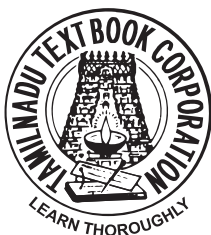


**TYPEWRITING**  
**AND**  
**COMPUTER OPERATION**  
**OFFICE SECRETARYSHIP - OSS**

**VOCATIONAL EDUCATION**  
**HIGHER SECONDARY - SECOND YEAR**

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Untouchability is a sin  
Untouchability is a crime  
Untouchability is a inhuman



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**“Computer Science, Higher Secondary Second Year, Tools Volume- I” Published by Tamilnadu Text Book Corporation, Chennai-600 006.**

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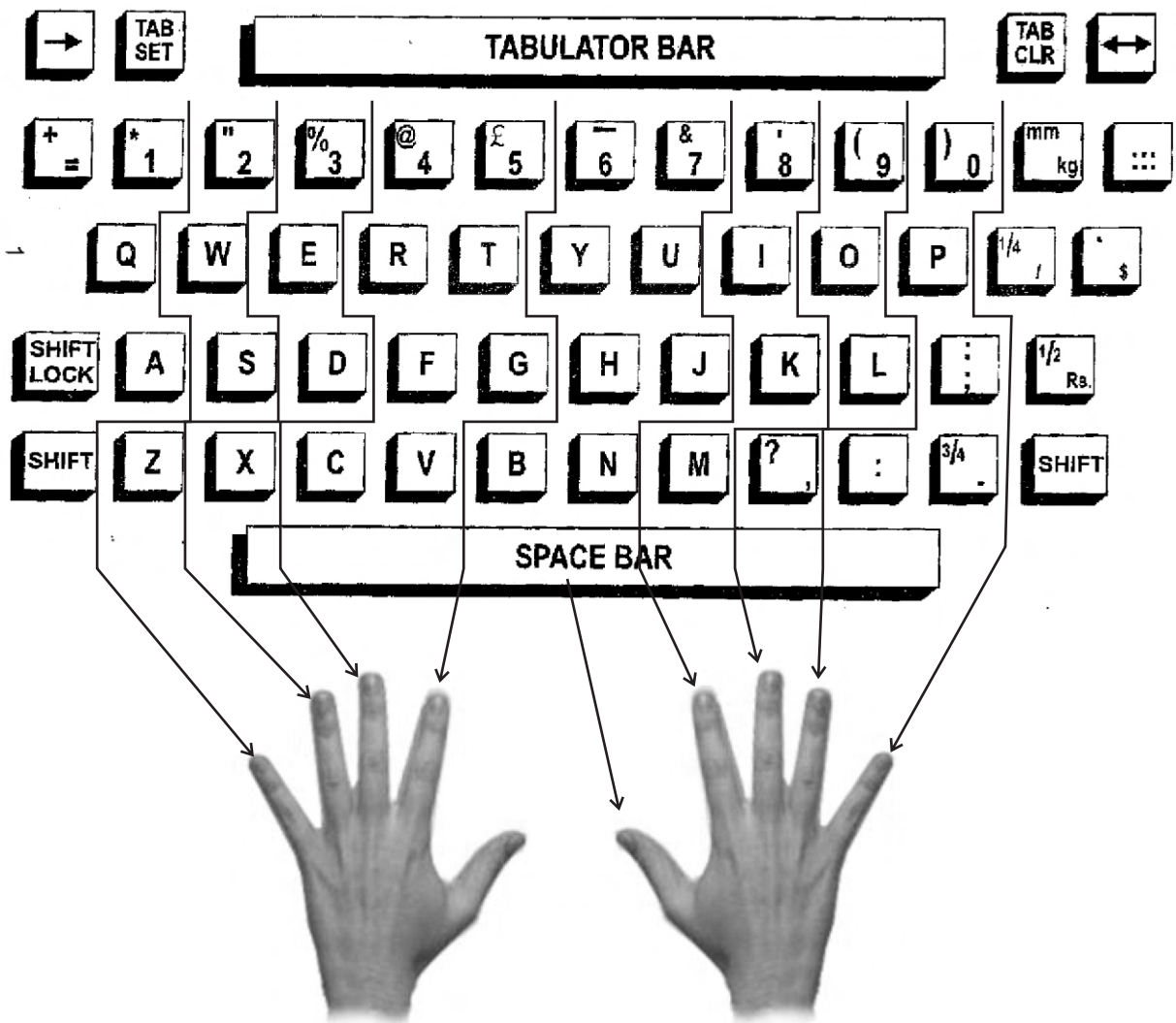
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# PART - A

## 1. KEY BOARD



## 2. Typing Practice:

### 2. (i) From Sentences:

Type the following sentences (Thirukural) each ten times

#### ***In Praise of God*** (Translation of Thirukural)

1. A begins the alphabet  
And God, primordial, the world.
2. What use is that learning which does not lead  
To the blessed feet of Pure intelligence?
3. Long life on earth is theirs who clasp  
The glorious flower-embedded feet.
4. Never harmed are those who clasp the feet  
Of the one beyond likes and hates
5. The delusions caused by good deeds and bad  
Shall never be theirs who seek God's praises.
6. Long life is theirs who tread the path  
Of him who conquered the five senses
7. None shall be free from carping care  
Save those at the feet beyond compare
8. The feet of the Lord with the Virtue-wheet  
Will help to cross the sea of birth
9. Palsied and useless the head unbowed  
At the feet of the God of eightfold virtue
10. The ocean of births can be crossed by those  
Who clasp God's feet, and non else.



