

## SECTION-A : READING

**Q.I. Read the given passage carefully and answer the questions given below: 12 marks**

1 From the time that I can remember having any thoughts about anything, I recall that I had an intense longing to learn to read.

2 Soon after we got settled in some manner in our new cabin in West Virginia, I persuaded my mother to get hold of a book for me. How or where she got it I do not know, but in some way she procured an old copy of Webster's 'blue-back' spelling book, which contained the alphabet. I began at once to devour this book, and I think that it was the first one I ever had in my hands.

3 I had learned from somebody that the way to begin to read was to learn the alphabet, so I tried in all the ways I could think of to learn it - all of course without a teacher, for I could find no one to teach me. There was not a single member of my race anywhere near us who could read, and I was too timid to approach any of the white people. In some way, within a few weeks, I mastered the greater portion of the alphabet.

4 In all my efforts to learn to read, my mother fully shared my ambition, and sympathised with me and helped me in every way that she could, Though she was not formally educated herself, she had high ambitions for her children, and a large fund of good, hard, common sense.

5 In the midst of my struggles and longing for an education, a young coloured boy who had learned to read in the state of Ohio came to Maiden. As soon as the coloured people found out that he could read, a newspaper was bought, and at the close of nearly every day's work this young man would be surrounded by a group of men and women who were anxious to hear him read the news contained in the papers.

6 About this time , the idea of opening some kind of a school for the coloured children in the village began to be discussed by members of the race. Since it would be the first school for "Negro" children that had ever been opened in that part of Virginia, it was, of course, to be a great and wildly excited event.

7 As yet no free schools had been started for coloured people in that section, hence each family agreed to pay a certain amount every month, with the understanding that the teacher who was appointed was to 'board round' — that is, spend a day with each family.

8 This was not bad for the teacher, for each family tried to provide the very best on the day the teacher was to be its guest. I recall that I looked forward with an anxious appetite to the 'teachers day' at our little eih' -'

9 All across the country, it was a whole race trying to go to school. Not to old to make the attempt to learn, and almost no one too young. As any kind of teachers could be found, not only were day-schools filled, but schools as well. The great ambition of the older people was to try to I read the Bible before they died.

**Q.1.1. On the basis of your understanding of the passage answer the following in your own words**

- How did Washington's mother support his desire to read ? Which w first book he bought ?
- How did the people of Maiden get to know about the news in newspapers ?
- What was the great event that took place in Maiden and why ?
- How did the people pay their teacher?
- Why were the older people keen to learn to read?

**Q. 1.2 Pick out the words / phrases from the passage which mean the the following**

- bold (para 3)
- sober (para 6)
- ordinary (para 7)
- hunger (para 8)

**Q.2. Read the passage carefully and answer the questions that follow:**

The development of the Internet, email and the word processor led to widespread, confident predictions about the paperless office. With these new electronic media, there would be no need for written communications to be sent on paper, or so it was said. In fact, the demand for office paper in total has grown on average by 8.1% each year since 1981. It is predicted to grow by at least 4-5 per cent until 2010 and even beyond. This overall increase conceals some intriguing underlying trends. There has been a relative decline in demand for copier paper. In Europe, between 1995 and 2000 the consumption of copier paper reduced by 11%.

So what is driving the growth in office paper sales ? There are two factors. The first is information. The amount of information available to the average office worker will, according to some reports, increase six-fold by the year 2010. This insatiable appetite for information is coupled with a quantum leap in ease of access. Although the percentage of information being printed is in sharp decline, this is more than compensated for by the fact that the amount of information available to us is doubling every two years. The net effect is growth in office paper of around 5% across Europe.

Many people don't like reading complicated emails, and print them off to look at them later. Email speeds communication but it encourages a more thoughtless process of writing — what has been called a stream of unconsciousness. Word processors encourage repeated drafting and new levels of perfectionism that are creating an exponential demand for paper.

Underlying these patterns is a profound change in the way documents are produced. The old way was print and distribute, a way of working that was dominated by the photocopier and small office printer. The new mode is distribution and print: 'This is the realm of the office printer and everyone has access to one of those. The world has gone from supporting 10,000 publishers to 100 million publishers and the figure rises every minute.' The paperless office is a clear fiction, although the products and applications and, most importantly, the customers for paper have changed radically. In 1997, the printer overtook the copier as the largest consumer of paper. By 2005 two-thirds of all paper in the office will go through the printer. The fate of paperless office is just one example of the difficulty of predicting the effects of technological innovations on economic and social systems. So is the idea of the leisured society. (429 words)

Q2(a) On the basis of your reading of the above passage, make notes on it using headings and sub-headings. Use recognizable abbreviations wherever necessary. 5

Q2(b) Using the notes write a summary of the above passage in 80 words. 3

**Q3. Read the given passage carefully and answer the questions given below:**

**12 marks**

1. In the hospital, I was thinking about the most exceptional people I've known. They were the ones who kept going when others quit; the ones who found ways to do what everyone else thought couldn't be done. They didn't just hold down a job or work hard. They were reaching deeper inside and finding something more. They made a greater difference. I don't believe they would have understood these words - "he held the frame so we both could see the inscription" - "the way I did."

2. "I remember my parents and other adults in my hometown saying, "Study hard and work hard but don't let your dreams get too big. If you do that, you'll only be disappointed."

3. "Learn to fit in and go along,' they said, 'that's what successful people do.' I got very good at fitting in and going along." His voice trailed off.

4. "Robert, you're going to hear the same kinds of things from people around you. They're well-intentioned but they're wrong. What if I hadn't accepted it?"

What if everyday I had questioned yesterday's definition of my best? What if I'd listened to my own heart instead of their words? Then I might have kept looking deeper and giving the world more of the best that was hidden inside me."

5. "And if I'd done that," he said, "more of the best would have come back to me, and to this family, and to you, Robert. But it won't," he said, "because I didn't do it."

6. "So this is my challenge to you-to live these words." He handed me the frame. There was no glass in it; I ran my fingertips over the words and felt the brittle paper. "But grandfather," I said, not wanting to disappoint him but unsure of how to accomplish what he was asking me, "maybe when I'm older..."

7. "Age has nothing to do with it. Every day you can learn something more about who you are and all the potential that's hidden inside you. Every day you can choose to become more than you have been. I'm asking you straight right now."

8. "But how?"

9. "By looking inside yourself. By testing new possibilities. By searching for what matters most to you, Robert. Few of us ever do that for ourselves. Instead, we hold our breath. We look away. We get by or go along. We defend what we have been. We say, "It's good enough." I pray you don't wake up one day and say, "I've been living my life wrong and now it's too late to make it right."

10. Young as I was, I could still see the pain his regret was causing him, and even then I recognized that the gift he was giving me was as much in honesty as in the specific words he was so determined for me to hear.

11. "Robert, all of us are mostly unused potential. It's up to you to become the most curious person you know and to keep asking yourself, What is *my* best? Keep finding more of it every day to give to the world. If you do that, I promise that more of the best than you can ever imagine - and in many ways beyond money - will come back to you."

12. And it has. Despite my struggles and mistakes along the way, I have learned that there are opportunities, for each of us that exist beneath and beyond conventional thinking and self imposed limits. What my grandfather realized too late that he had not done, he challenged me to do. In this book, I pass the challenge to you. (599 words)

(An excerpt from *The Other 90%* by Robert K. Cooper)

Q.a. Who, according to the writer, are exceptional people? (2)

Q.b. What, according to his parents, did 'successful' people do? (2)

Q.c. What does one need to do to "become more than you have been"? (2)

Q.d. Explain the phrase "looking inside yourself". (1)

Q.e. What did the writer learn from his struggles and mistakes? (1)

Q.f. Find words from the passage which mean the same as:- (4x1)

a) of unusual high quality (para 1)

b) hard but easily broken (para 6)

c) possibility for developing (para 11)

d) following accepted customs and traditions (para 12)

**Q4. Read the passage carefully and answer the questions that follow: 08 marks**

Cosmetic surgery is the latest beauty mantra in India , as more and more people want to look young and feel good. Be it a crooked nose, cleft lip or excessive body flab, cosmetic surgery can correct it all. Moreover, in the last decade , the popularity of medical tourism has soared among people in developed nations due to the elevated cost of healthcare in their own countries. A career as a cosmetic surgeon entails years of training and developing exceptional skill. However, once established, clients will flow in. Cosmetic surgery entails specialization in a wide variety of arenas such as

rhinoplasty (nose job), abdominalplasty (tummy tuck), otoplasty (ear surgery), chin, cheek, and liposuction. The level of education is expanding in the field of medical science, and the demand for cosmetic surgeons in India is at an all time high. Cosmetic or aesthetic surgery is a fine tuned branch of medicine and requires intensive training. After an MBBS degree ,students would have to pursue a three-year Masters in Surgery (MS) degree and decide upon their area of specialization. The MS degree involves a house job, a junior residency and a senior residency for one year each. Students then have to give a dissertation for approval to the university, after which they can sit for the MS examinations. Aspiring cosmetic surgeons need to specialize in plastic and reconstructive surgery, also known as MCh degree. Another option after MBBS is the Diploma National Board (DNB), which is parallel to the conventional medical system and offers various specialization options including plastic and cosmetic surgery. The basic requirement of a cosmetic surgeon is an elevated sense of aesthetics and beauty. A sense and perception for the perfection of the human anatomy is vital in cosmetic surgery. During their practising years, students must aim to train under renowned surgeons in the field, and soak up as much as possible from their expertise. Being an apprentice to a good surgeon will not only give you the much required exposure to the reality of the cosmetic operations but will also build your confidence and client base. The practising years are crucial because in cosmetic surgery, perfect results are essential. Medical science is not a stagnant field, and hence one must also keep abreast of the latest in the field of cosmetic surgery. The biggest profit for a truly dedicated cosmetic surgeon is the beautiful result of his work and the client's satisfaction. After training under reputed cosmetic surgeons, one can either seek employment in a hospital as a full time surgeon or open up a private clinic, or do both. If you are good, people will come to you. Word of mouth is the best form of advertising for a cosmetic surgeon.

