# HEALTH AND MEDICINE

## UNIT 1

### (SUMMARY)

<table>
<thead>
<tr>
<th>SECTION</th>
<th>WRITING SKILLS</th>
<th>READING SKILLS</th>
<th>LISTENING SKILLS</th>
<th>VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>- Listing factors contributing to good health</td>
<td>- Identifying the main points of a text</td>
<td>- Listening to a conversation/feature and understanding the topic and main points.</td>
<td>- Phrasal Verbs Understanding and using words related to health and sleep.</td>
</tr>
<tr>
<td><strong>(A) Do Indians get enough sleep?</strong></td>
<td>- Writing an informal letter</td>
<td>- Analyzing and interpreting the ideas in a text</td>
<td>- Listening for information required.</td>
<td>- Words related to benefits of laughter yoga.</td>
</tr>
<tr>
<td><strong>(B) Laughter the Best Medicine.</strong></td>
<td>- Identifying the main points of a text</td>
<td>- Reading a poem for global and local comprehension and appreciation.</td>
<td>- Listening for information required.</td>
<td>- Words related to benefits of laughter yoga.</td>
</tr>
<tr>
<td><strong>(C) Whopping Walter Hudson</strong></td>
<td>- Writing an informal letter</td>
<td>- Deducing the meaning of unfamiliar words.</td>
<td>- Listening for information required.</td>
<td>- Word extension - using vocabulary related to eating and build.</td>
</tr>
</tbody>
</table>

**In this UNIT you will develop your**

- Reading Skills
- Writing Skills
- Speaking Skills
- Listening Skills
- Vocabulary
**UNIT-1 CBSE MAIN COURSE BOOK HEALTH AND MEDICINE**

In this UNIT you will develop your:

<table>
<thead>
<tr>
<th>READING SKILLS</th>
<th>SPEAKING SKILLS</th>
<th>LISTENING SKILLS</th>
<th>VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>(D) The World of Sports.</td>
<td>• Selecting and extracting information from a text for a specific purpose.</td>
<td>• Presenting and supporting them with reasons.</td>
<td>• Punctuation</td>
</tr>
<tr>
<td></td>
<td>• Categorizing sports activities.</td>
<td>• Taking active part in a group discussion.</td>
<td>• Words related to sports and games.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Inferring the meaning of Words and using them in sentences.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Words related to herbal medicine and health.</td>
</tr>
<tr>
<td>(E) Nature’s Medicines.</td>
<td>• Recognizing the organization of a text.</td>
<td>• Making a power point presentation.</td>
<td>• Words related to herbal medicine and health.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Deducing the meaning of unfamiliar lexical items.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Identifying the main points of a text.</td>
</tr>
</tbody>
</table>
Introduction

In groups of 4-5, discuss and make a list of things that, according to you, contribute towards good health and wellness in an individual.

(a) a balanced diet
(b) 
(c) 
(d) 
(e) 
(f) 
(g) 
(h) 
(i) 
(j) 
(k) 

Source - Reader's Digest (August 2006)

Put a tick against the five most popular choices made by the groups in your class. How many groups included "A good night's sleep" as an important contributor to good health and well-being?

A. Do Indians get enough sleep?

A1. Read the following feature article on Sleep Habits among the Indians.

1. Aviral knew he was dead tired. Though it had been more than thirty eight hours since the forty four year old marketing executive returned to Delhi early one morning from New York, he was still recovering from jet lag. He had forced himself to remain awake the whole day as he had hoped to coerce his body into sleeping at night.
2. But the much needed sleep seemed to elude him completely. "I hardly managed any sleep that night," Aviral recalled. The time change had completely disrupted his sleep pattern, and when he got out of bed at 7a.m. to head for office, he was entirely ill at ease, to say the least. At the office, he could barely concentrate on his work.

3. Aviral wasn't aware simply how exhausted he was until he had driven a quarter of the twenty-four kilometre stretch on his way back home in the suburbs of Delhi. He halted at a busy signal on the way, but fell asleep suddenly at the wheel. He woke up dazed after the motorist behind him honked. Aviral drove on, but feeling he couldn't focus any further, he decided to pull off the main road and parked the car in a quiet place. Then, he rolled down the windows a bit and managed to take a two-hour nap in his car. It was only after that that Aviral could drive home safely.
4. It is an undisputed fact that not getting enough sleep can lead to problems in concentrating. In fact, many sleep disorder experts think that lack of sleep is the reason for many ailments. Dr. Kumar Menon and his colleagues presented a study paper on sleep disorders in Mumbai in which they stressed on the need for early detection of the problem and concluded that it was high time that all the physicians "woke up to sleep disorders and included sleep history in evaluating their patients."

5. Whatever be the cause of not getting proper and enough sleep, we’ve all experienced the exhaustion caused by lack of sleep. Thus, sleep is as important to a healthy lifestyle as eating properly and exercising. Getting a good night’s sleep is one of the simplest things we can do to stay healthy.

6. A good night’s sleep means waking up rested and invigorated. On an average, a healthy adult requires just over eight hours of sleep a night, according to Dr. Jeffrey Lipsitz, a Canadian expert on sleep disorders. However, the amount of sleep it takes to rejuvenate an individual varies from person to person. "It’s not a fixed number," opines Joseph De Koninck, a renowned professor of psychology, adding that if one consistently gets less sleep than one needs, then "a sleep deficit accumulates." The time it takes for a sleep deficit to accrue depends on how consistent the problem is. "Missing a couple of hours of sleep every night for a week is probably enough," says another psychiatrist Robert Levitan.

7. Swarup Chatterjee, the 28 year-old IIM graduate and assistant manager at a BPO in Hyderabad, knows very well that he doesn’t get enough sleep. "I haven’t had more than four to five hours of sleep for the last three years. There’s always so much that needs to be done in my professional as well as personal life that I am constantly thinking." Swarup is fully aware that all that is very stressful and he admits that even though he has high energy levels, he is often tired and so he drinks several cups of coffee to counter the fatigue. "But I know that I’ll be able to concentrate better if only I got more sleep," Chatterjee concludes.