## **2. (ii) From Paragraphs:**

**Type the following Paragraphs each ten times**

### **Positive Believing**

What is the difference between positive thinking and positive believing? What if you could actually listen to your thoughts? Are they positive or negative? How are you programming your mind for success or failure? The way in which you think has a profound effect on your performance.

Having a positive attitude and being motivated is a choice we make every day. Living a positive life is not easy..but then neither is negative living. Given a choice, I would rather go for a positive living. Positive thinking helps you use your abilities to the fullest.

Positive believing is more than positive thinking. It is knowing that positive thinking will work. Positive believing is an attitude of confidence that comes with preparation.

Having a positive attitude without making the effort is nothing more than having a wishful dream. The following illustrates positive believing.

It is easy to succeed today. If you want to get ahead in life, go the extra mile. There is no competition on the extra mile. Are you willing to a little more than you get paid for?

Praise the God from the heavens, praise him in the heights above, Praise Him, Sun and moon, praise him, all you shining stars, Praise Him, all highest heavens and you waters above the skies. Let them praise the name of the God for he commanded and they were created. He set them in place for ever and ever: He gave a decree that will never pass away Praise the God from the earth, you great sea creatures and all oceans depths, Lightning and hail, snow and clouds stormy winds that do his bidding, you mountain and all hills, fruit trees and all cedars, Wild animals and all cattle, small creatures and flying birds Kings of the earth and all nations, you princes and all rulers on earth, Young men and maidens, old men and children. Let them praise the name of the God, for his name alone is exalted:

## 2. (iii) From Scripts:

The following script to be practiced by typing ten times

### Develop a Mindset That Brings Happiness:

Bitterness is a sign of emotional failure. It paralyses our capacity to do good. Set your own standards. Be honest to yourself. Compete against yourself.

Do the following:

- \* Look for the positive in every person and in every situation.
- \* Resolve to be happy.
- \* Set your own standards judiciously.
- \* Develop an immunity to negative criticism
- \* Learn to find pleasure in every little thing.
- \* Remember all times are not the same.  
Ups and downs are part of life.
- \* Make the best of every situation.
- \* Keep yourself constructively occupied.
- \* Help others less fortunate than yourself.
- \* Learn to get over things. Don't brood.
- \* Forgive yourself and others. Don't guilt or bear grudges.

### Give yourself Positive Auto-Suggestions:

- \* I can handle it.
- \* I can do it.
- \* I am good at math.
- \* I have a good memory.

### 3. SPEED PRACTICE - First Paper

Type the following in double line spacing with a margin of ten degrees:-

Mother Teresa was born in Agnes Bojaxhiu in an Albanian village in 1910 and brought up in a family which was highly spiritual. In 1928, she left home to become a novice of Loreto in Dublin, Ireland. She heard about Calcutta and expressed 's Calcutta and began teaching in a novitiate of Loreto nuns in Darjeeling, the Himalayan town. After two years, she changed her religious vows of poverty, chastity and obedience and changed her name to Teresa and started teaching at St. Mary School, Calcutta.

It was in 1946 mother was inspired by Jesus to dedicate her life t the poor and within two years, she was working in the city's slums, picking up the sick and the dying from the streets. In 1950, she founded the Missionaries of Charity. Mother Teresa also came to be honored several tiroes across the world. She won. the Nobel Peace Prize, Bharat Ratna and Padma Shree to name a few. Mother's embalmed body was kept at the St. Tomas Church for a week while a grief-stricken nation proposed to accord to her a State funeral Thousands of mourners patiently waited in long, serpentine queues outside the church clutching garlands and bouquets, for one last look at Mother. On September 13, aristocrats and commoners alike, assembled in Calcutta to bid farewell to the century's greatest many as in. Several first ladies. Presidents, Prime Ministers, Queensland government functionaries from all over the world came of dignity into the hundreds and thousands of poor people she attended to in her 87

years long life. The 87 year old nun died on September 5 just the way she lived simply and quietly. Just after her dinner, she complained of a pain in the back. As the news of Mothers death broke out he hundreds of thousands of men, women and children gathered outside the Missionaries headquarters. To get a glimpse of their beloved Mother who all through her lift loved and cared for the sick, dying, destitute, leprosy patients.