a) Make notes on the passage given above in any format using recognizable abbreviations. Give a suitable title to the passage. **5 marks**

b) Write a summary based on the notes you have made in about 80 words. **3 marks**

**Q5. Read the passage given below and then answer the questions which follow:**

**12 marks**

1. In spite of all the honours that we heaped upon him, Pasteur, as has been said, remained simple of heart. Perhaps the imagery of his boyhood's days, when he limned the familiar scenes of his birthplace, and the longing to be a great artist, never wholly left him. In truth he did become a great artist , though after his sixteenth year he abandoned the brush for ever. Like every artist of worth, he put his whole soul and energy into his work, and it was this very energy that in the end wore him out. For to him, each sufferer was something more than just a case that was to be cured. He looked upon the fight against hydrophobia as a battle, and he was absorbed in his determination to win. The sight of injured children, particularly, moved him to an indescribable extent. He suffered with his patients, and yet he would not deny himself a share in that suffering. His greatest grief was when sheer physical exhaustion made him give up his active work. He retired to the estate at Villeneuve 'Estang, where he and his kennels for the study of rabies, and there he passed his last summer, as his great biographer, Vallery Radot, has said, "practicing the Gospel virtues."

2. "He revered the faith of his fathers," says the same writer, "and wished without ostentation or mystery to receive its aid during his last period."
3. The attitude of this man to the science he had done so much to perfect can be best summed up in a sentence that he is reputed once to have uttered, concerning the materialism of many of his contemporaries in similar branches of learning to his own: "The more I contemplate the mysteries of Nature, the more my faith becomes like that of a Breton peasant's wife."
4. But even then in retirement he loved to see his former pupils, and it was then he would reiterate his life principles: "Work," he would say, "never cease to work." So well had he kept this precept that he began rapidly to sink from exhaustion.
5. Finally on September 27, 1895, when someone leant over his bed to offer him a cup of milk, he said sadly: "I cannot," and with a look of perfect resignation and peace, seemed to fall asleep. He never again opened his eyes to the cares and sufferings of a world, which he had done so much to relieve and to conquer. He was within three months of his seventy-third birthday.
6. Thus passed, as simply as a child, the man whom the French people were to vote at a plebiscite as the greatest man that France had ever produced. Napoleon, who has always been considered the idol of France, was placed fifth.
7. No greater tribute could have been paid to Louis Pasteur, the tanner's son, the scientist, the man of peace, the patient worker for humanity.

**5.1 Answer the following question:**

- a. Even accolades and honours did not change the simple man that Pasteur was. Why?  
2 Marks
- b. How did Pasteur view those who suffered from diseases? 1 Mark
- c. How did Pasteur engage himself in the estate? 2 Marks
- d. What advice did he always give to his pupils? 2 Marks
- e. How did France, the country of his birth, honour this great scientist?  
2 Marks

**5.2 Find the words from the passage which mean the same as: 3 Marks**

- a. To paint (Para I)
- b. People belonging to the same period (Para 3)
- c. Vote by the people of the country to decide the matter of National importance (Para 6)

**Q6. Read the passage given below:**

**8 Marks**

Residents of the Bhirung Raut Ki Gali, where Ustad Bismillah Khan was born on March 21, 1916, were in shock. His cousin, 94-year-old Mohd Idrish Khan had tears in his eyes. Shubhan Khan, the care-taker of Bismillah's land, recalled: "Whenever in Dumaraon, he would give rupees two to the boys and rupees five to the girls of the locality".

He was very keen to play shehnai again in the local Bihariji's Temple where he had started playing shehnai with his father, Bachai Khan, at the age of six. His original name was Quamaruddin and became Bismillah only after he became famous as shehnai player in Varanasi.

His father Bachai Khan was the official shehnai player of Keshav Prasad Singh, the Maharaja of the erstwhile Dumaraon estate. Bismillah used to accompany him. For Bismillah Khan, the connection to music began at a very early age. By his teens, he had already become a master of the shehnai. On the day India gained freedom, Bismillah Khan, then a sprightly 31 year-old, had the rare honour of playing from Red Fort.

But Bismillah Khan won't just be remembered for elevating the shehnai from an instrument heard only in weddings and naubatkhana to one that was appreciated in concert halls across the world. His life was a testimony to the plurality that is India. A Practicing Muslim, he would take a daily dip in

the Ganga in his younger days after a bout of Kasti in Benia Baga Akhada. Every morning, Bishmillah Khan would do riyaz at the Balaji temple on the banks of the river. Even during his final hours in a Varanasi hospital, music didn't desert Bishmillah Khan. A few hours before he passed away early on Monday, the shehnai wizard hummed a thumri to show that he was feeling better. This was typical of a man for whom life revolved around music.

Throughout his life he abided by the principle that all religions are one. What marked Bishmillah Khan was his simplicity and disregard for the riches that come with musical fame. Till the very end, he used a cycle rickshaw to travel around Varanasi. But the pressure of providing for some 60 family members took its toll during his later years.

2.1 On the basis of your reading of the above passage make notes using heading and sub-headings. Use recognizable abbreviations where necessary.

**5 marks**

2.2 Make a summary of the above passage in not more than 80 words using the notes made and also suggest a suitable title. **3 Marks**

**Q7.** Read the following passage :

1. Many of us hold the assumption - a taken for granted belief- that "small" is synonymous with "inconsequential" or "insignificant". We believe that small actions and choices do not have much of a bearing on our lives. We think that it is only the big things, the big actions and the big decisions that really count. But when you look at the lives of all great people, you will see that they built their character through small decisions, small choices and small actions that they performed every day. They transformed their lives by working on their day-to-day behaviours slowly, steadily and consistently. Their personal and spiritual transformation did not occur

in one giant felled swoop, or in one singular, spectacular action. It happened more through a step-by-step or day-by-day approach. They nurtured and nourished their good habits and chipped away at their bad habits, one step at a time. It was their small day-to-day decisions, their everyday choices and actions, that cumulatively added up to make tremendous difference in the long run. Indeed, in matters of personal growth and character building, there is no such thing as an overnight success.

2. Growth always occurs through a sequential series of stages. There is an organic process to growth and transformation that cannot be circumvented. When we look at children growing up, we can see this process at work : the child first learns to crawl, then to stand and walk, and finally to run. The same is true in the natural world. We cannot sow today and expect to reap tomorrow. The soil must first be tilled, and then the seed must be planted. Next, it must be nurtured and nourished with enough water and sunlight, and only then will it grow, bear fruit and finally ripen and be ready to eat.

3. Gandhi intuitively understood this organic process and used this natural law to his benefit. Gandhi grew in small ways, in his day-to-day affairs. He did not wake up one day and find himself to be the "Mahatma" (great soul). In fact, there was nothing much in his early life that showed signs of greatness. But from his mid-twenties onwards, he consciously, deliberately and consistently attempted to change himself, reform himself and grow in some small way everyday. Day by day, hour by hour, he risked failure, explored, experimented and learned from mistakes. In seemingly small and large situations alike, he took up rather than avoided responsibility. Understanding that "a journey of a thousand miles begins with the first step", he seized each day and made it count.

4. People have always marvelled at the seemingly effortless way in which Gandhi could accomplish the most complex tasks. He exhibited a level of self-mastery and discipline that was astounding. It would, however, be wrong to claim that these things came easily to him. Many people saw him exhibiting his self-mastery, but did not see the years of practice and disciplined training that went into making his successes possible. Very few saw, up close and personally, his trials and tribulations,

fears, doubts and anxieties, or his inner efforts to overcome them. They saw the victory, but not the struggle.

5. This is a common factor in the lives of all great people : by exercising their freedoms and choices in small ways, their ability to influence and impact their lives and their environment grows. Each of their small and seemingly insignificant decisions and actions, taken everyday, adds up cumulatively to have a profound impact in the long run. By understanding this principle, we can move forward, with confidence, in the direction of our dreams. Often when our “ideal goal” looms too far from us, we become easily discouraged, disheartened and pessimistic. However, when we choose to grow in small ways, and when we break down any great task into small steps, performing it becomes progressively easy. "Anand Kumarasamy"

**7.1** On the basis of your understanding of the passage answer the following in your own words :

- (a) Mention two ways in which great people have built their character and transformed their lives ? 2
- (b) What according to the author is the universal law of nature ? Give an example. 2
- (c) Mention three qualities and characteristic features that helped to make Gandhi the ‘Mahatma’. 3
- (d) How can we achieve our dreams and ‘ideal goals’ ? 1

**7.2** Pick out the words/phrases from the passage which are similar in meaning to the following :

- (i) to destroy bit by bit (para 1)
- (ii) avoid by going round (para 2)
- (iii) a gut feeling (para 3)
- (iv) deep, very strongly felt (para 5)

**Q8.** Read the passage given below :

It has taken a tsunami to bring the coastal areas and rural coastal communities - the country's tail-end ecosystem and its marginalised people - into sustained mainstream attention. In normal times, there has rarely been so much coverage of fisher folk, other coastal poor and their problems in the media. The terrifying images of death and devastation along the narrow two-kilometre swathe of our southern coastline have left a lasting impression on civil society. It also

brought to public attention the wide range of economic activity that has moved towards the coast.

