

Ethanol is a high-octane biofuel which performs so splendidly in internal combustion engines that early automakers presumed it would be the world's 5th chief fuel.

American proponents of ethanol fuel highlight two principal advantages: its environmental impact and its energy security benefits.

The adoption of ethanol reduces noxious emissions such as carbon monoxide (CO) and pollutants from internal combustion engines; hence, it is appreciably less **deleterious** to the environment than gasoline. Ethanol made from corn has been shown to reduce harmful emissions by up to 13%, whereas ethanol made from cellulosic materials reduces dangerous emissions by as much as 88%.

Ethanol is a renewable biofuel; in only six months a new crop can be grown, harvested, and converted to fuel, so it is profitable for rural crop-producing economies. In addition, it keeps engines clean and can be used in gasoline engines with no modifications when combining gas with up to 10% ethanol. It can be used in specially modified vehicles called "flexible-fuel" or "flex-fuel" vehicles in concentrations of up to 85%. Gasoline combined with 85% ethanol is generally referred to as "E85." Higher ratios of ethanol in the fuel mixture result in less reliance on fossil fuels, so there is less dependence on imports.

American opponents of ethanol fuel point to three disadvantages: its price fluctuations, its energy level, and its availability.

The price of ethanol fluctuates on a different cycle than gasoline; therefore, at times ethanol is more expensive than gasoline, and at times it is cheaper. Another drawback of ethanol is that it contains less energy per gallon than gasoline; even when it is cheaper per gallon than 25 conventional fuel, it does not take the vehicle as far as a gallon of gas. A car's fuel economy with ethanol can be expected to be 20-30% less than a vehicle which burns gasoline. So the occasional cheaper price is offset by the lower energy yields. In addition, ethanol is not as widely distributed as gasoline. It is readily available only in the Midwest; other areas have limited ethanol infrastructure.

I. Reading comprehension:

1. It can be inferred from the passage that which of these statements about ethanol is/are true? (justify your answer).
 - a) Burning ethanol made from wood produces less CO than burning ethanol made from corn.
 - b) Burning ethanol made from grain produces less CO than burning gasoline.
 - c) Burning ethanol made from newspapers produces less CO than burning ethanol made from grass.
- 2.. The author's primary purpose is to:
 - a) describe and define ethanol.
 - b) compare 2 types of ethanol.
 - c) support the adoption of ethanol.
 - d) explain advantages and disadvantages of gasoline.
 - e) explain advantages and disadvantages of ethanol.Justify your answer.
- 3.. In line "6", *deleterious* most closely means
 - a) dangerous, because it harms the environment less than gas.
 - b) beneficial, because it helps the environment less than gas.
 - c) splendid, because it performs less splendidly than gas.
 - d) unreliable, because it is less unreliable than gas.
 - e) expensive, because it is less expensive than gas.
4. Give synonyms to the 4 underlined words in the text.

II. Put the verbs into the correct tense (simple past or present perfect).

1. A (you / ever / be) to London?
B: Yes, I (be) there three times.
2. A: When (be) the last time you(be) there?
B: Last summer. I (spend) two weeks in Brighton with my parents and then we (go) to Manchester.
3. A: When you first (eat) haggis?
B: That was in 2005. We (have) a Scottish festival in our town and they also (sell) traditional Scottish food. So I (buy) haggis.

III. Fill in the gaps with the following words:

radius / Northern Hemisphere/ Southern hemisphere /counterclockwise/ acceleration / inertia circle/ latitude/ clockwise/ speed/ angular velocity

Here Ω is theof the earth and ϕ isThe force is directed 90° to the right of the motion in theand 90° to the left in the..... It therefore does not change the In the absence of other forces, it gives rise to circular motion in the Northern Hemisphere and motion in the Southern Hemisphere. The circular motion requires an inward equal to C^2 divided by the..... Equating this to fC from (1), we find that the radius of the is C/f .

IV. Complete the sentences with : although / in spite of / because / because of

- 1) all our careful plans, a lot of things went wrong.
- 2) we'd planned a lot of things carefully, a lot of things went wrong.
- 3) I went home early I was feeling unwell.
- 4) I went to work the next day.....i was still feeling unwell.
- 5) She only accepted the job..... The salary, which was very high.
- 6) She accepted the job..... The salary, which was rather low.
- 7) I managed to get to sleep..... there was a lot of noise.
- 8) I couldn't get to sleep..... the noise.

Answers :

READING COMPREHENSION (7.P)

1.. The correct answer is **D**. (1.5)

I) Correct. Corn is a sugar-based crop, and wood is a cellulosic feedstock. ethanol made from corn reduces harmful emissions by up to 13%, and ethanol made from cellulosic materials reduces harmful emissions by as much as 88%. According to line 8, one of the noxious (harmful) emissions is carbon monoxide (CO.) Therefore; burning ethanol made from wood produces less CO than burning ethanol made from corn.