She brought up in a family which was highly spiritual. In 1928, she left home to become a novice of Loreto in Dublin, Ireland. She heard about Calcutta and expressed her wish to come to the city. Next year, her wish was fulfilled and she arrived in Calcutta and began teaching in a novitiate of Loreto nuns in Darjeeling. She invited criticisms, too. Some of her worst critics like Christopher Hitchens, the controversial author of "The Missionary Position: Mother Teresa in Theory and Practice" said she did not hesitate to accept funds from the world's despots and shady businesses. He made the same point in the British Television documentary. "Hell's Angel". A visibly pained Mother simply said: "Forgive them for they know not what they do". Strictly speaking, the news of Mother's death did no come as a surprise. In fact, it was expected. She was hospitalized several times in, the past few years with heart, long and with Mothers consent, the Missionaries chose another nun, the sixty two year old Sister Nirmala one of the foundress's favourities to run the Missionaries' spiritual empire that touches over hundred countries.



**Type the following in double line spacing with a margin of ten degrees:-**

Many illnesses are caused by irregular meals or from the habit of eating whatever catches the fancy or happens to come in handy. Such "carelessness" results in decreased efficiency too. You are what you eat. Hence, eating good meals on time is very important. Scientific meal planning is not too difficult. It may appear complicated to a beginner when he or she is told that a complete and balanced diet is essential to meet the needs of the individual. The needs of a person depend on his or her age, sex, body size type, temperament, nature of work, the climate and the health of his or her mind and body. The term daily diet means all the food a person eats during the day. Diet may refer to either food ordinarily eaten or that selected with reference to a particular state of health. A few simple rules combine all these requirements, and a little practice makes correct meal planning second nature.

Nutritionists define good meals as those which supply nutrition to meet body needs, protect the body against disease and are enjoyable to eat. With the knowledge of nutrition, one can easily choose food to fulfill the first two requirements; yet how much one enjoys one's food depends on one's taste and attitude in eating. You can train yourself to enjoy all essential foods. It is not clearly understood why some children seem to dislike certain foods. It is not clearly understood why some children seem to dislike certain foods. But experience shows that a persistent in overcoming most dislikes is rewarding.

Researchers have discovered that the custom of three meals a day is based on convenience and not on biological needs. Tests show that blood sugar concentration and muscular efficiency are lowest before breakfast

and remain at this level until a meal is taken. After eating, blood sugar rises sharply and efficiency increases but the two fall again to a low level within two and a half to four hours unless another meal is taken. From these facts it appears that a high level of energy can be maintained by eating every two and a half to three hours throughout the day. Experiments on factory workers have proved this to be true. To day many factories, offices and schools, have incorporated in their schedules a "nutrition" or "snack" period mid-forenoon and mid-afternoon.

The bed time snack is a matter of individual preference. To avoid interfering with sleep, it should either be omitted or be very light and contain light food such as milk or fruit. An over weight person and the elderly should avoid food before retiring. It is unfortunate that breakfast is so often slighted. People who stay in bed, late, rush with dressing and eat on the run. They are doing themselves great injustice. You need a good breakfast more than any other meal in order to bring your blood sugar, concentration and muscular efficiency to peak level. It always pays to make breakfast a heavy meal and discipline yourself to get up early enough to eat it in a relaxed way. Most people find it easier to plan three main meals a day making them not too heavy, and balancing each one. If there are to be two or three snack meals, they should be planned along with the main meals. The snack is a good way to get in the vitamins and mineral foods. Nutritionists recommend as snacks, foods such as milk soups, stew, fruit juices, fruits and salad vegetables rather than resorting to candy, pastries, ice cream and other sweet or starchy foods.

**Type the following in double line spacing with a margin of ten degrees:-**

The major objectives of nationalization of commercial banks as set out by the Prime Minister may be summarized removing the control over commercial banks by few large industrial houses. Providing adequate credit to the hitherto neglected sectors such as agriculture, small business, small scale and professional. To introduced professional management in commercial banking. To provide incentives and stimulus to young and qualified entrepreneurs. To provide adequate training and reasonable service conditions for bank employees. The banks have really lived up to the expectations of Parliament and the Prime Minister.

The commercial banks have become powerful institutions contributing for agricultural and rural development and also the enlistment of weaker sections of the rural community. Some of the significant achievements are rapid branch expansion, expansion of rural credit, strengthening of the co-operative sector and support to village and rural industries. The commercial banks in India had organized themselves along the lines and patterns of British banks. They are more comfortable with trade and large industrial houses than with the agriculture sector and small industries. A number of changes has taken place in moral areas after moral areas after commencement of the planning era. The concept of rural development has neither been concise nor consistent. Gandhiji's ideas are different from those of Jawaharlal Nehru and they are again different from the ideas of Indira Gandhi.