The debate on how to protect coastal lives and coastal ecosystems is now widespread.

There are four features of the coastal area ecosystem which makes it a particularly sensitive eco-zone. First, it is an “interface zone” where land meets the sea. It is therefore dynamic and non-static in its geo-physical and chemical parameters. Secondly, it has the highest primary productivity on the planet. Thirdly, it is the tail-end ecosystem and consequently receives all the negative externalities of terrestrial pollution. Fourthly, it is where the human population

density is highest and is also home to several socially isolated and disadvantaged communities such as fisher folk. Where once only isolated marine fishing communities existed, we now have a wide array of economic activity. These include five-star hotels, nuclear power plants, pilgrimage centres, coastal highways, aquaculture farms, shipbreaking yards, large chemical industry units, refinery units, sea cargo terminals, luxury residential colonies, fishing harbours, missile launching facilities and amusement parks. Many of these have entered the coast over the last two decades.

However with this expansion the original inhabitants are rarely taken into confidence. The rights of the original settlers have often been ridden over roughshod. The freedoms that they once enjoyed have been curbed and they have become the recipients of all the negative externalities of these new development activities - air and sea pollution, nuclear radiation, invasion of their cultural rights, to name but a few. Rarely have they been given adequate compensation for loss of their occupation, dignity, land and cultural rights. The post-tsunami disaster vulnerability reduction measures (the relief and rehabilitation) - including those provided by the state, are neither a “pure public good” nor a “pure private good.” These measures often lie in the

intermediate terrain between the two. A tsunami early warning system is near the public end and the quake and tsunami resistant homes near the private end. Other measures like community facilities are somewhere in between. It is, therefore, not just the quantum of disaster vulnerability reduction measures but to whom they are provided, that matters most. We need to encourage public policies,

which give priority to risk mitigation of those who are less able to acquire it privately because they are poor and dispossessed. Sustainable development of the coastal tract and greater entitlements and capabilities for the poor can be ensured only with a new structure of rights to an ecosystem which covers both land and sea."John Kurien"

(a) On the basis of your reading of the above passage make notes on it using headings and sub-headings. Use recognizable abbreviations wherever necessary. 5

(b) Using the notes write a summary of the above passage in 80 words. 3

### **9.1. Read the given passage carefully and answer the questions given below: 12 marks**

1. In order to make something happen, there must first be a dream. All great pioneers and visionaries were, first and foremost, dreamers whose dreams contained a touch of the impossible. Let us take the example of Gandhi, who also dreamed an "impossible" dream. To dream of freeing India from more than 100 years of British rule – a powerful imperial power – was novel enough, but to dream that freedom would be achieved without a single shot being fired was audacious.

2. Dreams (or day dreams) play a very important role in our lives. They provide us with a vision of what we want to achieve in life. Why is it important to have mighty goals, to dream great dreams? When our dreams and visions have a touch of the impossible, it stretches us. It grabs and pulls us out of our comfort zone. It forces us to employ new and innovative ways to achieve our goals. As Peter Senge states in his book, 'The Fifth Discipline', "The loftiness of the target compels new ways of thinking and acting." We are forced to 'think outside the box'.

3. With Gandhi at the helm, India embarked on one of the most unique freedom struggles in the history of the modern world. With truth, compassion and non-violence as his only weapons, Gandhi took on the might of the British empire. Gandhi painted a compelling picture of a free India – a united and truly self-reliant nation. Although many people initially doubted the efficacy of his methods, they gradually changed their minds as they saw Gandhi lead by example. People began to commit to this cause in larger numbers with each passing day. At one point, it was no longer Gandhi's vision; it had become a shared vision. Gandhi also helped them understand that this was a struggle of historic importance; if Indians could prove that freedom could be won through the non-violent way, then it would be a message of vital significance for future generations.

4. This shared vision lifted common men and women to greater levels of heroism and courage. These "ordinary" folk became so inspired that, they bravely and willingly joined in the struggle for Indian sovereignty. They endured physical blows and assaults without retreating or retaliating. They joined in Gandhi's hunger strikes and marches. The feeling that they were participating in something sacred and profound elicited the very best from these men and women. Their courageous actions are not understandable unless one realises that a powerful vision can inspire heroic acts and extraordinary courage from even the most seemingly ordinary person.

5. Gandhi himself was a very fearful and painfully shy child. This shyness continued well into his late twenties. He was so shy and fearful that at social gatherings, he could not make the simplest of speeches. At meetings, somebody else would have to read aloud what he had written. To top it all off, his first appearance as a lawyer in court was an unmitigated disaster; as Gandhi's turn came to speak, he found himself overwhelmed and tongue-tied. In his autobiography, he speaks of the innumerable occasions when he found himself in similar embarrassing situations, all due to his shyness.

6. And yet this person became the leader of millions. He became an extremely proficient speaker. He grew so self-confident that he was soon meeting and negotiating with very important and influential



leaders, such as British viceroys and generals who were in the top echelons of power. What happened? How did this painfully shy and fearful person end up as one of the greatest revolutionaries of the century? What triggered such a powerful transformation?

7. The answer is simple: when we care about something deeply, it unleashes within us immense courage; it inspires in us great daring, and 'we venture forth boldly. The vision of a free India and a peaceful and harmonious world was so compelling to Gandhi that he was no longer a slave to his fears. Inspired by this dream, he rose to the occasion. It enabled him to overcome his shyness. He cared so deeply about issues of freedom and non-violence that he tapped into his inner reservoirs of courage, will power and self-confidence.

8. Only when we have a great dream — will we truly know the extent and the depth of our potential, our courage and creativity. Unfortunately, the reverse is also true: when we do not have an overarching vision, even the trivial becomes painful, molehills appear as mountains and mere winds seem like hurricanes.

Anand Kumarasamy

**(a) On the basis of your understanding of the passage answer the following your own words**

- |  |   |
|--|---|
| (i) What were the two main features of Gandhi's 'impossible' dream?  | 2 |
| (ii) Mention two factors which are a result of having mighty dreams.   | 2 |
| (iii) What were Gandhi's weapons in his struggle for freedom?  | 1 |
| (iv) What led to the transformation of Gandhi from a shy person to one of the great revolutionaries of the 20th century? | 2 |
| (v) What happens when we do not have a great vision or dream?  | 1 |

**(b) Pick out words/phrases from the passage which are similar in meaning the following: 4**

- (i) daring and shocking (para 1)
- (ii) a course of action which produces the desired effect (para 3)
- (iii) terrible in every way (para 5)
- (iv) a level rank within an organisation (para 6)

**Q10.. Read the passage carefully and answer the questions that follow:**

It has taken a tsunami to bring the coastal areas and rural coastal communities - the country's tail-end ecosystem and its marginalised people—into sustained media attention. In normal times, there has rarely been so much coverage of fisherfolk coastal poor and their problems in the media. The terrifying images of devastation along the narrow two-kilometer swathe of our southern coast left a lasting impression on civil society. It also brought to public attention a range of economic activity that has moved towards the coast. The debate on protect coastal lives and coastal ecosystems is now widespread.

There are four features of the coastal area ecosystem which makes it a particular sensitive eco-zone. First, it is an "interface zone" where land meets the sea. It is therefore dynamic and non-static in its geo-physical and chemical parameters. Secondly, it has the highest primary productivity on the planet. Thirdly, it is the tail -end ecosystem and consequently receives all the negative externalities of terrestrial pollution. Fourthly, it is where the human population density is highest and is also home to several socially isolated and disadvantaged communities such as fisherfolk.

Where once only isolated marine fishing communities existed, we now have a wide array of economic activity. These include five-star hotels, nuclear power plants, pilgrimage centres, coastal highways, aquaculture farms, ship breaking yards, large chemical industry units, refinery units, sea cargo terminals, luxury residential colonies, fishing harbours, missile launching facilities and amusement parks. Many of these have entered the coast over the last two decades.

However with this expansion the original inhabitants are rarely taken into confidence. The rights of the original settlers have often been ridden over roughshod. The freedoms that they once enjoyed have been curbed and they have become the recipients of all the negative externalities of these new development activities air and sea pollution, nuclear radiation, invasion of their cultural rights, to name but a few. Rarely have they been given adequate compensation for loss of their occupation, dignity, land and cultural rights.

