoning in the argument is flawed because the argument

- (A) presumes, without giving justification, that fads are never indicative of genuine acceptance
- (B) fails to recognize that the reappearance of bicycles in the 1860s may have indicated genuine acceptance of them
- (C) offers no support for the claim that the Draisienne was the first true bicycle
- (D) poses a question that has little relevance to the argument's conclusion
- (E) ignores, without giving justification, alternative possible explanations of the initial failure of bicycles
- 5) Manager: When Sullivan was passed over for promotion, people said that the deciding factor was his being much older than the competition. But this is clearly not the case. Several recent promotions have been given to people older than Sullivan.

The manager's argument is most vulnerable to criticism because it fails to consider the possibility that

(A) Sullivan was well qualified for the promotion

following grounds?

- (B) age is only one of a number of factors that kept Sullivan from being promoted
- (C) people often associate age with experience and good judgment
- (D) the people older than Sullivan who were promoted had no younger competitors
- (E) Sullivan's employer tries to keep deliberations involving promotion decisions confidential
- **43.** 1) It is easy to see that the board of directors of the construction company is full of corruption and should be replaced. There are many instances of bribery by various persons on the staff of

board member Wagston that are a matter of public record. These bribes perniciously influenced the awarding of government contracts.

The argument's reasoning is most vulnerable to criticism on the grounds that

- (A) the argument fails to show that corruption is not limited to Wagston's staff
- (B) the argument fails to show that Wagston's staff engaged in any bribery other than bribery of government officials
- (C) the argument fails to specify the relation between bribery and corruption
- (D) the argument presumes without giving justification that all of Wagston's staff have engaged in corruption
- (E) the argument attempts to deflect attention away from substantive issues by attacking the character of the board
- 2) Advertisement: Each of the Economic Merit Prize winners from the past 25 years is covered by the Acme retirement plan. Since the winners of the nation's most prestigious award for economists have thus clearly recognized that the Acme plan offers them a financially secure future, it is probably a good plan for anyone with retirement needs similar to theirs. The advertisement's argumentation is most vulnerable to criticism on which one of the

- (A) It ignores the possibility that the majority of Economic Merit Prize winners from previous years used a retirement plan other than the Acme plan.
- (B) It fails to address adequately the possibility that any of several retirement plans would be good enough for, and offer a financially secure future to, Economic Merit Prize winners.
- (C) It appeals to the fact that supposed experts have endorsed the argument's main conclusion, rather than appealing to direct evidence for that conclusion.
- (D) It takes for granted that some winners of the Economic Merit Prize have deliberately selected the Acme retirement plan, rather than having had it chosen for them by their employers.
- (E) It presumes, without providing justification, that each of the Economic Merit Prize winners has retirement plan needs that are identical to the advertisement's intended audience's retirement plan needs.
- 3) Trainer: Research shows that when dogs are neutered in early puppyhood, their leg bones usually do not develop properly. Improper bone development leads in turn to problems with arthritis as dogs grow older. Thus, if you want to protect your dog from arthritis you should not neuter your dog until it is full-grown.
- Of the following, which one is a criticism to which the reasoning in the trainer's argument is most vulnerable?
- (A) It fails to state exactly what percentage of dogs neutered in early puppyhood experience improper bone development.
- (B) It fails to explain the connection between improper bone development and arthritis.
- (C) It fails to address the effects of neutering in middle or late puppyhood.
- (D) It fails to consider the possibility that the benefits of neutering a dog early might outweigh the risk of arthritis.
- (E) It fails to consider the possibility that dogs with properly developed bones can develop arthritis.
- 4) At the request of Grove Park residents, speed bumps were installed on all streets in their neighborhood. However, although through traffic does cause noise and congestion in Grove Park, this remedy is blatantly unfair. The neighborhood is not a private community, and its streets were built with public funds, and thus all drivers have the right to use them whenever they please.
- The reasoning in the argument is most vulnerable to criticism on the grounds that it
- (A) ignores the possibility that speed bumps may not reduce the speeds at which drivers drive through the neighborhood
- (B) neglects the possibility that drivers frequently drive through the neighborhood at high speeds
- (C) provides no evidence that drivers have complained about the new speed bumps in the neighborhood
- (D) contains the tacit assumption that residents of neighborhoods should have the right to restrict traffic through their communities
- (E) presumes, without providing justification, that speed bumps do prevent drivers from using the roads on which the bumps are found
- 5) Reviewer: Many historians claim, in their own treatment of subject matter, to be as little affected as any natural scientist by moral or aesthetic preconceptions. But we clearly cannot accept these proclamations of objectivity, for it is easy to find instances of false historical explanations embodying the ideological and other prejudices of their authors. The reviewer's reasoning is most vulnerable to criticism on the grounds that it
- (A) takes for granted that the model of objectivity offered by the natural sciences should apply in other fields
- (B) offers evidence that undermines rather than supports the conclusion it reaches
- (C) fails to recognize that many historians employ methodologies that are intended to uncover and compensate for prejudices

- (D) takes for granted that some historical work that embodies prejudices is written by historians who purport to be objective
- (E) fails to recognize that not all historical explanations embodying ideologies are false
- **44.** 1) In criminal proceedings, defense attorneys occasionally attempt to establish that a suspect was not present at the commission of a crime by comparing the suspect's DNA to the DNA of blood

or hair samples taken from the scene of the crime. Although every person's DNA is unique, DNA tests often fail to distinguish among DNA samples taken from distinct individuals. Hence, it is a mistake to exonerate a suspect simply because that person's DNA did not match the DNA samples taken from the scene of the crime.