These three dominant personalities, who played a significant

country, have left their imprints. Tumultuous and far reaching changes have taken place after the nationalization of commercial banks. Even before 1969, agriculture and allied activities were experiencing rapid growth under Credit Council pointed out a large credit gap measurers to improve and monitor the flow recommended a multi agency approach instead of depending on the co-operative credit societies alone, While the banks prior to nationalization were reluctant to enter rural areas and lend for rural activities in support of various governmental programmes.

Even during the British rule, the Government had recognized the importance Of agriculture and developed the Co-operative organizations to take care of agricultural credit. At that point of time and perhaps up to 1975, rural development was seen merely as agricultural development. It is only there after that the concept of rural development has undergone a considerable change, covering the entire gamut of rural activities. Various committees such as the Rural Banking Enquiry Committee, Rural Credit Survey Committee and Rural Credit Review Committee, have all talked about the development and strengthening of co-operative for agricultural sector and the need fro a change in policy in the wake of the green revolution which necessitated increased credit for adopting improved methods of cultivation, /the cost of cultivation had gone up with the use of high yielding seeds pesticides and fertilizers and improved means of irrigation. The co-operative societies could not meet the ever increasing demand for credit.

**Type the following in double line spacing with a margin of ten degrees:-**

Analyzing theories of Tamil origins, historians have declared that it may be taken as fairly certain that the Tamils were indigenous to south India. The collective impact of the geographical, archeological, epigraph factors on the richness of the cultural, environmental and socio - cultural factors on the richness of the hoary civilization of the Tamils is still being studied. This study generally justifies the aforementioned stand. The native people of these land speak the Tamil language, which is perhaps the only instance in history of an ancient classical tongue having successfully survived as a spoken language for a period over two thousand five hundred years with its basic structure remaining almost unaltered and intact during this long period.

Tamil is the oldest representative language of the Dravidian family. Its vocabulary and systemized grammar are far more advanced when compared to the other languages of the Dravidian stock. Tamil developed in a mature literature at least a thousand five hundred years before Telugu and a thousand years before karnataka. Unto the tenth century Tamil was the spoken language in kerala. Tamil genius was conspicuous not merely in the sphere of language but also in that of literature. Incidentally it may also be added that the ancient script system of the Tamils denotes the antiquity of the indigenous system of phonology of the Tamils denotes the antiquity of the indigenous pre-Christian era. It is noteworthy that the scientific evolution of vowels and consonants in general but particularly

Tolkappiyam. In no other script of any language do we find more than five nasals.

With a scientific system of writing the Tamils had evolved an original and outstanding literature basically touching upon the geographical and emotional aspects of human existence the rich civilization of these people, dived much good poetry. Much of this poetical lore has been lost but some has survived. This Survival is a fragment of a fragment some of what was reduced to writing has also been lost. It is from this fragmentary survival which exceeds twenty six thousand lines, that we get some glimpses into the life, which men and women led in the Tamil land in those far off days. They speak of villages and cities, cottages and mansions, kings and chieftains courts and poets, merchants and caravans, soldiers and armies, ships and chieftains, courts and armies ships and fleets, war and love, dress and jewelers, songs and dances, and arts and crafts. On the whole, the people seemed to have; lived joyously. The land was but sparsely occupied and there were large tracts of mountain and other regions. There was however a fairly large number of villages and hamlets, and cities of importance. A gradation of geographical features was available in the Tamil land from the hills to the sea including jungles the cities grew in size and developed in culture by contacts with people both from overseas and over-land. This aspect has bestowed upon the heritage of Tamilians dichotomy of high individualism and conservatism, combined with a gracious liberalism.



**Type the following in double line spacing with a margin of ten degrees:-**

The country has 64 crores of population, with 81 % among them living in the villages and the remaining in the urban areas. Any major development, in the development of the country, should naturally take place in the rural areas. The Five Year Plans and other development programmes, have laid emphasis on the development of rural areas and the growth of rural economy. Electricity, is universally recognized, as the major instrument of socio-economic changes, in any country and its contribution, in the face lift of the rural areas by no means, is a small achievement, but more importantly an economic necessity, It constitutes a key infrastructure for the development of the agrarian economy. It makes more livable and village occupation more attractive, apart from helping to increase production of land through full exploitation of ground water resources.

Rural electrification; has come a long way, since it was taken up as a planned programme, after the country became independent, in recent years. Progress has been phenomenal. While there is a general awareness of the big strides made in this crucial field, not all people realize the vitality it has imparted to the drought with its disastrous consequences, on the country. But for, an extensive rural electrification the consequences of the drought spread over large areas would have been severe. In fact, as a consequence of the drought situation the government had to accord a high priority, to the programme of rural electrification, with the sole aim of increasing the agricultural production, through energisation of the pumpsets. An emphasis of rural electrification is also reflected in the sharp increase in the plan outlays in the Five Year Plans. The

outlay for the Six Five Year Plan is expected to both more than previous plans. This underscores the growing awareness and recognitions of the importance of economic development of the country.

