READING PASSAGE-1

Effects of Plastic Bags on the Environment

The effects of plastic bags on the environment are really quite devastating. While there are many objections to the banning of plastic bags based solely on their convenience, the damage to the environment needs to be assessed too.

There is no way to strictly limit the effects of plastic bags on the environment because there is no disposal method, that will really help to eliminate the problem. While reusing them is the first step, most people don't do that. These bags are not durable enough to survive numerous trips to the store. The best a citizen can do is to reuse them.

The biggest problem with this is that once they have been soiled they end up in the trash, which then ends up in the landfill or is burned. Either of these solutions is not good for the environment. Burning emits toxic gases that harm the atmosphere and increase the level of VOCs in the air while landfills hold them indefinitely as a part of the plastic waste problem throughout the globe.

One of the greatest problems is that an estimated 300 million plastic bags end up in the Atlantic Ocean alone. These bags are very dangerous for the sea life, especially for those of the mammal variety. Any hunting mammal can easily mistake the size, shape and texture of the plastic bag for a meal and find its airway cut off. Needless deaths from plastic bags are increasing every year.

The environmental balance of the waterways is being thrown off by the rate of plastic bags finding their way into the mouths and intestinal tracts of sea mammals. As one species begins to die off at an abnormal rate, every other living organism in the waterways is also impacted.

The indefinite period of time that it takes for the average plastic bag to break down can be literally hundreds of years. Every bag that ends up in the woodlands of the country threatens the natural progression of wildlife. Because the breakdown rate is so slow the chances that the bag will harmlessly go away are extremely slim. Throughout the world plastic bags are responsible for the suffocation deaths of woodland animals as well as for inhibiting soil nutrients. The land litter that is made up of plastic bags has the potential to kill over and over again. It has been estimated that one bag has the potential to unintentionally kill one animal every three months due to unintentional digestion or inhalation.

While it's a noble thought to place the plastic bags in the recycling bin every week, studies have proven that there are very few recycling plants that actually recycle them. Most municipalities either burn them or send them off to the landfill after sorting. This is because it can be expensive to recycle this type of plastic. It doesn't melt down easily and is often not fit to be reused in its original form.

The premise of recycling these bags is nice. Yet funding for the upgrading of the recycling units just has not happened and thus less than 1% of all bags are sent to recycling plants worldwide. Most are left to become a pollution problem in one way or another.

There are always alternatives to plastic bags and the search for better and more alternatives continues. Paper bags are a possible option, but they also take their toll on the environment. The use of trees to increase the production of paper products will also have a negative environmental effect.

Reusable plastic bags are being introduced to regions that want to outlaw the plastic bags altogether. These are stronger and more durable and can be used for three to five trips to the store. Of course, the reusable cloth bag is fast becoming a favourite among the environmental supporters. While so far no bag is without its issues, these are the bags that are currently recommended for use to help protect environmental concerns.

Q. On the basis of your understanding of the above passage, answer any five of the questions given below by choosing the most appropriate option:

- 1. People object to the banning of plastic bags because they are:
- 1. durable.
- 2. convenient.
- 3. easily disposable.
- 4. useful.
- 2. The environmental balance of the waterways is being thrown off because:
- 1. the amount of plastic bags is decreasing the water level.
- 2. the breaking rate of these bags is slow.
- 3. many species of sea mammals are dying.
- 4. there are 300 million plastic bags lying in Atlantic Ocean.
- 3. What do most municipalities do to the plastic bags?
- 1. Send them off to the landfill.
- 2. Recycle them.
- 3. Clean and send them for reuse.
- 4. Leave them undestroyed.
- 4. The best option to replace plastic bags is:
- 1. paper bags.
- 2. reusable plastic bags.
- 3. cloth bags.
- 4. all of the above.
- 5. What is the first step to solve the problem of plastic waste?
- 1. Reuse
- Replace
- 3. Recycle
- 4. All of these
- 6. Why are the Paper bags not good alternative of plastic bags?
- 1. They are durable.
- 2. They cannot be recycled.
- 3. Trees are cut to make them.
- 4. They are reusable.

Answers

- 1. convenient.
- 2. many species of sea mammals are dying.
- Send them off to the landfill.
- 4. cloth bags.
- 5. Reuse
- 6. Trees are cut to make them.

- Q. Answer the questions briefly:
- 1. Why do the people oppose the banning of plastic?
- 2. Why is it not good to burn the plastic?
- 3. How are mammals affected by plastic bags?
- 4. Why do most municipalities not recycle plastic?
- 5. Which are better alternatives to plastic bags?
- 6. Find words from the passage which mean the same as the following:
- 1. Choking (para 6)
- 2. Costly (para 7)

Answers

- 1. Most of the people oppose the banning of plastic mainly due to its convenience and durability.
- 2. Burning plastic emits toxic gases that harm the atmosphere and increase the level of VOCs in the air while landfills hold them indefinitely.
- 3. Mammals mistake the size, shape and texture of the plastic bag for a meal and find its airway cut off. These plastic bags enter the mouths, stomachs and intestinal tracts of sea mammals.
- 4. Most municipalities either burn the plastics or send them off to the landfill after sorting. This is because it can be expensive to recycle this type of plastic. It doesn't melt down easily and is often not fit to be reused in its original form.
- 5. Paper bags are a possible option, but they also take their toll on the environment as trees are cut. Reusable bags are stronger and more durable. Another option is the reusable cloth bag.
- 6. Words are:
- 1. suffocation
- 2. expensive

READING PASSAGE-2 Donated Organs and their Transportation

Once an organ donor's family gives its consent and the organs are matched to a recipient, medical professionals are faced with the onerous challenge of transporting organs while ensuring that the harvested organ reaches its destination in the shortest possible time. This is done in order to preserve the harvested organs and involves the police and especially the traffic police department.