The post-tsunami disaster vulnerability reduction measures (the relief and rehabilitation) — including those provided by the state, are neither a “pure public good” nor a “pure private good.” These measures often lie in the intermediate terrain between the two. A tsunami early warning system is near the public end and the quake and tsunami resistant homes near the private end. Other treasures like community facilities are somewhere in between. It is, therefore, not just the quantum of disaster vulnerability reduction measures but to whom they are provided, that matters most. We need to encourage public policies, which give priority to risk mitigation of those who are less able to acquire it privately because they are poor and dispossessed. Sustainable development of the coastal tract and greater entitlements and capabilities for the poor can be ensured only with a new structure of rights to an ecosystem which covers both land and sea. (John Kurien)

(a) On the basis of your reading of the above passage make notes on it using headings and sub-headings. Use recognizable abbreviations wherever necessary. 5

(b) Using the notes write a summary of the above passage in 80 words. 3

---

**Q11. Read the passage given below and answer the questions that follow: 12**

1. Global warming is the warming up of the earth due to the trapping of gases like carbon dioxide, carbon monoxide, methane and nitrous oxide, when the atmosphere fails to perform its function of acting as a protective blanket. The incoming solar radiation is partly absorbed by carbon dioxide, though a vastly higher amount of the outgoing radiation is trapped in the atmosphere.
2. Carbon dioxide possesses immense staying properties in the atmosphere. It is being speculated that carbon dioxide concentrations may double in about a century.
3. This increased carbon dioxide level, according to predictions, indicates an increase in temperature ranging from 1.5-4 degrees Celsius, or a rise in sea levels by about 50cms by AD 2100.
4. However, Earth apparently has its own system of checks and balances. Water vapour in the atmosphere is known to absorb radiation more than any other atmospheric component.
5. A doubling of carbon dioxide concentration would increase the capacity of the Earth's surface to absorb infra-red radiation by about 4 watts per square meter, though over all, the levels of absorption would be small.
6. Volcanic eruptions, too, are believed to be responsible for reduction in the carbon dioxide contents in the atmosphere. A massive volcanic eruption in Philippines had in fact a cooling impact.
7. Cooling through volcanic eruptions is believed to release certain gases into the atmosphere, which are responsible for increase in the carbon dioxide content in the atmosphere.

8. Measurement of the incident of CO<sub>2</sub> in the atmosphere made in Hawaii indicate that during 1992-93 about two billion tonnes of the gas was found missing from the atmosphere.
9. As far as the impact of ozone depletion is concerned, it seems to be dictated more by political considerations, than any other factor. This increased burning of fossil fuels for energy is largely responsible for the increase in temperature through ozone depletion.
10. A tug-of-war has been going on among the industrialised countries and the developing countries on the share of the blame. In fact, the US, the erstwhile USSR, Brazil and China account for almost half of the net global emissions of harmful gases such as CFCs. While North America generates about 5 tonnes per head of carbon dioxide, Africa, China and India together generate approximately 1 tonne of CO<sub>2</sub> per head.
11. Developing countries, on the other hand, are charged with emission of methane largely generated from paddy fields and discharge of animals.
12. However, despite the fact that 1995 was one of the hottest years of the century, snowfalls have been recorded in some part of the world – notably on the eastern coast of America and in Jammu and Kashmir.
13. Moreover, over the last 50 years, the Arctic climate has not been undergoing any noticeable temperature changes. In fact, till 1975, global temperatures had been undergoing a downward trend. Could the recent spurt in temperatures be a natural cyclical process, or temporary offshoot of the shifting pressure belts?
14. Given the rising temperatures, growing seasons would be prolonged. Higher temperatures would also lead to an increased evaporation from oceans, thereby intensifying cloudiness, leading to moderate temperatures during the day and warmer nights.
15. Warmer temperatures during the night enhance agricultural productivity. Increased carbon dioxide in the atmosphere will also result in an increase in fertility.
16. Global warming will also have an impact on the El Niño phenomenon – the circulation of weather disturbances around the world as a result of the warming of Pacific Oceans around the tropics.
17. However, a few questions remain in the ongoing debate on global warming.
18. The process of heat transfer in the atmosphere – convection – is a field in which a lot of research needs to be done.
19. Secondly, clouds and vapour are known to be major absorbers of incoming radiation back into space.
20. If the cloud cover, as a result of increased evaporation due to rising temperature, were to increase, it would result in more containment.
21. Plants, which both absorb and release carbon dioxide, too have a crucial role to play. Their role, however, has been till now underestimated.

**11.1 Answer the following questions briefly:**

(10 marks)

- i) What is the function of the earth's atmosphere?

- ii) What is increased amount of carbon dioxide likely to lead to?
- iii) How does water vapour balance the effect of carbon dioxide?
- iv) What is the cause of tug-of-war between industrialised and developing countries?
- v) What is the 'EL Nino Phenomenon'?

**11.2 Find words in the passage that mean the same as the following:** (2 Marks)

- i) arrested (para 1)
- ii) sudden increase (para 13)

**Q12. Read the following passage carefully and answer the questions that follow:**

1. It is hard to think of an Indian snack that is not fried. However, we need to be aware of what happens to oil when it is heated. When oil begins to smoke, it is a good indication that it has been heated too much. At this temperature, chemical changes begin to take place, which have many health risks. Of course, this is tricky. If the oil is not hot enough, then more of it is absorbed, and the resultant product is quite soggy and unfit to eat.
2. Further, prolonged heating of oil at high temperature, i.e., at its smoking point or higher, leads to its degradation. A substance called acrolein is formed which can irritate the stomach lining. Oil that has decomposed to acrolein will be dark and viscous. Normally, this does not happen when food is fried at home. But as oil is expensive we are not willing to put it down the drain after having used it only once. The common tendency is to set aside any oil that is left over to use another time. And repeated use of the same oil guarantees the formation of acrolein with all its undesirable effects.
3. In fact, some experts suggest that oil should not be held at its smoking temperature for more than 15 minutes at a time. This time span, as everyone knows, is hardly sufficient to prepare required number of *pooris* for even a small family of four. Sadly, olive and corn oils are not widely available in our markets. Both these oils can be heated to higher temperature before they start smoking.
4. Even heart-friendly oils like those made from sunflower are also not spared from these effects. The harmful chemical changes will take place if oil is heated to high temperatures for a long time, or if it is used over and over again. Still, vegetable fats are recommended for frying over animal fats like butter and ghee because they are less likely to cause heart disease.
5. Another problem arises when used oil is stored under less than satisfactory conditions. If the oil is not stored in an airtight container which, additionally, allow light to pass through, then it will deteriorate further because of the effect of oxygen and light on the oil.
6. By and large, these undesirable effects result when food is deep-fried. So eat deep fried food occasionally. This does not mean that we can no longer enjoy the flavour and palatability of fried foods. Some food like *tikkis* land themselves to both deep and shallow frying. Oil from shallow frying is rarely left over, so that takes away the worry about decomposed oil. And every batch of frying will require fresh oil, oil that has not been used before.

7. The practice of heating small amounts of mustard, black gram, dal, curry leaves, chillies and the like in a little oil before they are added to curries and vegetables and meat dishes, is called tempering. Tempering is not meant solely to lend a fine flavour to the food. It has a nutritional benefit as well. Certain vitamins – A, D, E and K are soluble only in fat, and in order that they are absorbed in the human guts, some fat has to be present in the same meal, preferably in the same dish. To get the benefit of the carotene in carrots, for example, temper them with a little oil, mustard and curry leaves.

Q. 12(a) On the basis of your reading of the above passage, make notes on it in points only, using headings and sub-headings. Also use recognisable abbreviations;

wherever necessary (minimum 4). Supply a suitable title to it. (5)

Q.12(b) Write a summary of the above passage in about 80 words. (3)

**Q13 Read the following passage and answer the questions that follow. The answer must be in brief and to the point only.**

- (1) In the next few years, football powers like Brazil, Argentina, Italy or Germany may be in for some really tough competition from none other than humanoid robots.
- (2) Those robots were seen in action at Robo Cup 2006, an international football tournament held in Bremen, Germany, recently
- (3) As many as 440 teams from 36 countries participated in the 10<sup>th</sup> edition of this unique annual event. The Australian robots, team NUBots, which represents the University of Newcastle – defeated the University of New South Wales’rUNSWift team 7-3 in the final. The NUBots aggregated 64 goals but didn’t concede any.
- (4) According to Sydney Morning Herald, the NUBots have retained one of the top three spots in the Robo Cup for the past four years, but this is the very first time they have tasted victory after a narrow defeat to Germany last year. Germany’s University of Dortmund team Microsoft Hellhounds took the third place.
- (5) Held in Germany for the first time, the five-day tournament had robot slugging it out in 11 different leagues or categories for simulation robots, small and middle sized robots, as also four legged and humanoid ones. In the humanoid league, there were teams from countries like USA, Canada, Germany, Japan, Singapore and Iran.
- (6) A number of matches saw live commentary provided by a pair of robots developed by scientists from Carnegie Mellon University, U.S.A.
- (7) Organisers said their ultimate aim was to develop by 2050 a team of humanoid robots that could beat the human World Cup football champions.
- (8) “ Robo Cup 2006 is the first step towards a communal vision. The vision includes the development of a humanoid robot team of 11 players, which can win against a human soccer world champion team “ Minoru Asad, President of the Robo Cup Federation, said on the official website..
- (9) The Robo Cup competitors are built around the Sony AIBO robotic dog, and teams

of students and academics work year – round on their design. Each of the four competitors in a team wirelessly communicates with other players, out-manoeuvres the opposition, tries, to keep the balls on the pitch and most importantly scores goals for his side, all without human intervention.

- (10) The game involves robots playing both individualistic(each agent / robot must identify relevant objects, self-localise, dribble) and cooperative (passes complementary roles) elements in a dynamic and adversarial environment.
- (11) The tournament, followed by a two-day symposium, also offered about 2,500 experts from all over the world a chance to come together and hold discussions on artificial intelligence and robot engineering.
- (12) “After 50 years of research within artificial intelligence, it has been determined that these things can be better researched using football than the game of chess. We have advanced a fair bit for this 10<sup>th</sup> year of Robo Cup.” Said Hans-Dieter Burkhard, Vice president of the federation.
- (13) The previous Robo Cup was held in Osaka, Japan, while the next one will be staged in Atlanta, USA.