With increasing investment, it has been possible to electrify more than 44 percent of the total villages in the country. Also over 40 lakhs of pumpsets have been energized with a view to boost the agricultural production. The electrification of the villages and the connection to the pump-sets have been carried out simultaneously. The energisation of the pumpsets have been impressive in all these years.

Rural electrification has undergone shifts in emphasis from time to time to meet the felt need and requirements of socioeconomic development from earlier village electrification, emphasis was shifted to energisation of pumpsets. In view of the priority accorded, to the integrated rural development and welfare, the focus of rural electrification is not only on increasing agriculture production, but also on promotion of rural industries and creation of opportunities. For increased rural employment, besides the provision of amenities such as protected water supply system. Viewed in this context, what rural electrification has achieved so far, is by no means insignificant. In pattern, pace and progress is a name of pride for any developing nation, like India. In the villages, which have received electricity changes have occurred at a fast pace.

Type the following in double line spacing with a margin of ten degrees:-

The present generation and the coming generations have to solve three grave problems, namely, population poverty and pollution if they have to survive. Pollution being the most dangerous problem like cancer in which death is sure but slow. Environment pollution is assuming dangerous proportions all through the globe and India is not free from this poisonous disease. This is the gift of modern living, industrialization and urbanization. Unless timely action is taken we have a forbidding and bleak future for the world. The word noise is derived from the Latin term *nausea*. It has been defined as unwanted sound, a potential hazard to health and communication dumped into the environment with regard to the adverse effect it may have on unwilling ears.<sup>1</sup> Noise is defined as unwanted sound. Sound, which pleases the listeners, is music and that which causes pain and annoyance is noise.

In Chambers 21st Century Dictionary the definition of noise has undergone a change. Noise pollution stands carved out as a phrase separately from noise. The two are defined as under: Noise- a sound; a harsh disagreeable sound, or such sound; a din. Pollution- an excessive or annoying degree of noise in a particular area, e.g. from traffic or aero plane engines. Pollution is a noise derived from the verb pollute. Section 2 (c) of the Environment

(Protection) Act, 1986 defines environmental pollution to mean the presence in the environment of any environmental pollutant. Section 2 (b) of the said Act defines environmental pollutant to mean any solid, liquid or gaseous substance present in such concentration as may be, or tends to be injurious to environment.

A decibel is the standard for the measurement of noise. The zero on a decibel scale is at the threshold of hearing, the lowest sound pressure that can be heard, on the scale according to Smith, 20 db is whisper, 40 db the noise in a quiet office. 60 db is normal conversation, 80 db is the level at which sound becomes physically painful. The Noise quantum of some of the cities in our country indicate their pitch in decibel in the noisiest areas of corresponding cities, e.g. Delhi- 80 db, Kolkata - 87, Bombay-85, Chennai-89 db etc.

Broadly speaking, the noise pollution has two sources, i.e. industrial and non-industrial. The industrial source includes the noise from various industries and big machines working at a very high speed and high noise intensity. Non-industrial source of noise includes the noise created by transport/vehicular traffic and the neighborhood noise generated by various noise pollution can also be divided in the categories, namely, natural and manmade. Most leading noise sources will fall into the following categories:



Type the following in double line spacing with a margin of ten degrees:-

Now-a-days , the problem of low flying military aircraft has added a new dimension to community annoyance, as the nation seeks to improve its nap-of-the-earth aircraft operations over national parks, wilderness areas , and other areas previously unaffected by aircraft noise has claimed national attention over recent years.

Apartment dwellers are often annoyed by noise in their homes, especially when the building is not well designed and constructed. In this case, internal building noise from plumbing, boilers, generators, air conditioners, and fans, can be audible and annoying. Improperly insulated walls and ceilings can reveal the sound of-amplified music, voices, footfalls and noisy activities from neighboring units. External noise from emergency vehicles, traffic, refuse collection, and other city noises can be a problem for urban residents, especially when windows are open or insufficiently glazed. Certain household equipment, such as vacuum cleaners and some kitchen appliances have been and continue to be noisemakers, although their contribution to the daily noise dose is usually not very large. On Human Being, Animal and Property: Noise has always been with the human civilization but it was never so obvious, so intense, so varied &

so pervasive as it is seen in the last of this century. Noise pollution makes men more irritable. The effect of noise pollution is multifaceted & inter related. The effects of Noise Pollution on Human Being, Animal and property are as follows:

Regarding the impact of noise on human efficiency there are number of experiments which print out the fact that human efficiency increases with noise reduction. A study by Sinha & Sinha in India suggested that reducing industrial booths could improve the quality of their work. Thus human efficiency is related with noise. II Lack of concentration:- For better quality of work there should be concentration , Noise causes lack of concentration. In big cities , mostly all the offices are on main road. The noise of traffic or the loud speakers of different types of horns divert the attention of the people working in offices.