8. In a study conducted by sleep-disorder experts, it was found that at least one-third of adults have significant sleep loss, i.e. they have just six and a half hours or less of sleep every night. Then a recent survey conducted in India has shown that
twenty-nine percent of Indians went to sleep only after midnight and sixty-one percent slept for seven hours or less. The survey also arrived at the conclusion that Indians were among the world’s earliest risers, with sixty-four percent getting out of bed before 7 a.m. Is there a need to reiterate that “Early to Rise” is good provided a person follows the “Early to Bed” principle as well?

A2. Now that you have read a substantial part of the feature article, work with your partner and jot down at least five reasons that, according to you, are mainly responsible for Indians today not getting the desired quota of sleep each night. Share your views with other pairs of students in your class.

A3. On the basis of your reading of the article, answer the following questions:
   a) The direct result of lack of sleep is _________________.
   b) Why is it important for physicians to ‘wake up’ to sleep disorders? How will it help?
   c) What do you understand by sleep deficit? Why does the amount of sleep required to rejuvenate people vary from one person to another?
   d) Why does the writer refer to the ‘early to bed...’ principle?

A.4. Now, write a letter to your school going younger brother or sister who is sleep deprived. Advise him or her to make life style changes to his/her daily schedule in order to get the desired hours of sleep daily.

Work in pairs and follow the CODER (Collect, Organize, Draft, Edit, Review) steps recommended for writing.

Language Tips: (a) Remember to use the imperative form of sentences mostly.

E.g. "Drink a lot of water and take at least a fifteen minute stroll after dinner on a regular basis."

(b) For the sake of introducing variety into your writing, use other forms of sentences making statements or asking questions, but consider the possibility of using modals like "should", "must", "may", "might", etc or using words or expressions that we usually employ when we advise others.
E.g. "You are recommended/advised to....."
"You ought to..."
"You must not forget to...."
"It is important to...."

A.5. a) Phrasal verbs are "multi-word verbs". These verbs consist of a basic verb + another word or words. The other word(s) can be prepositions and/or adverbs that modify or change their meaning. For example 'give up' is a phrasal verb that means 'stop doing' something, which is very different from 'give'. In the article that you have just read there are a few phrasal verbs like:

* **pull off** : Manage to do something difficult or tricky/to steer or turn a vehicle off the road
* **roll down** : roll down (something) or roll (something) down : to move (something) down especially by turning a handle
* **head for** : to go or cause to go (towards)
* **woke up** : arose from sleep/realized

Now look through the unit of Health and Medicine, figure out the phrasal verbs that you come across and list them.

b) **Find words from the article which mean the same as the following:**

i. compel (para 1)
ii. evade (para 2)
iii. revitalize (para 6)
iv. amass (para 6)
v. oppose (para 7)
vi. restate (para 8)

A6. **Read the concluding part of the article on whether we get enough sleep these days.**
1. Sleep is crucial to maintaining one’s health. Without it, we increase our susceptibility to an astonishing array of health problems, including heart disease, stroke, diabetes, obesity and depression.

2. Not sleeping enough can compromise your immune system, says Stanley Coren, noted professor of psychology and author of the very popular book, "Sleep Thieves". You eat well and exercise in order to keep your immune system up, Coren goes on to explain, but if you aren't sleeping, you undo all that good work. "The immune system works best when you are sleeping," he says. "That's when your natural killer cells are generated."

3. Natural killer cells are produced in the bone marrow and found in the blood and lymph fluid. They are part of the body’s defence mechanism against viruses, bacteria, even cancer, and they do not work properly in the persons who are sleep-deprived. A study in Turkey revealed that after 24 hours of sleep deprivation, the percentage of natural killer cells in the blood declined by 37 percent. Another study in the USA conducted on 23 boys and men found that one night of partial sleep-deprivation reduced natural-killer-cell activity to 72 percent of normal levels. Though their activity returns to normal when we begin to get proper sleep, the real problem is that a lot of damage might have been done to our bodies when we were sleep-deprived for several nights and our immune system might have left us undefended and susceptible to infection.

4. It's not just our immune system that gets adversely affected when we cut down on sleep. According to Dr. Michael Sole, a Canadian cardiologist, there is a higher rate of heart failure among people with sleep disorders and sleep disturbances. He goes on to emphasise that there is increased evidence of C-reactive protein, an indicator of heart disease risk, in people suffering from sleep loss.

5. Researches in various universities all over the world have discovered that chronic sleep loss can reduce the body's ability to regulate hormones and process carbohydrates. In a study at the University of Chicago, the researchers reduced participants' sleep from eight to four hours a night and after less than even a week, they noted changes in the body similar to the effects of early diabetes or advanced aging. Sleep disturbances increase the likelihood of prediabetic state of glucose intolerance and insulin resistance. Both these are also markers for heart
ailments. Dietician Ramona Josephson notes that insufficient sleep may affect three hormones that can contribute to obesity.

6. There's a decrease in leptin, the appetite-suppressing hormone found in our fat tissue, she says. Ghrelin, the hormone controlling hunger pangs increases with lack of sleep causing greater feelings of hunger. Then a sleep-deprived body starts producing more of the stress hormone cortisol, which increases fat storage. Not only do the increased hormones resulting from sleep loss make us eat more, but induces us to quickly or mindlessly make wrong food choices because we feel fatigued and weak. "The less you sleep, the more your chances of obesity," Josephson concludes.

7. Sleep is important in keeping not only our waistline trim, but ensuring a balanced brain activity too. During sleep, brain neurotransmitters-the chemicals that deliver messages between nerve cells in the brain-are replenished. When we do not sleep well, our brain chemicals become depleted which leads to emotional disturbances like depression, anxiety and general feelings of sadness, anger and irritation.

A7. Find the words from the final part of the above article that you have just finished reading which mean the same as the words or group of words given below.