The traditional method of transporting organs by road is referred to as a "green corridor". This process entails police escorting an ambulance, so as to move around traffic – usually a specific traffic lane is chosen and all signals on the route stay green to ensure it to reach its destination in the shortest possible time. A 'green corridor' is a route cleared and cordoned off by the traffic police to ensure the smooth and steady transportation of harvested organs, on most occasions, to those awaiting a life-saving transplant. Organs tend to have a very short preservation time, such as the heart which has to be harvested and transplanted within four hours or the lungs which can be preserved for only six hours once they are harvested.

The first green corridor in India was created by Chennai Traffic Police in September 2008 when they accomplished their task of enabling an ambulance to reach its destination within 11 minutes during peak hour traffic. That organ saved a nine-year-old girl whose life depended on the transplant.

Similarly, such green corridors have been created by traffic police of various cities such as Pune, Mumbai, Delhi NCR etc. Personnel are stationed at selected

points to divert, control and clear the traffic giving way to the ambulance. Apart from this, a motorcade of police vehicles accompanies the ambulance ensuring that it does not face any problems. Delhi Traffic Police provided a green corridor from IGI Airport to Institute of Liver and Biliary Sciences in Vasant Kunj for transportation of a liver. The distance of 14 kms was covered in 11 minutes.

Experts point out the lack of a robust system to transport organs to superspeciality hospitals in least possible time. National Organ & Tissue Transplant Organisation (NOTTO), the country's apex organ donation agency, is now framing a proposal to airlift cadaver organs and will send a report to the Union Health Ministry. "Cadaver organs have a short life and so transplant should be done within a few golden hours." Director (NOTTO) expressed, "Therefore, we are preparing a proposal for airlifting organs at any given moment."

Most states do not have enough well-trained experts to retrieve or perform transplant procedures. Also, there is an acute shortage of advanced healthcare facilities to carry out a transplant. So, it is referred to other big centres in metropolitan cities. Organs retrieved from Aurangabad, Indore, Surat, Pune are sent to the Mumbai as these cities do not have super-speciality healthcare centres, informed officials.

"In India, about fifty thousand to one lakh patients are suffering from acute heart failure and need heart transplant at any point of time. In a private set-up, a heart transplant costs 15-20 lakhs, which is followed up by postoperative medication of about 30,000 per month lifelong."

Q. On the basis of your understanding of the above passage, answer the following questions by choosing the most appropriate options:

- 1. The first green corridor in India was created in:
- 1. New Delhi
- 2. Chennai
- 3. Mumbai
- 4. Pune
- 2. The organization which is framing a proposal to airlift cadaver organs is:
- 1. Union Health Ministry
- 2. Regional Organ and Tissue Transplant Organisation
- 3. National Organ and Tissue Transplant Organisation
- 4. State Organ and Tissue Transplant Organisation
- 3. The onerous task the author is talking about in para 1 is:
- 1. finding organ donors.
- 2. finding doctors capable of performing transplants.
- 3. to carry the harvested organ in the shortest possible time.
- 4. to arrange the requisite facilities for the transplant.
- 4. Most of the people do not go for the heart transplant as :
- 1. it is very risky.
- 2. it is very painful.
- 3. it may cause death of the recipient.
- 4. the cost is prohibitive.
 - 5. Most states refer organ transplant cases to big hospitals because
- 1. they don't have well-trained experts.
- 2. the patients don't trust local doctors.
- 3. the state hospitals are very crowded.
- they don't have a pool of harvested organs.
- Heart retrieved from a body is alive only for _____ hours.

- 1. two
- 2. three
- 3. four
- 4. five

Answers

- 1. Chennai
- 2. National Organ and Tissue Transplant Organisation
- 3. to carry the harvested organ in the shortest possible time.
- 4. the cost is prohibitive.
- 5. they don't have well-trained experts.
- 6. four
 - Q. Answer the following questions briefly:
- 1. What is a 'green corridor'?
- 2. Why is smooth transportation of the retrieved organ necessary?
- 3. What opinion do you form of Chennai Police with regard to the transportation of a harvested heart?
- 4. What does the author mean by 'a few golden hours'?
- 5. How much does a heart transplant cost a patient in a private hospital?
- 6. Pick out the words from the passage which mean the same as the following:
- 1. save (para 1)
- 2. achieved / carried out (para 3)