The effect of nose on audition is well recognized. Mechanics , locomotive drivers, telephone operators etc. All have their hearing . Impairment as a result of noise at the place of work. Physicists, physicians & psychologists are of the view that continued exposure to noise level above. 80 to 100 db is unsafe, Loud noise causes temporary or permanent deafness. Now is well known to all that plants are similar to human being. They are also as sensitive as man. There should be cool & peaceful environment for their better growth.

Type the following in double line spacing with a margin of ten degrees:-

Article 21 of the Constitution guarantees life and personal liberty to all persons. It is well settled by repeated pronouncements of the Supreme Court that right to life enshrined in Article 21 is not of mere survival or existence. It guarantees a right of persons to life with human dignity. Any one who wishes to live in peace, comfort and quiet within his house has a right to prevent the noise as pollutant reaching him. Right to Information:-

Chapter IV of Indian Penal code deals with offences relating to public health, safety, ...decency, morals under Sections 268, 269, 270, 279, 280, 287, 288, 290 291 294. Noise pollution can be penalized with the help of above section. Private remedies suits in the area may related to public nuisance under A299. This article punishment in case of Public nuisance law of torts covers. A person is guilty of public nuisance who does any act or is guilty of an illegal omission which causes any common injury, danger, or annoyance to the public or to the people in general who dwell or occupy property in the vicinity or which must necessarily cause injury, obstruction danger or annoyance to persons who may have occasion to use any public right. A common nuisance is not excused on the ground that it causes some convenience or advantage. Who ever commits a public

nuisance in any case not otherwise punishable by this code, shall be punished with fine, which may extend to Rs. 200. Under law of torts, a civil suit can be filed claiming damages for the nuisance. For filing a suit under law of torts a plaintiff is required to comply with some of the requirements of tort of nuisance which are as follows In *Christie Vs Davey* The extent of noise & the amount of disturbance caused there by was ignored & it was held that the noise which arose due to the practice of lawful profession, & without any malice, could not be considered to be actionable nuisance. In *Hollywood Silver Fox Farm Ltd. Vs Emmett* It was held that presence of malice was a factor in determining liability for noise amounting to nuisance. The court said that even on his own land was nuisance, & the defendant was liable in damages.

The Factories Act does not contain any specific provision for noise control. However, under the Third Schedule Sections 89 and 90 of the Act, noise induced hearing loss, is mentioned as notifiable disease. Similarly, under the Modal Rules, limits for noise exposure for work zone area have been prescribed.

**Type the following in double line spacing with a margin of ten degrees:-**

The word virus is too familiar to us and everybody would like to avoid coming in contact with a virus. This is because viruses cause diseases not only in human beings but also in animals and plants. Virus is a Latin word meaning slimy liquid or poison. The list of diseases caused by viruses is a long one. Perhaps the most dreaded disease caused by viruses in human beings is Acquired Immune Deficiency Syndrome (AIDS). Some of the other diseases caused by viruses in human beings are infantile paralysis, dengue, hepatitis B, influenza, common cold herpes yellow fever and small pox. Viruses are parasites. They need a living cell host for reproduction. Some viruses infect bacteria only and they are known as bacteria-eaters.

The biological nature of virus was first indicated by a Russian scientist Dimitry. Ivanovsky and a Dutch scientist Martinus W. Beijerinck in the last decade of the nineteenth century. All viruses contain nucleic acid either DNA or RNA and protein. It may be noted that living cells contain both RNA and DNA but a virus has only one of the two. Based on the type of nucleic acid that a virus contains, it is classified as DNA or RNA virus. The size and shape of virus are determined by the amount and arrangement of nucleic acids and proteins. They vary in diameter from 20 nanometres to 400 nanometres

(one nanometer is one billionth of a metre). Viruses are too small to be seen with naked eyes. With a few exceptions they cannot be seen even with ordinary or optical microscope.

The vaccinia virus can be visualized under a powerful optical microscope. Viruses come in various shapes rods, threads, spheroids, polyhedrons and tadpole-like structure. Some viruses come in combined shapes, for example, a virus may have a polyhedral head attached to a rod-like tail. The infective part of a virus, when it is outside the host cell is called the virion. It contains at least one protein synthesized by a specific gene of the nucleic acid of the virus. All viruses have a protein coat called a capsid around the nucleic acid. Some virus like disease causing organisms which have only nucleic acid and no structural proteins are known as viroids. It protects the nucleic acid of the virus from digestion by enzymes called nucleases.

It helps the virion to penetrate through the cell surface membrane or in some cases to inject the infectious nucleic acid into the interior of the host cell. It provides sites on its surface which recognize the receptors on the surface of the host cells for attaching the virion. Virus is host specific, that is, a virus may not harm one type of host but can severely damage another.