Which one of the following is an error in the reasoning above?

- (A) It assumes without warrant that the use of physical evidence in identifying suspects is never mistaken.
- (B) It confuses a test that incorrectly identifies DNA samples as coming from the same person with a test that incorrectly shows as coming from different persons samples that come from a single person.
- (C) It generalizes about the reliability of all methods used to identify those involved in the commission of a crime on the basis of results that pertain to only a few such methods.
- (D) It relies on experimental data derived from DNA testing that have not been shown to hold under nonexperimental conditions.
- (E) It fails to demonstrate that physical evidence taken from the scene of a crime is the only sort of evidence that should be admitted in criminal court proceedings.
- 2) The enthusiastic acceptance of ascetic lifestyles evidenced in the surviving writings of monastic authors indicates that medieval societies were much less concerned with monetary gain than are contemporary Western cultures.

The reasoning in the argument is most vulnerable to criticism on the grounds that the argument

- (A) employs the imprecise term "ascetic"
- (B) generalizes from a sample that is likely to be unrepresentative
- (C) applies contemporary standards inappropriately to medieval societies
- (D) inserts personal opinions into what purports to be a factual debate
- (E) advances premises that are inconsistent
- 3) Between 1976 and 1985, chemical wastes were dumped into Cod Bay. Today, 3 percent of the bay's bluefin cod population have deformed fins, and wary consumers have stopped buying the fish. In seeking financial reparations from companies that dumped the chemicals,

representatives of Cod Bay's fishing industry have claimed that since the chemicals are known to cause genetic mutations, the deformity in the bluefin cod must have been caused by the presence of those chemicals in Cod Bay.

The answer to each of the following questions would be helpful in evaluating the representatives' claim EXCEPT:

- (A) What is the incidence of deformed fins in bluefin cod that are not exposed to chemicals such as those dumped into Cod Bay?
- (B) What was the incidence of deformed fins in bluefin cod in Cod Bay before the chemical dumping began?
- (C) Has the consumption of the bluefin cod from Cod Bay that have deformed fins caused any health problems in the people who ate them?
- (D) Are bluefin cod prone to any naturally occurring diseases that can cause fin deformities of the same kind as those displayed by the bluefin cod of Cod Bay?
- (E) Are there gene-altering pollutants present in Cod Bay other than the chemical wastes that were dumped by the companies?
- 4) Insufficient rain can cause crops to falter and agricultural prices to rise. Records indicate that during a certain nation's recent crisis, faltering crops and rising agricultural prices prompted

the government to take over food distribution in an effort to prevent starvation. Thus, the weather must have played an important role in bringing about the crisis.

The argument's reasoning is most vulnerable to criticism on the grounds that the argument

- (A) concludes, merely from the fact that the period of insufficient rain occurred before the nation's crisis, that insufficient rain caused the nation's crisis
- (B) fails to take into account the possibility that the scarcity was not severe enough to justify the government's taking over food distribution
- (C) uses the term "crisis" equivocally in the reasoning, referring to both a political crisis and an economic crisis
- (D) infers, merely from the fact that one event could have caused a second event, that the first event in fact caused the second
- (E) takes for granted that any condition that is necessary for an increase in agricultural prices is also sufficient for such an increase
- 5) According to some astronomers, Earth is struck by a meteorite large enough to cause an ice age

on an average of once every 100 million years. The last such incident occurred nearly 100 million years ago, so we can expect that Earth will be struck by such a meteorite in the near future. This clearly warrants funding to determine whether there is a means to protect our planet from such meteorite strikes.

The reasoning in the argument is most subject to criticism on the grounds that the argument (A) makes a bold prescription on the basis of evidence that establishes only a high probability for a disastrous event

- (B) presumes, without providing justification, that the probability of a chance event's occurring is not affected by whether the event has occurred during a period in which it would be expected to occur
- (C) moves from evidence about the average frequency of an event to a specific prediction about when the next such event will occur
- (D) fails to specify the likelihood that, if such a meteorite should strike Earth, the meteorite would indeed cause an ice age
- (E) presumes, without providing justification, that some feasible means can be found to deter large meteorite strikes

Підготував: доцент кафедри теорії та історії держави і права	Андріюк В.В.