(a) Vital, very important (para 1): _____________________________

(b) the quality of being prone to or open to dangers, like a disease or infection or a weakness (para 1): _____________________________

(c) a wide range (para 1): _____________________________

(d) very badly in a damaging way (para 4): _____________________________

(e) a problem that has persisted for quite some time (para 5): _____________________________
A8. Choose the appropriate options to complete the sentences below.

1. Lack of sleep
   (a) decreases laziness.
   (b) weakens the body’s capacity to combat diseases.
   (c) helps youngsters do well in their examinations.
   (d) prevents a person from gaining weight.

2. Natural killer cells
   (a) make a person look old pretty quickly.
   (b) are produced in large numbers when we stay awake.
   (c) help us fight viruses and bacteria.
   (d) work well even for sleep-deprived people.

3. C-reactive protein
   (a) when produced more in the body causes heart failure.
   (b) prevents us from having a good night’s sleep.
   (c) helps us to sleep peacefully.
   (d) assists in destroying natural killer cells.

4. If we don’t sleep well,
   (a) we may lose our appetite.
   (b) we may become very thin.
   (c) our brain may stop functioning in a balanced manner.
   (d) production of brain chemicals increases.

A9. Lack of sleep has a direct effect on the production of three hormones and brain neurotransmitters, which in turn has a bearing on our health. Complete the table below to show the above.
### Lack of sleep and its effects on hormone production and ultimate effect on us

<table>
<thead>
<tr>
<th>Lack of sleep</th>
<th>Effect on the production of</th>
<th>Ultimate effect on us</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Leptin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Ghrelin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Cortisol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Brain neurotransmitters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A 10** You have read about sleep deprivation and the ill effects it has on human beings. There are other work areas where youngsters remain sleep deprived and fall a pray to ill health. Listen carefully to some of the comments made about the business process outsourcing (BPO) sector which is part of the IT-enabled industry and do the activity.

**While you listen, complete the following statements by choosing the right option:**

1. According to the speaker, call centre work is insensitive because:
   - i. the people cannot go to the toilets and need to concentrate very hard
   - ii. the people are expected to attend to all the calls that come through to them
   - iii. it requires unflagging concentration throughout the day with minimum breaks for meals or visits to the toilet
   - iv. the people are expected to work on the computer all day long
2. People working at call centers are not allowed to leave their desks because:
   i. the managers do not want them to waste time smoking
   ii. they have to attend the calls which come in one after the other
   iii. they have to work at their computers all day long
   iv. they are paid very well

3. The targets that have to be met by the call centre employees have been called unrealistic because:
   i. they have to attend to too many calls in one day
   ii. they have to attend to double the calls than call center workers in other countries
   iii. it is not humanly possible to attend all the calls that come through to them
   iv. the employees fall sick after working at these places

4. Closed circuit cameras have been installed in these offices to monitor
   i. whether the workers are smoking
   ii. whether the workers are resting at their desks
   iii. whether the workers are attending their calls without wasting a minute
   iv. whether the workers are visiting the toilets too often

5. The statistics about the health problems suffered by these people are
   i. 13% - headaches, 3%-eye fatigue, 23% indigestion and constipation
   ii. 3%- headaches, 13%- eye fatigue, 23% indigestion and constipation
   iii. 23% - headaches, 3%-eye fatigue, 13% indigestion and constipation
   iv. 13% - headaches, 13%-eye fatigue, 23% indigestion and constipation

6. That most people are not happy with their jobs in a call centre can be inferred from the fact that:
   i. they are under constant surveillance
ii. they have to speak incessantly on the telephone
iii. they have to stare at the computer screen all day long
iv. they do not stay in the job for more than three years

A 11. You have listened to the woes of working in a call centre. There are a number of other jobs which involve health, hazards. However, modern advancements and developments in various therapies have improved our living conditions. Given below are different view points. In groups of four, discuss and add to these views:

- The pace of life is very fast—there’s a lot of stress and pressure, whether you’re a student or an adult.
- Various new therapies are emerging to provide holistic health.
- There is growing awareness among people about lifestyle disorders.
- Yoga and laughter therapies are some of the best therapies that are an answer to present day lifestyle diseases.

- Every day in the field of medical science there is new advancement.
- In India, we have increased life expectancy.
- But there are also new diseases.
- Even absence of stress also helps in keeping good health.
Laughter-the Best Medicine

B1. Read the following poem. Take turns in reading them aloud with your partner and ensure that you put in the right sort of feelings and emotions and voice modulations and intonation to make your partner laugh heartily.

Ogden Nash
The Muddlehead

I knew a man from Petushkee
As muddleheaded as could be.

He always got mixed up with clothes;
He wore his mittens on his toes,
Forgot his collar in his haste,
And tied his tie around his waist.

What a muddle head was he,
That man who lived in Petushkee!

They told him as he went about:
"You've got u' r coat on inside out!"
And when they saw his hat, they said:
"You've put a saucepan on your head!"

What a muddle head was he,
That man who lived in Petushkee!

At lunch he scratched a piece of bread,
And spread some butter on his head.
He put his walking stick to bed,
And he stood in the rack instead.

What a muddle head was he,
That man who lived in Petushkee!

He walked up to a tram one day
And climbed in very sprightly;
Conductor thought that he would pay,
Instead he said politely:

"Parding your beggon,
Kister Monductor,
I'm off for a week's vacation;
I stop you to beg your cramway tar
As soon as we reach the station."
Conductor got a fright
And didn't sleep that nite.

What a muddle head was he,
That man who lived in Petushkee!

He rushed into the first café:
"A railway ticket please, One way."
And at the ticket office said:
"A slice of tea and a cup of bread."

What a muddle head was he,
That man who lived in Petushkee!

He passed the man collecting the fares,
And entered a carriage awaiting repairs,
That stood on a siding, all by itself.
Half of his luggage, he put on a shelf,
The rest on the floor, his coat on his lap
And settled himself for a bit of a nap.

All at once he raised his head,
"I must have been asleep"- he said.
"Hey, what stop is this?" he cried
"Petushkee," a voice replied.