II) ethanol reduces noxious emissions such as carbon monoxide (CO) and pollutants from internal combustion engines; hence, it is appreciably less deleterious to the environment than gasoline. ethanol made from corn reduces harmful emissions by up to 13%.

III) Incorrect. According to lines 3-4, grass, wood, and recycled newspapers are cellulosic materials. And while, according to lines 11-12, using ethanol made from cellulosic materials reduces harmful emissions by up to 88%, there is no comparison made among the various cellulosic materials.

2.. The correct answer is **E**. (1.5)

A) Incorrect. While the author describes and defines ethanol in lines 1-6, she goes on to explain the advantages and disadvantages of using it.

B) Incorrect. While the author makes several comparisons between sugar-based ethanol and cellulosic ethanol, she goes on to explain the advantages and disadvantages of using it.

C) Incorrect. While the author explains the advantages of adopting ethanol in lines 8-19, she goes on to explain the disadvantages of using it.

D) Incorrect. While the author explains that ethanol is less harmful to the environment than gasoline and that gas works better and is more widely available than ethanol in lines 24-28, she does so only insofar as she is comparing the advantages and disadvantages of ethanol.

E) Correct. The structure of the passage is revealed, which explain what the proponents of ethanol highlight as advantages and, which explain what the opponents of ethanol point to as disadvantages.

3. The correct answer is **A**. (1.5)

A) Correct. Ethanol reduces noxious (harmful) emissions; ethanol made from corn reduces harmful emissions by up to 13%, and ethanol made from cellulosic materials reduces harmful emissions by as much as 88%. So ethanol is less harmful, or less dangerous, than gasoline.

B) Incorrect. According to line 8, ethanol reduces noxious (harmful) emissions; ethanol made from corn reduces harmful emissions by up to 13%, and ethanol made from cellulosic materials reduces harmful emissions by as much as 88%. So ethanol is more beneficial, not less beneficial, than gasoline.

C) Incorrect. Ethanol performs so splendidly in internal combustion machines that carmakers thought it would be the chief fuel. It keeps engines clean. car's fuel economy can be less with ethanol than with gasoline, there is no mention that ethanol performs less splendidly than gas.

D) Incorrect. Ethanol performs so splendidly in internal combustion machines that carmakers thought it would be the chief fuel. Ehanol does not take the vehicle as far as a gallon of gas. But there is no mention that it is more or less unreliable than gas.

E) Incorrect. Ethanol is appreciably less deleterious to the environment than gasoline. The expense of gasoline would not cause the environment to change. The price of ethanol fluctuates on a different cycle than gasoline; therefore, at ethanol is more expensive than gasoline, and at times it is cheaper. So, ethanol is not less expensive than gas.

4. Synonyms: (2. P)

- Splendidly= wonderfully, amazingly, remarkably
- Highlight= emphasize- focus on- stress on
- Harmful= dangerous
- widely= largely- generally

II. Put the verbs into the correct tense (simple past or present perfect). (2.5 p)

- 1) A **have you ever been to** London?
a. B: Yes, **I have been** there three times.
- 2) A: When **was** the last time you **were** there?
a. B: Last summer. I **spent** two weeks in Brighton with my parents and then we **went** to Manchester.
- 3) A: When **did you** first **eat** haggis?
a. B: That **was** in 2005. We **had** a Scottish festival in our town and they also **sold** traditional Scottish food. So I **bought** haggis.

III. Fill in the gaps with the following words: (2.5 p)

radius / Northern Hemisphere/ Southern hemisphere /counterclockwise/ acceleration / inertia circle/ latitude/ clockwise/ speed/ angular velocity

Here Ω is the **angular velocity** of the earth and ϕ is **latitude**. The force is directed 90° to the right of the motion in the **Northern Hemisphere** and 90° to the left in the **Southern hemisphere**. It therefore does not change the **speed**. In the absence of other forces, it gives rise to **clockwise** circular motion in the Northern Hemisphere and **counterclockwise** motion in the Southern Hemisphere. The circular motion requires an inward **acceleration** equal to C^2 divided by the **radius**. Equating this to fC from (1), we find that the radius of the **inertia circle** is C/f .

IV. Complete the sentences with : **although / in spite of / because / because of** (4.P)

- 1) **Despite/ in spite of** all our careful plans, a lot of things went wrong.
- 2) **Although** we'd planned a lot of things carefully, a lot of things went wrong.
- 3) I went home early **because** I was feeling unwell.
- 4) I went to work the next day **although** i was still feeling unwell.
- 5) She only accepted the job **because of** The salary, which was very high.
- 6) She accepted the job **in spite of** The salary, which was rather low.
- 7) I managed to get to sleep **although** there was a lot of noise.
- 8) I couldn't get to sleep **because of** the noise.