-----  
1(a) **On the basis of your reading of the passage, answer the following questions in your own words as far as possible. Use one or two sentences only for each answer :**  
**(10 Marks)**

- (i) Why, according to the author will football powers like Brazil, Argentina, Italy or Germany be in for tough competition ? (1 Mark)
  - (ii) What is special about the performance of NUBots team in the Robo Cup Tournaments ? (2 Marks)
  - (iii) Who provided commentary during this tournament ? (1 Mark)
  - (iv) What is the ultimate aim of the organizers of Robo Cup Tournaments ? (1 Mark)
  - (v) How do the Robo cup competitors perform on the field ? (2 Marks )
  - (vi) What could a student of robotics learn at post tournament symposium ? (2 Marks )
  - (vii) ‘.....these things can be better researched’ (*Para 12*). Which things is the author talking about ? (1 Marks )
- (b) **find words in the passage which mean the same as following:** (2 Marks )
- (i) competing fiercely (Para 4-6)
  - (ii) having to do with conflict or opposition (Para 8 – 10 )

**Q 14. Read the following passage and answer the questions that follow.**

There are two problems which cause great worry to our educationists – the problem of religious and moral instruction in a land of many faiths and the problems arising out of a large variety of languages.

Taking up of the education of children, we see that they should be trained to love one another, to be kind and helpful to all, to be tender to the lower animals and to observe and think right. The task of teaching them how to read and write and to count and calculate is important, but it should not make us lose sight of the primary aim of moulding personality in the right way.

For this it is necessary to call into aid, culture, tradition and religion. But in our country we have, in the same school, to look after the boys and girls born in different faiths and belonging to families that live diverse ways of life and follow different forms of worship associated with different denominations of religion. It will not do to tread the easy path of evading the evolve a suitable technique and method for serving the spiritual needs of school children professing different faiths. We would thereby promote an atmosphere of mutual respect, a fuller understanding and helpful cooperation among the different communities in our society. Again we must remain one people and we have and therefore we have to give basic training in our schools to speak and understand more language than one and to appreciate and respect the different religion prevailing in India.

It is not right for us in India to be dissuaded from this by consideration as to overtaking the young mind. What is necessary must be done. And it is not in fact too great a burden.

Any attempt to do away with or steamroll the differences through governmental coercion and indirect pressure would be as futile as it would be unwise. Any imposition of a single way of life and form of worship on all children or neglect of a section of the pupils in this respect or barren secularization will lead to a conflict between school and home life which is harmful. On the other hand, if we give due recognition to the different prevailing faiths in the educational institutions by organizing suitable facilities for religious teaching for boys and girls of all communities, this may itself serve as a broadening influence of great national values.

(a) On the basis of your reading of the above passage, make notes on it, giving heading and subheading. Use recognizable abbreviations wherever necessary (Minimum 4). Supply a suitable title to it. (5)

(b) Using the notes, write a summary of the above passage in 80 words: (3)

**Q15 Read the following passage and answer the questions that follow. The answer must be in brief and to the point only.**

- (1) In the next few years, football powers like Brazil, Argentina, Italy or Germany may be in for some really tough competition from none other than humanoid robots.
- (2) Those robots were seen in action at Robo Cup 2006, an international football tournament held in Bremen, Germany, recently
- (3) As many as 440 teams from 36 countries participated in the 10<sup>th</sup> edition of this unique annual event. The Australian robots, team NUBots, which represents the University of Newcastle – defeated the University of New South Wales’rUNSWift team 7-3 in the final. The NUBots aggregated 64 goals but didn’t concede any.
- (4) According to Sydney Morning Herald, the NUBots have retained one of the top three spots in the Robo Cup for the past four years, but this is the very first time they have tasted victory after a narrow defeat to Germany last year. Germany’s University of Dortmund team Microsoft Hellhounds took the third place.
- (5) Held in Germany for the first time, the five-day tournament had robot slugging it out in 11 different leagues or categories for simulation robots, small and middle sized robots,

as also four legged and humanoid ones. In the humanoid league, there were teams from countries like USA, Canada, Germany, Japan, Singapore and Iran.

- (6) A number of matches saw live commentary provided by a pair of robots developed by scientists from Carnegie Mellon University, U.S.A.
- (7) Organisers said their ultimate aim was to develop by 2050 a team of humanoid robots that could beat the human World Cup football champions.
- (8) “Robo Cup 2006 is the first step towards a communal vision. The vision includes the development of a humanoid robot team of 11 players, which can win against a human soccer world champion team “ Minoru Asad, President of the Robo Cup Federation, said on the official website..
- (9) The Robo Cup competitors are built around the Sony AIBO robotic dog, and teams of students and academics work year – round on their design. Each of the four competitors in a team wirelessly communicates with other players, out-manoeuvres the opposition, tries, to keep the balls on the pitch and most importantly scores goals for his side, all without human intervention.
- (10) The game involves robots playing both individualistic(each agent / robot must identify relevant objects, self-localise, dribble) and cooperative (passes complementary roles) elements in a dynamic and adversarial environment.
- (11) The tournament, followed by a two-day symposium, also offered about 2,500 experts from all over the world a chance to come together and hold discussions on artificial intelligence and robot engineering.
- (12) “After 50 years of research within artificial intelligence, it has been determined that these things can be better researched using football than the game of chess. We have advanced a fair but for this 10<sup>th</sup> year of Robo Cup.” Said Hans-Dieter Burkhard, Vice president of the federation.
- (13) The previous Robo Cup was held in Osaka, Japan, while the next one will be staged in Atlanta, USA.

-----  
15(a) **On the basis of your reading of the passage, answer the following questions in your own words as far as possible. Use one or two sentences only for each answer :**

**(10 Marks)**

- (i) Why, according to the author will football powers like Brazil, Argentina, Italy or Germany be in for tough competition ? (1 Mark)
- (ii) What is special about the performance of NUBots team in the Robo Cup Tournaments ? (2 Marks)
- (iii) Who provided commentary during this tournament ? (1 Mark)
- (iv) What is the ultimate aim of the organizers of Robo Cup Tournaments ? (1 Mark)
- (v) How do the Robo cup competitors perform on the field ? (2 Marks )



- (vi) What could a student of robotics learn at post tournament symposium ? (2 Marks )
- (vii) ‘.....these things can be better researched’ (Para 12). Which things is the author talking about ? (1 Marks )
- (b) **find words in the passage which mean the same as following:** (2 Marks )
- (i) competing fiercely (Para 4-6)
- (ii) having to do with conflict or opposition (Para 8 – 10 )

**Q 16. Read the following passage and answer the questions that follow.**

There are two problems which cause great worry to our educationists – the problem of religious and moral instruction in a land of many faiths and the problems arising out of a large variety of languages.

Taking up of the education of children, we see that they should be trained to love one another, to be kind and helpful to all, to be tender to the lower animals and to observe and think right. The task of teaching them how to read and write and to count and calculate is important, but it should not make us lose sight of the primary aim of moulding personality in the right way.

For this it is necessary to call into aid, culture, tradition and religion. But in our country we have, in the same school, to look after the boys and girls born in different faiths and belonging to families that live diverse ways of life and follow different forms of worship associated with different denominations of religion. It will not do to tread the easy path of evading the evolve a suitable technique and method for serving the spiritual needs of school children professing different faiths. We would thereby promote an atmosphere of mutual respect, a fuller understanding and helpful cooperation among the different communities in our society. Again we must remain one people and we have and therefore we have to give basic training in our schools to speak and understand more language than one and to appreciate and respect the different religion prevailing in India.

It is not right for us in India to be dissuaded from this by consideration as to overtaking the young mind. What is necessary must be done. And it is not in fact too great a burden.

Any attempt to do away with or steamroll the differences through governmental coercion and indirect pressure would be as futile as it would be unwise. Any imposition of a single way of life and form of worship on all children or neglect of a section of the pupils in this respect or barren secularization will lead to a conflict between school and home life which is harmful. On the other hand, if we give due recognition to the different prevailing faiths in the educational institutions by organizing suitable facilities for religious teaching for boys and girls of all communities, this may itself serve as a broadening influence of great national values.

**(a) On the basis of your reading of the above passage, make notes on it, giving heading and subheading. Use recognizable abbreviations wherever necessary (Minimum 4). Supply a suitable title to it. (5)**

**(b) Using the notes, write a summary of the above passage in 80 words: (3)**

**Q17.. Read the passage given below and answer the questions that follow:**

1. The concept of utilising plants and flowers to clean the polluted soil around chemical industrial units, abandoned mines and nuclear power plants is called phyto – remediation. It is an incredible technology and its use is spreading fast. Using some plants and flowers to soak heavy poisonous metals from the soil make sense. It is a lot cheaper than other solution used currently.