Once again he closed his eyes
And dreamt he was in Paradise.
When he woke, he looked about,
Raised the window and leaned out.

"I've seen this place before, I believe,
Is it Kharkov or is it Kiev?
Tell me where I am," he cried.
"In Petushkee", a voice replied.

And so again he settled down
And dreamt the world was upside down
When he woke, he looked about,
Raised the window and looked out.

"I seem to know this station too,
Is it Nalchik or Baku?
Tell me what its called," he cried.
"Petushkee' a voice replied.

Up he jumped: "It's a crime!
I've been riding all this time,
And here I am where I began!
That's no way to treat a man!"

What a muddle head was he,
That man who lived in Petushkee

B2. Discuss with your partner which part of the poem you liked the most and give reasons for your preference.

B3. Humor is infectious. The sound of roaring laughter is far more contagious than any cough, sniffle, or sneeze. When laughter is shared, it binds people together and increases happiness and intimacy. In addition to the domino effect of joy and amusement, laughter also strengthens your immune system, boosts energy, and protects you from the damaging effects of stress. Best of all, this priceless medicine is fun, free, and easy to use. Given below the table are the benefits of laughter in a jumbled form. Complete the table by putting them in the relevant column.
The Benefits of Laughter

Physical Health Benefits:  
- Boosts immunity  
- Strengthens relationships  
- Enhances teamwork  
- Relieves stress  
- Helps defuse conflict  
- Eases anxiety and fear  
- Promotes group bonding  
- Lowers stress hormones  
- Decreases pain  
- Improves mood  
- Adds joy and zest to life  
- Attracts others to us  
- Enhances resilience  
- Relaxes your muscles  
- Prevents heart disease

Mental Health Benefits:  
-  

Social Benefits:  
-  

• • •
B4. **Read the following article.**

**Fundamentals of Laughter Yoga**

1. The most important principle behind Laughter Yoga or the most significant driving force behind the several Laughter Clubs is the theory that Motion Creates Emotion. Quite a few people wonder how a person can laugh when he is in no mood to laugh or when one doesn’t have any reason to laugh. However, the answer is very simple. For, there is a well established link between the body and the mind. Whatever happens to the mind happens to the body as well. This is easily understood and observed too. If a person is sad or depressed, his body also appears quite lifeless and sluggish. Such a person doesn’t walk or talk enthusiastically. But, what most people fail to understand is that the opposite is also true. Whatever happens to the body also happens to the mind. I remember my father once telling me, "Son, if you are sad or feeling a bit low, don’t sit idle. Keep doing some physical work or go for a walk or do some jogging or go out to play some cricket or football. You’ll feel better." And most of the times dad was proved correct. I would start feeling better quite soon. In an unhappy state of mind, if we bring ourselves to behaving or acting happy, soon enough we will start feeling light-hearted and chirpy indeed!

2. So, Laughter Yoga aims to use the two-way body-mind link to change the state of mind through voluntary physical gestures which include repetitive clapping, chanting, specific body movements along with laughter and breathing exercises. The result is so positive and its effects are so powerful that the modern world today has witnessed Laughter Yoga overcome severe and chronic depression in thousands of people right across the globe. In fact, several Laughter Clubs have adopted the motto, "If your Mind can't laugh, bring your Body to our club."

3. Laughter is all about playfulness. Have you ever wondered why children laugh 300 to 400 times a day whereas adults would consider themselves very fortunate if they manage laughter 10 to 15 times in a day? This is because of that seriously wicked and interfering tool called the brain! Adult use their brains or minds first to comprehend humour and then decide if they have to laugh. Very often, they suffer
from what is said in Hindi the LKK Syndrome, that is "Log Kya Kahenge" or "What will people say?" This is called the "Mind-to-Body Model of Humour". On the other hand, children, who do not allow themselves to be too affected by the LKK Syndrome and don't use their brain to seriously do the comprehension first, laugh the most while playing. Even if they fall into mud and slime while playing, they laugh heartily together without bothering about the consequences of soiling their spotlessly white school dress in case of a traditionally strict class teacher or headmistress in school or mother at home! Their laughter comes straight from the body and happily they don’t make use of intellectual capacity of the brain for it. Very clearly, they exhibit the "Body-to-Mind Model of Humour". It is this childlike playfulness that Laughter Yoga aims at cultivating in people who are quite stressed these days. What is sadly significant is the fact that more and more children and even women, to whom smiles and laughter and giggling should come as naturally as the turtle coming out of its shell to walk or leaves falling in autumn, are enrolling themselves as members of laughter clubs nowadays!

4. Laughter Yoga makes a clear distinction between Happiness and Joy. Happiness is a conditional response of the mind which is totally dependent on the fulfilment of certain desires of the mind. By its very nature, it is related to how one’s life had been in the past or how it will be in the future! It is not there at all in the present moment. The ironical and sad fact is that even if some dreams, goals or aspirations are fulfilled, happiness disappears quite quickly as the mind starts chasing new goalposts—a new job, a new house, a bigger car, etc. On the other hand, joyfulness is the unconditional commitment to be happy each moment, to have fun for the moment, despite the problems and challenges of life, no matter how insurmountable they seem to the mind. It is the promise that the Body makes to the mind to indulge in playfulness moment by moment and thereby give relaxation to it. During these periods of playfulness triggered by a plethora of physical activities like dancing, singing, playing and laughing, physiological and biochemical changes take place within our body that give us a sense of well-being that completely alters a negative outlook towards life and its challenges replacing it with confident positivism moment by moment.
5. Therefore, in Laughter Clubs, members develop positive conditioning of joy. By laughing together over a period of time, clapping in a rhythm, chanting "Ho Ho Ha Ha" in unison and positive affirmations like "Very Good Very Good Yay Yay", the brain develops new neuronal connections to produce happy neuropeptides and hormones in the body that rejuvenate the members.