Answer

- A green corridor is a route cleared and cordoned off by the traffic police to ensure the smooth and steady transportation of harvested organs, on most occasions, to those awaiting a life-saving transplant.
- A retrieved organ requires smooth transportation because it has very short preservation time post its harvest.
- Chennai Police did a phenomenal job by successfully transporting an organ in 11 minutes during the peak traffic hour and saving the life of a nine-year old girl.
- 4. By 'a few golden hours', the author means 'short preservation time' that the harvested organs have with them.
- 5. In a private hospital, a heart transplant costs 11 15-20 lakhs, which is followed by postoperative medication of about 30,000 per month lifelong.
- 6. Words are:
- 1. Preserve
- 2. Accomplished

READING PASSAGE-3 Cycling

Every morning Ravi gives his brain an extra boost. We're not talking about drinking strong cups of coffee or playing one of those mind-training video games advertised all over Facebook. "I jump into my stationary bike and cycle for 45 minutes to work," says Ravi. "When I get to my desk, my brain is at peak activity for a few hours." After his mental focus comes to a halt later in the day, he starts it with another short spell of cycling to be able to run errands.

Ride, work, ride, repeat. It's a scientifically proven system that describes some unexpected benefits of cycling. In a recent study in the Journal of Clinical and Diagnostic Research, scientists found that people scored higher on tests of memory, reasoning, and planning after 30 minutes of spinning on a stationary bike than they did before they rode the bike. They also complete the tests faster after pedalling.

Exercise is like fertilizer for your brain. All those hours spent on exercising your muscles, create rich capillary beds not only in leg and hip muscles, but also in your brain. More blood vessels in your brain and muscles mean more oxygen and nutrients to help them work. When you pedal, you also force more nerve cells to fire. The result: you double or triple the production of these cells—literally building your brain. You also release neurotransmitters (the messengers between your brain cells) so all those cells, new and old, can communicate with each other for better, faster functioning. That's a pretty profound benefit to cyclists.

This kind of growth is especially important with each passing birthday, because as we age, our brains shrink and those connections weaken. Exercise restores and protects the brain cells. Neuroscientists say, "Adults who exercise display sharper memory skills, higher concentration levels, more fluid thinking, and greater problem-solving ability than those who are sedentary."

Cycling also elevates your mood, relieves anxiety, increases stress resistance, and even banishes the blues. "Exercise works in the same way as psychotherapy and antidepressants in the treatment of depression, maybe better," says Dr. Manjari. A recent study analyzing 26 years of research finds that even some exercise— as little as 20 to 30 minutes a day—can prevent depression over the long term.

Remember: Although it's healthy, exercise itself is a stress, especially when you're just getting started or getting back into riding. When you first begin to exert yourself, your body releases a particular hormone to raise your heart rate, blood pressure, and blood glucose levels, says Meher Ahluwalia, PhD, a professor of integrative physiology. As you get fitter, it takes a longer, harder ride to trigger that same response.

Q. On the basis of your understanding of the passage, complete the statements given below with the help of the options that follow:

1. Ravi gets his brain to work at peak level by

- 1. drinking three cups of coffee.
- 2. playing games that need brain activity.
- 3. cycling on a stationary bike.
- 4. taking tablets to pump up his brain.

2. When nerve cells work during exercise then

- 1. the body experiences stress.
- 2. the brain is strengthened by multiplying them.
- 3. you start to lose your temper.
- 4. your stationary cycle starts to beep.

Answer

- 1. cycling on a stationary bike.
- 2. the brain is strengthened by multiplying them.
 - Q. Answer the following questions briefly:
- 1. How does exercise help the brain?
- 2. Why does Ravi do a circuit of 'ride, work, ride'?
- 3. What is the work of neuro transmitters?
- 4. What benefits other than greater brain act
- 5. How is exercise itself a stress?
- 6. Find words from the passage which mean the same as the following:
- 1. manure (para 3)
- inactive (para 4)Answer
- Exercise is like the fertilizer to the brain. It creates rich capillary beds not only
 in legs and hips muscles, but also in the brain. More blood vessels in the brain
 and muscles mean more oxygen and nutrients to help them work. It doubles
 or triples the nerve cells and builds the brain. It also releases
 neurotransmitters.
- Ravi does a circuit of 'ride, work, ride' because it given his brain an extra boost. People who do such rigorous activities score higher on tests of memory, reasoning and planning. It also helps in completing the tests faster.
- 3. Neurotransmitters are the messengers between our brain cells. They enable faster, and better communication between the brain cells.
- 4. Cycling elevates our mood, relieves anxiety, increases stress resistance and even banishes the blues. It prevents depression.
- As we age, our brain shrinks and the connections between the cells weaken. Exercise restores and protects the brain cells. It leads to sharper memory skills, higher concentration levels, more fluid thinking and better problem solving ability.
- 6. Exercise itself is a stress especially when one just starts an activity or gets back to it. At that point, the body releases a particular hormone which raises the heart rate, blood pressure and blood glucose levels.
- 7. Words are:
- 1. fertilizer
- 2. sedentary