2. Such plants and flowers which for some unknown reason take up significant amount of metals like copper, nickel, lead, selenium, uranium and zinc along with other nutrients essential for their normal growth are called hyper-accumulators. They store them in their roots and cells.
3. Plants researchers in the UK have now understood the process through which this hyper-accumulators absorb large quantities of metals. They have identified vegetables like cabbage, cauliflower, broccoli and brussels sprouts are possible candidates, which could be genetically altered to accumulate these heavy metals in their roots and cells.
4. Throughout the developed and developing world including India, there are vast tracts of land like abandoned mines, chemical units, metals processing units where the soil has been contaminated with heavy metals like chromium, copper, lead zinc, nickel or manganese. The traces of these metals have gone deep into the soil. No useful crops grow on them.
5. As of today, such areas are abandoned or huge amount of contaminated soil is dug up and treated with chemicals to remove these poisonous metals. The process is both time taking and expensive.
6. The agriculture researchers have found that even the most polluted soil is not completely barren. There are some plants, which have evolved to grow in such soil. One group of plants can grow without absorbing these harmful metals from the soil, while the other group can absorb them in their roots and cells and detoxify the soil in the process.
7. Most plants find nickel to be very bad material. They refused to grow in soil, which are rich in nickel. But *Streptanthus polygaloides*, a member of the mustard family, simply loves and grows only in the nickel rich soil. As everyone knows nickel and cadmium are highly poisonous. It is not therefore, advisable to discard rechargeable batteries made of nickel and cadmium in the garbage.
8. Sunflower plant absorbs uranium selectively from the uranium-contaminated soil in its roots. If uranium contaminated water is filtered through sunflower roots, they absorb uranium. Corn and peas are able to absorb lead from the contaminated soil.
9. Another plant of the mustard family can take up a dangerous form of mercury from the soil and transform it into a less harmful form and allow it to evaporate into the air. Onion, garlic, mustard and cabbage are able to remove selenium, another poisonous metal from the soil. They also absorb large quantities of boron and cadmium.
10. The presence of selenium in some soil makes plants growing in those soils, poisonous to animals. The soil in Hoshiarpur district of Punjab is rich in selenium. This accumulates in the grass that cattle eat. After some time they refuse to eat, develop cracks on the hooves. Their horns start peeling and bodies and tail lose hair. Within a few months they degenerate and die.
11. The soil that contains five milligrams of Selenium in 1 kg. or above are considered as toxic soils. However, even soil containing 0.1 mg of selenium per kg. can produce grass containing toxic levels of selenium. *Astragalus racemosus*, one of the weeds belonging to the pea family is a selenium accumulator. The plant's ability to concentrate selenium could be utilized to produce selenium, a metal very much needed as well as useful in electrical and electronic industry.
12. It may also be possible to develop plants with a higher capacity for absorbing metals through genetic engineering. It may also be possible to use genetic engineering to transfer the metal accumulating habit into some plants that grow faster.
13. But a major snag is that most of these plants are edible ones and consumed by humans and animals. If the metals rich parts of these plants are eaten, it may lead to heavy metal poisoning. As of today lead poisoning caused by lead from tetraethyl lead in the petrol is a serious problem in metropolitan cities of India. Arsenic poisoning is causing harm in West Bengal.
14. Mining engineers in the US are planning to extract nickel by this method. They planted 1 million *Streptanthus* plants in 1 hectare of wasteland rich in nickel. When the crop was harvested they cut and dried them like grass. Finally they burned the dried plants in an incinerator and extracted nickel by leaching the ash, which yielded 15 to 20 per cent nickel by weight. Nickel is an expensive metal and used to make stainless steel, coins and special alloy steel for industry and defence. Traditional mining methods were not economically viable for extracting nickel from such soil. The current price of nickel makes the method profitable. India is very poor in nickel ores.
15. However, researchers acknowledge that they have much more in-depth work to be carried out before the technology can be used to recover these heavy metals from soil in commercial way.
16. Plants may do the job of environmental cleaning for 10 per cent of the cost of traditional methods of decontaminating the soil. A beginning should be made in India to find out plants, which have this metal accumulating habit and develop the technology to country's advantage.

17. Despite many limitations scientists feel that clean up in the 21<sup>st</sup> century may simply be a matter of letting a thousand flowers bloom in the contaminated soils.

**Q 17(a) On the basis of your reading of the passage, answer the following questions in your own words as far as possible. Use one or two sentences only for each answer : (10 Marks)**

- (i) What do you understand by phyto-remediation ? (1 Mark)
- (ii) Where do the Hyper accumulators grow? How? (2 Marks)
- (iii) How are poisonous metals removed from contaminated soil these days? (1 Mark)
- (iv) What are the two drawbacks of this system? (2 Mark)
- (v) How is selenium harmful as well as useful? (2 Marks )
- (vi) Why is the use of plants advocated for decontaminating the soil?  
What snag it suffer from? (2 Marks )

**B. Pick out the synonyms to the following from the passage.**

- (1.) Made impure by adding dangerous or disease carrying substance.(Para 4) (1 Mark)
- (2.) Pass into a worse physical stage than the normal or desirable one.(Para 10)(1 Mark)
- (3.) Feasible; sound and workable.(Para 14) (1 Mark)

**Q18 Read the following passage carefully and answer the following questions that follow:**

Tourism has emerged as the world's largest industry. Growing rapidly in the last two decades, today it accounts for 6 Percent of world output and employs some 100 millions people around the globe. Since the end of Second World War, it has developed immense revenue and development potential and stands today as a unique natural renewable resource industry. Tourism-the travel-based recreation-provides people with a change of place and the break for the monotony of daily life. It brings people of different nations together, allowing them to come into close contact with each other's customs and other aspects of life. It reveals the scenic beauty and past heritage of a country to people belonging to another nation. The knowledge and experience gained in the process can lead to greater understanding and tolerance, and can even foster world peace.

The contribution of tourism can be now seen more clearly than on the economic front. A study by United Nations has shown that developing countries, in particular, can reap handsome benefits out of tourism which greatly boosts national income.

Tourism generates employments, and adds to the entrepreneurial wealth of a nation. While tourism's advantages are many, its undesirable side – effects has raised fresh problems. Tourism can cost social, cultural or environmental disruptions. Of the greatest concern is its damage to the environment. In order to attract more tourists, sprawling resorts are built which take neither the local architectural styles nor the ecology into consideration. Natural systems come to be destroyed as a result of indiscriminate construction to provide water and waste disposal facilities and recreational arrangements to tourists. Overuse of environmental wealth disturbs the ecological balance.

Damage is most in wildlife parks, which remain the foremost sites of tourist's attraction. Tourist vans and visitors' feet destroy the ground vegetation thus affecting the feeding habits of the animals and the landscape as well. Overcrowding brings about congestion, leading to environmental and health hazards.

The Taj Mahal, one of the Seven Wonders of the World, has suffered a lot of wear and tear from trampling feet of tourists.

Some socio-cultural effects of tourism have been damaging culture. Tourism often usher in new life style; arrangements as desired by tourists are provided in order to make them feel at home. The emergence of this 'other' culture in various places has caused dissatisfaction among the local people. The concern is that the local people tend to imitate the foreign values, breaking away from their own traditions.

To promote the safe tourism while ensuring that it remain the profitable industry, it is imperative to understand the factors that hamper the growth of tourism and check them effectively. General instability of the nation is damaging the tourism prospects. Political disturbances, in particular, pose a serious problem. The growing violence in the international scene and increasing threat of terrorism affects the flow of tourists.

Countries like Sri Lanka have been a victim of terrorist threats for long and have therefore suffered setbacks in tourism. Whatever the problems, India must work hard to reap the benefits from this industry, for the country has every thing to attract visitors from far and near.

- (a) On the basis of your reading of the above passage, make notes of it in points only using heading and sub-headings. Also use recognizable abbreviations wherever necessary (minimum 4). Supply a suitable title for it. (5 marks)
- (b) Write a summary of the above passage in about 80 words. (3 marks)

**Q19 Read the following passage carefully and answer the questions that follow:**

1. It is hard to think of an Indian snack that is not fried. However, we need to be aware of what happens to oil when it is heated. When oil begins to smoke, it is a good indication that it has been heated too much. At this temperature, chemical changes begin to take place, which have many health risks. Of course, this is tricky. If the oil is not hot enough, then more of it is absorbed, and the resultant product is quite soggy and unfit to eat.
2. Further, prolonged heating of oil at high temperature, i.e., at its smoking point or higher, leads to its degradation. A substance called acrolein is formed which can irritate the stomach lining. Oil that has decomposed to acrolein will be dark and viscous. Normally, this does not happen when food is fried at home. But as oil is expensive we are not willing to put it down the drain after having used it only once. The common tendency is to set aside any oil that is left over to use another time. And repeated use of the same oil guarantees the formation of acrolein with all its undesirable effects.
3. In fact, some experts suggest that oil should not be held at its smoking temperature for more than 15 minutes at a time. This time span, as everyone knows, is hardly sufficient to prepare required number of *pooris* for even a small family of four. Sadly, olive and corn oils are not widely available in our markets. Both these oils can be heated to higher temperature before they start smoking.
4. Even heart-friendly oils like those made from sunflower are also not spared from these effects. The harmful chemical changes will take place if oil is heated to high temperatures for a long time, or if it is used over and over again. Still, vegetable fats are recommended for frying over animal fats like butter and ghee because they are less likely to cause heart disease.
5. Another problem arises when used oil is stored under less than satisfactory conditions. If the oil is not stored in an airtight container which, additionally, allow light to pass through, then it will deteriorate further because of the effect of oxygen and light on the oil.
6. By and large, these undesirable effects result when food is deep-fried. So eat deep fried food occasionally. This does not mean that we can no longer enjoy the flavour and palatability of fried foods. Some food like *tikkis* land themselves to both deep and shallow frying. Oil from shallow frying is rarely left over, so that takes away the worry about decomposed oil. And every batch of frying will require fresh oil, oil that has not been used before.