6. Finally, Laughter Yoga rectifies shallow and irregular breathing, which is the direct consequence of stress and negative mental state. According to Dr. Otto Warburg, a Nobel Laureate, one of the main reasons for falling sick is the lack of oxygen in the body cells due to incorrect breathing. So, let us laugh together and get the oxygen back into our cells!
B 5  Given below in jumbled form are the sub-headings for the paragraphs of the article that you just read. Arrange the headings in the right order against the paragraph numbers:

(para 4)  The unconditional nature of joy
(para 6)  Healing power of laughter yoga
(para 2)  Laughter-Positive Impact - making members refreshed
(para 5)  The conditioned Mind
(para 1)  The link between Body and Mind
(para 3)  Spontaneous laughter

B6.  Now write an e-mail to your overstressed sister who is preparing for her Class XII exams suggesting her to join a laughter club to combat her anxiety. You may use the following points along with your own.

Laughter-- lowers Blood pressure
reduces stress hormones
cleanses lungs and body tissues
increases blood circulation
boosts immune function
produces a general sense of well being
Section C

"Whopping Walter Hudson"

C 1 You probably know the meanings of the words workaholic and alcoholic.

What do you think a foodaholic is? Walter Hudson was one. How much do you weigh? Walter Hudson weighed more, much more. This is his obituary.

1. **WALTER HUDSON**, who has died at Hempstead, New York, age 46, was once listed in The Guinness Book of World Records as the heaviest man on earth.

2. About 183 cm tall and 274 around, with cherubic features set off by pigtails braided in the Cherokee style, he long devoted himself to the pleasures of the table. Four years ago, Hudson-then tipping the industrial scales at his top weight of 540 kg - gained worldwide notoriety (as "Whopping Walter") when he became stuck in his bedroom door. He was wedged there for some four hours. It took eight firemen to free him.

3. Walter Hudson was born at Brooklyn in 1945 and, as he recalled, "began gorging at the age of six." At 15 he was so obese his legs collapsed underneath him and he was confined to bed.
4. Indeed, except for the time when his family moved to Hempstead in 1970 and he was transported by motor-car (his then 266kg broke the seat,) he remained inside. "I'm just a foodaholic," he once confessed, "I have no excuse."

5. Hudson's eating habits were fuelled by food brought in by members of his family. He would generally start his day with a breakfast of two pounds of bacon, 32 sausages, a dozen eggs, a loaf of bread, jam and coffee.

6. For lunch, Hudson favoured four enormous bowls of rice, four double cheeseburgers, eight boxes of fried potatoes, six pies, and six large bottles of coca-cola. For dinner he would eat six roasted corns, half-a-dozen yams, and another six or seven baked potatoes, ending with a whole apple pie. Between these main meals, he would eat a chicken or two, followed by noodles, string beans, six large bottles of soda, not to mention colossal sandwiches, and copious amounts of ice-cream.

   "All I cared about," he recalled, "was food, FOOD!"

7. When not eating and sleeping he would watch television, listen to tapes and read the Bible—he had a particular penchant for the psalms and was apt to recite Psalm 121. "I will lift up mine eyes unto the hills..."

8. Hudson, though, was advised against sitting up for longer than five minutes because of the risk of being smothered by flab. The only exercise he engaged in was when he attended to his ablutions; it took him an hour to negotiate the six yards to the bathroom from his bedroom. Then in 1987, he found himself wedged in the door-way. "The day I got stuck in that door," he recalled, "that when the Lord got me the help I needed." The help to which he referred was offered by Dick Gregory, a comedian who masterminded the Slim Safe Diet Scheme.

9. "We think what might have happened," said Gregory about his new client, "is that in 27 years of lying around he might, because of the reading of his Bible, have taken on the same characteristics as Buddhist monks - slowed down the biological processes. But we don't know."

10. Gregory placed Hudson on a 1,200 calorie-a-day diet of raw fruit and orange juice. For exercise he was advised to lie in bed waving his arms about like a conductor.

11. Hudson soon lost some four inches off his knees, and within three months had shed 178 kg. It began to look as if he might fulfil such ambitions as visiting his
mother’s grave, riding on the New York subway, driving into the country—and even flying to a clinic in the Bahamas, from which he envisaged emerging as a sylph of 13 stones.

12. But it was not to be. At the time of his death, of an apparent heart attack, Hudson reportedly weighed 508 kg. Rescue workers had to cut a large hole in the wall of his bedroom to remove the body. He was unmarried.

**C 2** Copy and complete the following table, using information from the boxes below. (Draw a X if there is no information to put in certain boxes.)

<table>
<thead>
<tr>
<th>Year</th>
<th>what happened</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>family moved to Hampstead New York; broke the motor-car seat</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>&quot;began gorging&quot;</td>
<td>540 kg</td>
</tr>
<tr>
<td>1987/1988</td>
<td>died</td>
<td>362 kg</td>
</tr>
<tr>
<td>1960</td>
<td>very obese; legs collapsed and he was confined to bed</td>
<td>266 kg</td>
</tr>
<tr>
<td>1991</td>
<td>went on a diet; lost 178 kg in three months.</td>
<td>508 kg</td>
</tr>
</tbody>
</table>

born in Brooklyn
C 3. Find words in the passage from the paragraphs indicated within brackets and complete the following sentences. Use only one word, in its appropriate form, in each blank.

1. Some people are so____________ to their work that they have no time for their family. (para-2)
2. Harshad’s corrupt practices soon gained him_____________ in the city. (para-2)
3. When a person is dehydrated, he should be given ______________ amounts of fluid. (para-6)
4. He visited various vintage car rallies because he had a ______________ for old cars. (para-7)
5. If you over-eat and do not exercise, you will become_____________.(para-9)
6. The driver had to ______________ the winding road to the mountain top with caution. (para-8)
7. The new literacy programme ______________ a 20% increase in the literacy rate over the next two years. (para-11)

C 4. Arrange the following words associated with eating on a scale ranging from 'peck' to 'gorge'. You may add more words to the list given below:

peck .................................................. gorge

words: gobble, nibble, bite, hog, feast, gormandize

b. Form a similar scale for words that describe a person's build:

skinny .................................................. obese
C 5. Have a class discussion……..
1. What do you think life was really like for Walter Hudson? Was he happy? Did he have many friends? Think of the things that you do every day: what things could Walter not do? Also, what about clothes, chairs, a bed, washing himself……
2. Why do you think he did not go on a serious diet when he was much younger, so that he could live a fuller life?
3. What advice would you have given Walter on his diet?
4. Where do you think he got the money from to eat so much food?
5. Who do you think bought and cooked all the food he ate? Were they also to blame for Walter's obesity?