Type the following in double line spacing with a margin of ten degrees:-

Judiciary And Noise Pollution In Raghunandan Prasad the engine of a factory was causing noise so as to be a serious nuisance to be the people living in the neighborhood the forbade the working of engine from 9 P.M. to 5 A.M. In Mauj Raghun6 A rice mill working at night during season will not disentitle the inhabitants of locality to relief under this section if it is established that such working is a nuisance. In Ram Avtar7 The appellant carried on a trade of auctioning vegetable in private house the noise caused by the auctioning caused discomfort to person living in society. An order was passed restraining auctioning g of vegetable in the their house.

In Himmat Singh8 Where there were fodder tabs in a residential colony to which fodder was brought daily during nights by trucks which were unloaded in the morning and fodder was cut during the day by electric operated machines. It was held that the carrying on the trades causing intolerable noises emanating offensive smells and spreading dust containing articles of fodder cut was public nuisance as noise pollution. Some other important cases are also have great relevance in this regard: In Govind singh9 the court examined the emerging parameters of public nuisance. The supreme court on

special leave to appeal noted that the evidence disclosed the emission of smoke injurious to health and physical comfort of people living or working in the proximity of appellant bakery and held this as a case of public nuisance.

In Maulan Mufti Syed and Other10 V. State Of West Bengal AIR 1999 CAL 15 The court held imposition of restriction on the use of microphone and loud speakers by the state government between 9 pm to 7 am which inter alia include recitation of azan on microphone in early hours before 7 AM is not violative of Article 25 of constitution guaranteeing of freedom of religion. Latest authority of supreme court is a land mark judgment in the field of noise pollution. In Re: Noise Pollution11 Following important observations have been made by Supreme court regarding noise pollution which are discussed. Anil mittal an engineer filed this case .

The amendment empowered the state government to permit use of loudspeakers or public address system during night hours between 10 pm to 12 pm in the mid night on or during the cultural or religious occasions for a limited period not exceeding 15 days.



**Type the following in double line spacing with a margin of ten degrees:-**

Since the days of Indian Independence, the country has duly recognised the importance of harnessing Science and Technology in a major way. The thrust provided to Science and Technology since then has been aimed at making it an instrument for the growth of socio-economic status, agriculture, industry, infrastructure and services in the country. Today India is one of the top ranking countries in the world in the field of technology development. Its capability in building nuclear reactors, communication, remote sensing satellites and guided missiles, just to mention a few is unquestionable. The recent nuclear explosions at Pokhran have clearly established the remarkable potential of our country in Science and Technology.

By demonstrating its capability to manufacture and test the most modern thermonuclear technique involving boosted fission and also weapons of low yield types, India is now in a position to design specific practical and strategic weapons, it may require for its defence. With its wide-ranging capabilities, Indian Science and Technology has come to be regarded as one of the most powerful instruments of growth and development, specially in the emerging scenario of globalisation and competition. The Indian policy and the approach that is envisaged in the Ninth Five Year Plan aims at exploring new vistas of economic prosperity with Science and Technology as the main focal point to meet the economic, industrial, trade and societal challenges.

Many of the earlier inputs have been very useful for building up a viable infrastructure. The Plan seeks modification in the existing policies especially with regard to the mechanisms of implementation so that

the benefits emerging from Science and Technology must reach all sections of the community. The Plan envisages to direct all efforts to build and maintain a strong science base as a prerequisite for achieving technological competence. In this endeavour, it is planned to create more centres of excellence in institutions of higher learning for supply of future manpower and for nurturing scientists with exceptional capabilities by offering them facilities comparable with international standards.

The Plan envisages execution of research programmes in priority areas in a mission mode through appropriate restructuring and reorientation of many of the scientific institutions and laboratories. It aims to minimize the hierarchical bureaucracy in Research and Development institutions. In this regard, several measures have been suggested, like professionalisation of science auditing, decentralisation of decision making powers and authority of implementation, introduction of participative decision making processes in the Science and Technology institutions, etc. All these would ensure that the activities pertaining to scientific management are performed by scientists and technologists. Appropriate linkages between the industry and the research institutions or laboratories help in effective marketing of technology.

The focus of the programmes would be to encourage and strengthen interaction among Research and Development institutions and the user. The existence of core technological strengths is one of the key elements in the modern global interaction. In this context, the plan focusses on developing core strengths and concentrating on areas where competitive strengths can be built



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The definition of gene has changed over the time. The term gene was coined by the Danish geneticist Wilhelm Johannsen in 1909 to refer to the inheritance factor responsible for particular character in an individual for example, the gene for eye colour. It was Gregor Johann Mendel who first formulated a formal concept of genes which he designated as factors. A Mendelian gene occurs at particular point on a particular chromosome and may have several variants, each specifying a particular form of that character for example, the alleles for blue or brown eyes. Some alleles show dominance and these mask the effect of other alleles known as recessive.