7. The practice of heating small amounts of mustard, black gram, dal, curry leaves, chillies and the like in a little oil before they are added to curries and vegetables and meat dishes, is called tempering. Tempering is not meant solely to lend a fine flavour to the food. It has a nutritional benefit as well. Certain vitamins – A, D, E and K are soluble only in fat, and in order that they are absorbed in the human guts, some fat has to be present in the same meal, preferably in the same dish. To get the benefit of the carotene in carrots, for example, temper them with a little oil, mustard and curry leaves.

**1 On the basis of your reading of the above passage make notes on it, using atleast 5 recognisable abbreviations. Use a format you think is suitable. Give a title.** (5 marks)

**.2 Find words/phrases in the passage that mean the same as the following:** (3 marks)

- i) for an extended period of time (para 2)
- ii) decrease in quality (para 5)
- iii) pleasant to taste (para 6)

**Q20 Read the following passage carefully and answer the questions that follow:**

1. Global warming is the warming up of the earth due to the trapping of gases like carbon dioxide, carbon monoxide, methane and nitrous oxide, when the atmosphere fails to perform its function of acting as a protective blanket. The incoming solar radiation is partly absorbed by carbon dioxide, though a vastly higher amount of the outgoing radiation is trapped in the atmosphere.
2. Carbon dioxide possesses immense staying properties in the atmosphere. It is being speculated that carbon dioxide concentrations may double in about a century.
3. This increased carbon dioxide level, according to predictions, indicates an increase in temperature ranging from 1.5-4 degrees Celsius, or a rise in sea levels by about 50cms by AD 2100.
4. However, Earth apparently has its own system of checks and balances. Water vapour in the atmosphere is known to absorb radiation more than any other atmospheric component.
5. A doubling of carbon dioxide concentration would increase the capacity of the Earth's surface to absorb infra-red radiation by about 4 watts per square metre, though over all, the levels of absorption would be small.
6. Volcanic eruptions, too, are believed to be responsible for reduction in the carbon dioxide contents in the atmosphere. A massive volcanic eruption in Philippines had in fact a cooling impact.
7. Cooling through volcanic eruptions is believed to release certain gases into the atmosphere, which are responsible for increase in the carbon dioxide content in the atmosphere.

8. Measurement of the incident of CO<sub>2</sub> in the atmosphere made in Hawaii indicate that during 1992-93 about two billion tonnes of the gas was found missing from the atmosphere.
9. As far as the impact of ozone depletion is concerned, it seems to be dictated more by political considerations, than any other factor. This increased burning of fossil fuels for energy is largely responsible for the increase in temperature through ozone depletion.
10. A tug-of-war has been going on among the industrialised countries and the developing countries on the share of the blame. In fact, the US, the erstwhile USSR, Brazil and China account for almost half of the net global emissions of harmful gases such as CFCs. While North America generates about 5 tonnes per head of carbon dioxide, Africa, China and India together generate approximately 1 tonne of CO<sub>2</sub> per head.
11. Developing countries, on the other hand, are charged with emission of methane largely generated from paddy fields and discharge of animals.
12. However, despite the fact that 1995 was one of the hottest years of the century, snowfalls have been recorded in some part of the world – notably on the eastern coast of America and in Jammu and Kashmir.
13. Moreover, over the last 50 years, the Arctic climate has not been undergoing any noticeable temperature changes. In fact, till 1975, global temperatures had been undergoing a downward trend. Could the recent spurt in temperatures be a natural cyclical process, or temporary offshoot of the shifting pressure belts?
14. Given the rising temperatures, growing seasons would be prolonged. Higher temperatures would also lead to an increased evaporation from oceans, thereby intensifying cloudiness, leading to moderate temperatures during the day and warmer nights.
15. Warmer temperatures during the night enhance agricultural productivity. Increased carbon dioxide in the atmosphere will also result in an increase in fertility.
16. Global warming will also have an impact on the El Niño phenomenon – the circulation of weather disturbances around the world as a result of the warming of Pacific Oceans around the tropics.
17. However, a few questions remain in the ongoing debate on global warming.
18. The process of heat transfer in the atmosphere – convection – is a field in which a lot of research needs to be done.
19. Secondly, clouds and vapour are known to be major absorbers of incoming radiation back into space.
20. If the cloud cover, as a result of increased evaporation due to rising temperature, were to increase, it would result in more containment.
21. Plants, which both absorb and release carbon dioxide, too have a crucial role to play. Their role, however, has been till now underestimated.

**A Answer the following questions briefly:**

(10 marks)

- i) What is the function of the earth's atmosphere? (2 marks)
- ii) What is increased amount of carbon dioxide likely to lead to? (2 marks)
- iii) How does water vapour balance the effect of carbon dioxide? (2 marks)
- iv) What is the cause of tug-of-war between industrialised and developing countries? (2 marks)
- v) What is the 'EL Nino Phenomenon'? (2 marks)

**B Find words in the passage that mean the same as the following:**

(2 marks)

- i) arrested (para 1)
- ii) sudden increase (para 13)

**Q21 Read the passage given below and answer the questions that follow: 12**

1. Study undertaken by the National Institute of Nutrition (NIN), Hyderabad, to assess the aluminium content of commonly consumed Indian foods revealed that usage of aluminium utensils contributed significantly to the total daily intake of aluminium and that of leaching of aluminium from the vessel into food preparations occurred in greater proportions when they were used for preparing acidic foods such as tamarind containing leafy vegetables or tomatoes containing dal. Also such leaching increased significantly in new aluminium vessels.

2. Since aluminium vessels are the most commonly used cookware in rural and semi-urban . India, NIN undertook the study to gauge the extent of leaching of aluminium into different Indian foods cooked in aluminium vessels, In addition, several commonly consumed food items were also analysed for their aluminium content. The NIN data revealed that the major contribution of aluminium from Indian foods was through consumption of vegetables, spices and pulses. Green leafy vegetables and "sambar" contributed significantly to the total daily aluminium intake. Cereals, milk and milk product on the other hand contributed negligible amounts.

3. An article on "Risk of aluminium toxicity in the Indian context", published in the bulletin of the Indian Council of Medical Research, explains the significance of the study. First, extensive data are available from the Western literature regarding the risk of aluminium toxicity, while it is scanty in India. Second, here, because of the wide use of aluminium cookware and storage vessels, the intake of aluminium by Indian population could be much higher than what has been reported in the West. Third, recent studies have revealed that calcium and iron deficiencies might enhance aluminium absorption. And in our country, given the fact that iron deficiency is widely prevalent and calcium intake is

suboptimal in most of the population, especially children, pregnant and lactating women, these groups might well be at risk due to aluminium absorption.

4. Now why should one worry about aluminium intake, particularly when aluminium is the most abundant metal in the biosphere and we are continuously exposed to it in our daily life through water, food, pharmaceutical products and even through airborne dust particles. In fact, aluminium sulphate or alum is used as a flocculating agent in the purification of municipal water supplies and the drinking water may well contain high levels of aluminium.

5. Similarly, aluminium is used in certain antacids, anti-diarrhoeals and analgesics. It is also used in some food additives. Aluminium cookware, cans, packaging material are other sources of aluminium contamination, particularly when they are used for storing or packing citric or acidic foods.

6. However, recent research has implicated aluminium as interfering with a variety of cellular and metabolic processes in the nervous systems. Aluminium toxicity is also believed to cause certain learning disabilities in children. Several disorders of the nervous system such as dialysis dementia, senile dementia of the Alzheimer's type and Parkinson's dementia have also been associated with increased ingestion of aluminium.

7. Referring to the epidemiological evidences pointing to the possible role of aluminium in senile dementia of the Alzheimer's type (SDAT), the ICMR article says that about eight studies conducted in five countries have pointed to an association between the high concentration of aluminium in drinking water and the number of cases SDAT. Similarly 10 laboratories from four continents have reported higher levels of aluminium in brain tissues of these patients. SDAT is a progressive neurodegenerative disorder of the elderly and is characterised by loss of memory, disorientation, poor concentration, apathy etc.

8. Average dietary intake of aluminium in adults is estimated to be about 3—5 mg per day. Most aluminium absorbed from the intestinal tract is excreted in urine, in individuals with normal renal functions. Says the ICMR article : While the neurotoxic potential of aluminium is undisputed in various animal species, there is yet no strong evidence to suggest that aluminium could be toxic to normal healthy humans. Aluminium has a very low absorption rate and also slow turnover in the body. Therefore the risk of aluminium toxicity is probably due to prolonged chronic exposure.

9. So keeping in mind these factors and the epidemiological evidences pointing to the possible role of aluminium in SDAT, it would be advisable to control the intake of aluminium through diet and water by elderly persons as well as patients with renal failure.

10. And on the basis of the NIN study, the article says that the use of aluminium cookware should be limited. While they are safe for most cereal preparations, they are best avoided for cooking acidic foods such as tomato, tamarind, containing pulses and also green leafy vegetables.