C 6. The following is an entry in Walter's diary:

I woke at 10 am. I have put on 7 kg in the last three days. I watched TV all morning. All my clothes are now too small, so I phoned mother. She came at 3 p.m. with a tailor. He looked shocked and frightened when he saw me! He measured me for some new shirts and trousers. For evening dinner I had 10 baked potatoes, 2 kg rice, six meat pies, 12 bananas, and four large cokes. Then I had problems getting through the bedroom door - I had to breathe in and squeeze my stomach through with my fingers. I went to bed at 8 p.m. and read the Bible.

Write the next day's entry in Walter's diary. Make up information, in order to make your entry interesting.

C 7. Writing a Message.

Sometimes information is received over the telephone, public address system or in person by someone and then passed on to a third person. A message is a short, informal piece of writing conveying the information to a person for whom the information was intended but who was not at hand to receive the information.

How to write a message

* Since a message is received at a particular time and conveys important information that the receiver must act upon, a message must have a date and time.

* The name of person for whom message is intended must be clearly mentioned.
The message must convey all relevant details like the name of the person who left the message, the reason for leaving the message and follow-up action required.

**Your father had recently gone for a health check. The doctor rang up to give the report. As your father was not at home, and you have to go out, you leave a message for him. Draft the message in not more than 40 words.**

Dr. Geeta : Is it 67890987?
You : Yes it is. May I know who is calling?
Dr. Geeta : I am Dr. Geeta Trehan from Trehan Surgical Centre and Nursing Home. I would like to talk to Mr. Uday.
You : He is not here at this moment.
Dr. Geeta : Could you please tell him that I have gone through all his test reports? They do not show any serious problem. If no improvement is seen during that period, we will go for some more tests. I feel he should continue the same medicine for another one week. However I have fixed an appointment with a Heart Specialist for two o’clock tomorrow at X Hospital. He must come there by the appointed time with his reports.
You : Thank you, Doctor. I shall convey your message when he comes.
C 8. Now, read the following telephone conversation which took place between Radhika and Gaurish. As Gaurish wishes to leave home immediately, he will not be able to meet his parents who have gone to the market. He leaves a message for his parents. Write the message for Gaurish in not more than 40 words.

Radhika : Hello, Is that Mr. Saxena's residence.
Gaurish : Yes.
Radhika : May I speak to Mr. Saxena? I am Radhika, the roommate of his daughter, Nidhi.
Gaurish : Papa is not at home as he has gone to the market. Is everything O.K. with Nidhi? I'm her brother, Gaurish.
Radhika : I'm sorry to inform you that Nidhi received an electric shock and is admitted to Sanjeevani Hospital.
Gaurish : Oh! How did it happen?
Radhika : She was switching on the desert cooler when she received a shock and fell down unconscious. She was rushed to the hospital immediately. She is conscious now and wants to meet you and her parents.
Gaurish : Thank you very much for informing us. I'll leave for the hospital immediately.
Radhika : That's all right, Bye.
Gaurish : Bye.

D. The World of Sports

Play is an integral part of human nature. By turning a useful activity into a sport or play, man has shown himself the way to indulge in it and concentrate on it over a period of time and get daily doses of benefit out of it. This is the reason why sports and games, from times immemorial, have been our best source of amusement and entertainment. Any sporting activity involves physical exertion and skill, with an individual or a team engaged in competition with one another for honour or sheer entertainment or both. It helps us to develop physically, mentally and socially too.
D1. Discuss in small groups and select two games that, according to you, develop us the best (a) physically, (b) mentally and (c) socially. Give reasons for your choice.

Physically: __________________________ and __________________________
Reasons for our choice: _______________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

Mentally: __________________________ and __________________________
Reasons for our choice: _______________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

Socially: __________________________ and __________________________
Reasons for our choice: _______________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

D2. There are hundreds and thousands of sports and games being played all over the world. However, we can place them under the following categories in order to know about them in a more convenient and systematic manner. Some of the categories are as follows:

Working in small groups of 4-5 students, discuss and place the sports and games given below in the category to which each of them belongs.

paragliding      Go-Karting      hurdles      pommel horse      basketball
windsurfing     Formula One      judo      sculling      fencing
kayaking       pole vaulting      dressage      squash      kickboxing
kho kho          kung fu         malkham      snowboarding   golf
decathlon       cricket      soccer      snooker      kabbadi

D3 punctuate the following passage

a new age cycle rickshaw that is light on both the pockets and the calf muscles of rickshaw pullers mobile games designed to battle life threatening diseases like hiv/aids and tb and a low cost computer that enables visually challenged students to read the textbooks these are all new inventions these are not innovations designed by phunjshuk wanngduaka ranchhoddas shamaldas of chanchad of 3 idiots fame much before aamir khan's rancho made innovation a household word these simple but powerful ideas were being quietly conceptualised and put to practice by enterprising Indians in various corners of the country.

D4. Read this rags-to-riches story of a professional golfer from India.

Ashok Kumar, one of the country's leading golfers who rose from the ranks of a caddie, remembers his very humble beginnings very distinctly. "The reason I am here in this swanky restaurant of the Oberoi, sipping coffee with you is because of golf. It has brought me name, fame and money and all that I could possibly ask for in life. Without golf, I am a zero," said the 27-year-old golfer with rare candour in a chat with Kalyan Ashok, a sports journalist working with Sportstar, one of India's leading sports weeklies.

India's No.3 golfer may not exactly be rolling in luxury at the moment, but he definitely leads a comfortable life-a far cry from the days when he used to sleep in a stable. "It's destiny that brought me to this stage in life and I can't say that I deserve it, but it's God's gift to me through golf," said Ashok. Not the one to forget his past, Ashok Kumar keeps reminding himself how he came up in life.
His story is stranger than fiction. Ashok was born into a poor family in Bihar that struggled to make both ends meet. (He has four brothers and two sisters.) In 1988, his parents sent him away with his elder brother to Delhi and he worked as an errand boy at the Jaipur Polo Club.

"I used to work in the day assisting my brother and sleep in the stable at night. The club also had the Air Force golf course and I wandered on to it one day and watched the players and caddies. I thought of becoming a caddie, but I was too young then. I did not get the job, but the club hired me a few years later," recalls Ashok. It was then that he took to golf. He started practising in the club when no one was around. However, he was caught playing one day and was suspended from his job, as caddies were not allowed to practise golf.

"I was back to square one. Then I went away to help a lorry owner who was transporting sand. I remember the days when I had to pay five rupees to hire a blanket during winter and sleep in Connaught Place," Ashok said wistfully.
Six months later, when things cooled down, he moved back to the Air Force golf course and became a caddie to Amit Luthra, who was India's top golfer and an Asian Games gold medallist. "Luthra saab spoke to the club authorities and got me in," Ashok said with gratitude writ large on his face.

Ashok learnt a lot from Luthra and one day he challenged his mentor to a play-off. "I don’t know what got into my head and I told him that I will beat him, to which Luthraji said that if I did that he would waive a month’s caddie fee. We played on the road, but I lost," Ashok smiled.

Luthra, however, was very impressed with the young man’s talent and got him enrolled at the Delhi Golf Club, which allowed caddies to play. Seizing this opportunity with both hands, Ashok went on to improve his game by leaps and bounds and in 1995, DGC selected him to play in the All India Junior tournament in Kolkata.

"I didn’t know where Kolkata was. I thought it was outside the country! I travelled in an unreserved compartment, spending most of the time sitting in the bathroom or just outside as there was no place elsewhere."

In Kolkata, he finished third and in the next two years he became the Junior Champion of the country. In 2000, he moved to the amateur ranks and two years later he became a pro, finishing his first season as India’s No.5 golf player. Riding a wave of success, Ashok held the No.1 spot in 2006 and 2008 and currently (2010) he is ranked No.3.

The moment he cherishes the most as a player is not the time when he won his first major title but when he finished 18th in the Hero Honda-DLF Tournament in 2002. It fetched him a cheque of Rs. 1 lakh. "I never looked back after that," Ashok remarked.

In the early part of 2010, Ashok’s golfing career got a boost when the Bangalore-based business and software company, Kaseya India, run by golf enthusiast, Mr. Girish Krishnamurthy, decided to sponsor him. "I am a simple guy and with Kaseya around to take care of other things, I can concentrate better on my game now," Ashok says with determination as well as gratitude. It is his ardent wish that all golf links in the country should support caddies, as he feels that many of them have a lot of inherent talent simply waiting to be tapped.
Ashok has modelled his game on his golfing idol, Tiger Woods. Incidentally, he had met Tiger when he was a caddie to Arjun Atwal in Bangkok a decade ago. "He hugged me when he was introduced by Atwal as a top amateur from India. I asked him for his advice, to which the legendary golfer simply said-'don't think of beating others, they should think of beating you," Ashok's eyes sparkled when he recalled his meeting with Tiger.

He faithfully follows that advice from the maestro and hopes to play with him one day. "For the moment, I eat, drink and sleep golf. There's no distraction in my life. I relax with some music and watch CDs of Tiger Woods," Ashok concluded.

D5. Given below are some qualities that a human being may possess. On the basis of your reading of the passage, pick three qualities that you think the ace Indian golfer Ashok Kumar possesses and using incidents or statements justify your choice in a short paragraph of around 100-150 words.

(a) pride  (b) frankness  (c) jealousy  (d) humility  (e) perseverance  
(f) compassion  (g) goal orientation

D6. The journalist has used some lovely words and expressions in the above 'story'. Match the words or groups of words with the meanings given.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. swanky</td>
<td>(a) a return to the original situation from where one started</td>
</tr>
<tr>
<td>2. candour</td>
<td>(b) highly unbelievable</td>
</tr>
<tr>
<td>3. A far cry from</td>
<td>(c) very quickly or in large amounts</td>
</tr>
<tr>
<td>4. stranger than fiction</td>
<td>(d) frankness</td>
</tr>
<tr>
<td>5. back to square one</td>
<td>(e) very different</td>
</tr>
<tr>
<td>6. by leaps and bounds</td>
<td>(f) fashionable and expensive</td>
</tr>
<tr>
<td>7. inherent</td>
<td>(g) a great performer</td>
</tr>
<tr>
<td>8. maestro</td>
<td>(h) pertaining to a natural quality that can't be removed</td>
</tr>
</tbody>
</table>
D7. Use the above words and expressions in meaningful sentences of your own. You may use more than a sentence to bring out the meaning clearly.

D8. You must be fond of a sport or any hobby like painting or dancing or singing. Imagine that you have become a star in your field of interest. One day, you meet a poor boy with a lot of talent, but no resources to get himself the facilities to nurture his talent. As a successful person, who is very interested in nurturing his talent, you decide to become his mentor. How would you go about doing it? Write a diary entry on any given date ten years from now about the feelings that the young but poor talented person evoked in you and the plans you thought of to develop his potential.

E1. Read the following article "Nature's Medicine Chest" and complete the exercise that follows.

1. The plant world is an immense store of active chemical compounds. Nearly half the medicines we use today are herbal in origin, and a quarter contains plant extracts or active chemicals taken directly from plants. Many more are yet to be discovered, recorded and researched; only a few thousand have been studied. Across the globe, the hunt will always be on to find species that could form the bases of new medicines. Humans have always used plants to ease their pains. They imbued them with magical powers and then gradually learnt to identify their properties. We can now enjoy the benefits of herbal medicines because, over thousands of years, our ancestors discovered which plants were medicinally beneficial and which were highly toxic.