**Q.Ii. Answer the following questions briefly in your own words as far as possible:**

- (i) What does the study of NIN reveal? Give two findings. 2
- (ii) Which two types of Indian foods cooked in aluminium vessels contribute to significant aluminium consumption? 2
- (iii) What leads to excess aluminium consumption and who are easily affected? 1
- (iv) What are the two main risks caused by aluminium toxicity? 2
- (v) We should watch out aluminium intake. What are the two specific recommendation in this regard? . 2    **lii. Find**

**words in the above passage which convey a similar meaning as the following :**

- (i) removing by the action of a percolating fluid (Para 1) 1
- (ii) of little importance or size; not worth considering (Para 2) 1
- (iii) confusion, losing sense of direction (Para 7) 1

**Q22. Read the following passage carefully and answer the questions that follow:**

Egotism is the most common fault of mankind. Product of the perfectly natural desire to display oneself, egotism, which is an exaggerated form of self-display, can take such a variety of shapes that it is not always easy to discern. Beyond any shadow of doubt, however, it is a personal defect that ought to be constantly hunted down and scotched, for it impairs the personality and frustrates all efforts at self-improvement. This is the easily recognizable form of egotism that is evidenced in the person who continually talks of his own affairs. You must all have met the kind of man who is never happy save when recounting his exploits and experiences in life; and whatever subject he may begin discussing you feel quite sure that he will sooner or later arrive at himself. Although such a blatant kind of egotism is apparent to be onlooker, it may not be so easy for the egotist himself to recognize his fault. But if he can put on his guard-and it behoves each one of us to examine carefully whether we are entirely immune from this canker-there is always hope of a cure. On the other hand, there is a type, not uncommon, which evidences its egotism by affecting a humility that is certainly not felt, and ostentatiously avoiding the use of the



pronoun "I" in speech and in writing. Such affectation is an infallible sign of egotism, and it is all the more reprehensible because it is deliberately assumed by the person.

Next we come to the individual who holds strong opinions and insists on forcing these opinions on to others. He constantly lays down the law, he knows and he jolly well insists that you shall accept his viewpoints. Here again, there is not a great difficulty in recognizing aspect of this conduct, although it is not so easy to remove such a defect, for a person of this kind is generally possessed of a fiery temper-but again, it can be done, and recognition of the defect is the first step towards its cure.

There are two other well-known types of egotists-the over-precise person and the officious one. The former offends by his metriculous habits, his insistence on having everything just right-just right generally connoting the way he personally wants them to be. The officious individual succeeds in making himself most disliked because of his detestable habit of always showing or telling other people how to do things. He will appeal to duty; he will continually find fault with another's way of doing things, and point out the immense superiority of his method. In his own eyes, he is always right.

- Q. (a) On the basis of your reading of the above passage, make notes on it in points only, using headings and sub-headings. Also use recognisable abbreviations; wherever necessary (minimum 4). Supply a suitable title to it. (5)
- (b) Write a summary of the above passage in about 80 words. (3)

**Q23 Read the passage given below and answer the questions that follow: 12**

1. Global warming is the warming up of the earth due to the trapping of gases like carbon dioxide, carbon monoxide, methane and nitrous oxide, when the atmosphere fails to perform its function of acting as a protective blanket. The incoming solar radiation is partly absorbed by carbon dioxide, though a vastly higher amount of the outgoing radiation is trapped in the atmosphere.
2. Carbon dioxide possesses immense staying properties in the atmosphere. It is being speculated that carbon dioxide concentrations may double in about a century.
3. This increased carbon dioxide level, according to predictions, indicates an increase in temperature ranging from 1.5-4 degrees Celsius, or a rise in sea levels by about 50cms by AD 2100.
4. However, Earth apparently has its own system of checks and balances. Water vapour in the atmosphere is known to absorb radiation more than any other atmospheric component.
5. A doubling of carbon dioxide concentration would increase the capacity of the Earth's surface to absorb infra-red radiation by about 4 watts per square meter, though over all, the levels of absorption would be small.
6. Volcanic eruptions, too, are believed to be responsible for reduction in the carbon dioxide contents in the atmosphere. A massive volcanic eruption in Philippines had in fact a cooling impact.
7. Cooling through volcanic eruptions is believed to release certain gases into the atmosphere, which are responsible for increase in the carbon dioxide content in the atmosphere.

8. Measurement of the incident of CO<sub>2</sub> in the atmosphere made in Hawaii indicate that during 1992-93 about two billion tonnes of the gas was found missing from the atmosphere.
9. As far as the impact of ozone depletion is concerned, it seems to be dictated more by political considerations, than any other factor. This increased burning of fossil fuels for energy is largely responsible for the increase in temperature through ozone depletion.
10. A tug-of-war has been going on among the industrialised countries and the developing countries on the share of the blame. In fact, the US, the erstwhile USSR, Brazil and China account for almost half of the net global emissions of harmful gases such as CFCs. While North America generates about 5 tonnes per head of carbon dioxide, Africa, China and India together generate approximately 1 tonne of CO<sub>2</sub> per head.
11. Developing countries, on the other hand, are charged with emission of methane largely generated from paddy fields and discharge of animals.
12. However, despite the fact that 1995 was one of the hottest years of the century, snowfalls have been recorded in some part of the world – notably on the eastern coast of America and in Jammu and Kashmir.
13. Moreover, over the last 50 years, the Arctic climate has not been undergoing any noticeable temperature changes. In fact, till 1975, global temperatures had been undergoing a downward trend. Could the recent spurt in temperatures be a natural cyclical process, or temporary offshoot of the shifting pressure belts?
14. Given the rising temperatures, growing seasons would be prolonged. Higher temperatures would also lead to an increased evaporation from oceans, thereby intensifying cloudiness, leading to moderate temperatures during the day and warmer nights.
15. Warmer temperatures during the night enhance agricultural productivity. Increased carbon dioxide in the atmosphere will also result in an increase in fertility.
16. Global warming will also have an impact on the El Niño phenomenon – the circulation of weather disturbances around the world as a result of the warming of Pacific Oceans around the tropics.
17. However, a few questions remain in the ongoing debate on global warming.
18. The process of heat transfer in the atmosphere – convection – is a field in which a lot of research needs to be done.
19. Secondly, clouds and vapour are known to be major absorbers of incoming radiation back into space.
20. If the cloud cover, as a result of increased evaporation due to rising temperature, were to increase, it would result in more containment.
21. Plants, which both absorb and release carbon dioxide, too have a crucial role to play. Their role, however, has been till now underestimated.

**1.1 Answer the following questions briefly:**

(10 marks)

- i) What is the function of the earth's atmosphere?
- ii) What is increased amount of carbon dioxide likely to lead to?
- iii) How does water vapour balance the effect of carbon dioxide?
- iv) What is the cause of tug-of-war between industrialised and developing countries?
- v) What is the 'EL Nino Phenomenon'?

**1.2 Find words in the passage that mean the same as the following:**  
(2 Marks)

- i) arrested (para 1)
- ii) sudden increase (para 13)

**Q24. Read the following passage carefully and answer the questions that follow:**

1. It is hard to think of an Indian snack that is not fried. However, we need to be aware of what happens to oil when it is heated. When oil begins to smoke, it is a good indication that it has been heated too much. At this temperature, chemical changes begin to take place, which have many health risks. Of course, this is tricky. If the oil is not hot enough, then more of it is absorbed, and the resultant product is quite soggy and unfit to eat.
2. Further, prolonged heating of oil at high temperature, i.e., at its smoking point or higher, leads to its degradation. A substance called acrolein is formed which can irritate the stomach lining. Oil that has decomposed to acrolein will be dark and viscous. Normally, this does not happen when food is fried at home. But as oil is expensive we are not willing to put it down the drain after having used it only once. The common tendency is to set aside any oil that is left over to use another time. And repeated use of the same oil guarantees the formation of acrolein with all its undesirable effects.
3. In fact, some experts suggest that oil should not be held at its smoking temperature for more than 15 minutes at a time. This time span, as everyone knows, is hardly sufficient to prepare required number of *pooris* for even a small family of four. Sadly, olive and corn oils are not widely available in our markets. Both these oils can be heated to higher temperature before they start smoking.
4. Even heart-friendly oils like those made from sunflower are also not spared from these effects. The harmful chemical changes will take place if oil is heated to high temperatures for a long time, or if it is used over and over again. Still, vegetable fats are recommended for frying over animal fats like butter and ghee because they are less likely to cause heart disease.
5. Another problem arises when used oil is stored under less than satisfactory conditions. If the oil is not stored in an airtight container which, additionally, allow light to pass through, then it will deteriorate further because of the effect of oxygen and light on the oil.

6. By and large, these undesirable effects result when food is deep-fried. So eat deep fried food occasionally. This does not mean that we can no longer enjoy the flavour and palatability of fried foods. Some food like *tikkis* land themselves to both deep and shallow frying. Oil from shallow frying is rarely left over, so that takes away the worry about decomposed oil. And every batch of frying will require fresh oil, oil that has not been used before.
7. The practice of heating small amounts of mustard, black gram, dal, curry leaves, chillies and the like in a little oil before they are added to curries and vegetables and meat dishes, is called tempering. Tempering is not meant solely to lend a fine flavour to the food. It has a nutritional benefit as well. Certain vitamins – A, D, E and K are soluble only in fat, and in order that they are absorbed in the human guts, some fat has to be present in the same meal, preferably in the same dish. To get the benefit of the carotene in carrots, for example, temper them with a little oil, mustard and curry leaves.

Q. 2(a) On the basis of your reading of the above passage, make notes on it in points only, using headings and sub-headings. Also use recognisable abbreviations;

wherever necessary (minimum 4). Supply a suitable title to it. (5)

Q.2(b) Write a summary of the above passage in about 80 words. (3)

---