2. Thousands of years ago, the ancient Egyptians discovered simple ways to extract and use the active ingredients within plants. Egyptian papyrus manuscripts from 2000 B.C. record the use of perfumes and fine oils, and aromatic oils and gums in the embalming process.

3. In ancient Greece in the 5th and the 4th centuries BC, Hippocrates, the father of medicine, was already recommending asparagus and garlic for their diuretic qualities, poppy as a way of inducing sleep and willow leaves to relieve pain and fever. In the 1st century AD, another Greek doctor, Dioscorides, established the first collection of medicinal plants. His treatise on the subject was translated into
Arabic and Persian. Centuries later, his work was also used by the Muslim scholars who influenced great universities of the period, particularly at Montpellier, Europe’s most famous centre for the study of botany.  

4. As a result of trade with Africa and Asia, the Western world’s store of herbal medicines was enriched by the inclusion of camphor, cinnamon, ginger, ginseng, nutmeg, sandalwood, turmeric and henna. For a long time, however, the use of both local plants and those with more distant origins was based on more or less fanciful beliefs. Throughout the Middle Ages herbal medicine consisted of a mixture of magic, superstition and empirical observation. From the Renaissance onwards, scientists and their scientific studies, discoveries and inventions came to the fore, rejecting alchemists’ elixirs and other magical remedies. Local plants were carefully collected and widely used to make infusions, decoctions and ointments. These plants make up the major part of the traditional cures that we have inherited.

5. In the late 1700s, Carl Wilhelm Scheele, a gifted Swedish chemist, obtained tartaric acid from grapes, citric acid from lemons and malic acid from apples. The techniques that he and his contemporaries used led to the isolation of the first purified compounds from plants that could be used as drugs. First came the isolation of morphine from the opium poppy in 1803, then caffeine from coffee beans in 1819, quinine from cinchona bark and colchicines from meadow saffron both in 1820 and atropine from deadly nightshade in 1835.

6. One tree that generated considerable interest among scientists was the willow. In the early 1800s, chemists from Germany, Italy and France began the search for the compounds responsible for the acclaimed pain-relieving effects of its bark. In 1828, the German pharmacist, Johann Buchner, was the first to obtain salicin, the major compound in a pure form. In 1838, the Italian chemist, Raffaele Piria also obtained salicylic acid from the bark by various chemical processes. But these early compounds caused blisters in the mouth, and stomach upsets when ingested. In 1853, a French chemist, Charles Frederic Gerhardt, synthesised a modified form of salicylic acid-acetylsalicylic acid. But still it wasn’t further developed for more than 40 years until a German chemist, Felix Hoffman, working for Bayer, rediscovered Gerhardt’s compound. Hoffman gave it to his father who suffered from arthritis and reported the beneficial effects.
7. Bayer decided to market the acetylsalicylic acid as a new drug for pain relief and patented the compound acetylsalicylic acid in 1899. At last from the willow, the first modern drug was born and, with 12000 tons of aspirin sold every year throughout the world, it has kept its number one position.

8. From the 1930s onwards, advances in chemistry have made it much easier to reproduce the active ingredients in plants. But plants will continue to have a medicinal importance in their own right. Their active constituents may be slightly modified to improve their efficiency or to reduce their undesirable effects, but they are still vital for the treatment of disorders such as cancers and heart diseases or as a means of combating malaria. And they remain the essence of herbal medicine—an area that has still not been fully understood and explored.

E2. Some sub-titles are given below corresponding to each of the paragraphs of the article that you have just read. Match the sub-titles with their paragraphs by writing the number of the paragraph in the space provided.

<table>
<thead>
<tr>
<th>SUB-TITLES</th>
<th>PARAGRAPH NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth of the first modern drug.</td>
<td></td>
</tr>
<tr>
<td>Man's hunt for medicinal plants from ancient times.</td>
<td></td>
</tr>
<tr>
<td>Contribution of Greek scholars</td>
<td></td>
</tr>
<tr>
<td>Pioneering isolation of compounds</td>
<td></td>
</tr>
<tr>
<td>The beginning of a new era of recreation of plant components with modifications</td>
<td></td>
</tr>
<tr>
<td>Positive effects of new trade and trading routes</td>
<td></td>
</tr>
<tr>
<td>The Wonder Tree</td>
<td></td>
</tr>
<tr>
<td>Knowledge from ancient Egypt</td>
<td></td>
</tr>
</tbody>
</table>

E3. Find words from the passage that mean the same or nearly the same as the following:

(a) filled with a certain quality (para 1) : ...........................................

(b) scented or perfumed or sweet-smelling (para 2) : ...........................................
E4. Complete the following sentences on the basis of your reading of the text in D1.

(a) After the Renaissance, the major shifts that occurred in the approach towards herbal plants were

(b) Isolation of compounds from plants to be used as drugs was the

E5. Complete the following flowchart that traces the contributory processes leading to the development of the first modern drug from the willow tree.

(a) salicin, the first major compound, was obtained in 1828

(b) 

(c) 

(d) Felix Hoffman's contribution of rediscovering Gerhardt's compound

(e) 
E6. **Class Project**

Work in groups of 6-8 students to present your findings on any two of the herbal plants suggested below through a series of charts or a computer power point presentation.

(a) Alfalfa (Medicago sativa)
(b) Aloe vera
(c) Arnica (Arnica montana)
(d) Ashwagandha (Withania somnifera)
(e) Papaya (Carica papaya)
(f) Lavender (Lavandula officinalis)
(g) Black Radish (Raphanus sativus niger)
(h) Pumpkin (Cucurbita pepo)
(i) Pineapple (Ananas comosus)
(j) Peppermint (Mentha x. peperita)

Please ensure that the whole class gets divided into 4-5 groups and each group must work on different sets or pairs of herbal plants.