In 1940s, scientists showed that a gene could be identified with a particular length of DNA. This led the scientists to propose the one-gene-one-enzyme principle. But then it became known that sometimes protein can be made up of several polypeptide chains each polypeptide chain representing a specific gene. So, the one-gene-one-enzyme principle had to be replaced by one-gene-one-polypeptide. Today, a gene is either defined as the functional segment of DNA that is required to synthesise a complete polypeptide chain or a unit of selection that determines a specific character in an organism on which natural selection can act. The visible effects of genes are expressed in proteins. Genes control the structure of the proteins they produce via the genetic code and also the amount to be produced and the timing of production. Human beings have about one lakh genes.

The number of nucleotides in a gene range from two thousand to two crore pairs of nucleotides. Genes undergo mutation and recombination to produce the

variation on which the natural selection operates. DNA is a complex giant molecule that carries the secret of life. It is DNA which has all the information needed to build, control and maintain a living organism. In organism, DNA is organised into chromosomes and contained in the cell nucleus. It consists of a double helix of two strands coiled to each other. The strands are made of nucleotide subunits. A nucleotide consists of a purine base linked to a sugar and a phosphate group.

The bases on each strand are joined by hydrogen bonds and are always paired in the same way. Adenine always binds with thymine and guanine with cytosine. Hereditary characteristics of living organism are determined by the information encoded in DNA. The information is stored by means of genetic code that is a specific sequence of purine bases along the DNA. The basic symbol of the code is a sequence of three consecutive bases. The different triplate sequences or codons specify the 20 amino acids commonly used by cells for protein synthesis and give start and stop signals for the process. The sequence of codon determines the precise order in which amino acids are linked up during protein synthesis and therefore the kind of protein that is to be produced. As there are 4 different bases, the maximum possible number of codons is 64. One amino acid may have more than one codon. Evidence for the nature of the genetic code was provided in the 1960s. As the quality of the information differs from individual to individual, from species to species, it is expected that the composition of the DNA would reflect this difference and this actually happens.



**Type the following in double line spacing with a margin of ten degrees:-**

Unemployment in an undeveloped country is different from unemployment in a developed country. In a developed country the mobility of labour is very high. It is trained and skilled and there is always unutilised productive capacity in the industries. As a result, unemployed labour can be easily employed in the existing industries.

The cause of unemployment normally happens to be just some defect in the working of the economic system. Because of a deficiency in effective demand the business people feel that increased production is not profitable. However, if demand rises production becomes profitable and as a result, unemployed labour is quickly absorbed.

In an underdeveloped country, say India, the problem is entirely different. Here unemployment is basically structural. That is to say that labour is too much in supply as compared with land and capital resources with which to employ it gainfully. For this reason, unemployment here is of chronic nature and can be cured in the long run only through increased resources with which to employ this labour. Further, labour in India is unskilled and as such cannot be employed readily in modern industries unless trained first. Also labour mobility in India is very low because of the customs, attachment to soil, unfamiliarity with the conditions prevailing in different regions and so on. As a result it may be that while in some parts of the country labour is unemployed in the others there may be actual scarcity.

To put the nature of unemployment problem in India into concrete terms, there are basically two sections of the unemployed, educated and non-edu-

cated. And there are further subdivisions of these. The educated unemployed are mainly in the urban areas and further fall into the categories of clerical type and skilled type. Non-educated unemployed persons in the urban areas cannot get employment in the cities and have a tendency to go back to their villages once they came. Therefore, non-educated unemployed are mainly in the villages and these also mainly in the agricultural Held.

Our economy being mainly agricultural and our agriculture being confined, mainly to one or two crops a year the people engaged in it usually do not find enough work throughout the year. There is the crop-season and there is the lean season. This seasonal unemployment could have been remedied if people could engage themselves in cottage industries. The extent of unemployment in India must be assessed before we resort to remedies. It has been one of the greatest difficulties to ascertain the extent of unemployment in India. Adequate data have not been available for the purpose. Employment exchanges are unreliable for the purpose. So many people, especially the rural people, do not get themselves registered with the employment exchanges and these exchanges do not cover all the cases of the unemployed and the disguised unemployed nor are they able to tell us effectively the handicaps faced by labour mobility.

The real solution lies in long-term steps which should check the population growth of the country. But the problem cannot wait its solution for such a long period.



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The relationship between a banker and his customer is of two kinds, namely general relationship and special relationship. The relationship between a banker and his customer is mainly that of debtor and creditor. The respective positions depend on the state of the account. Normally the banker is a debtor and the customer is a creditor. The reason is the customer generally keeps some amount in his account with the bank. In other words, customer's account generally shows a credit balance. But in the case of an overdraft the banker is a creditor and customer is a debtor. In the case of a fixed deposit account the banker is a debtor and the customer is a creditor. In the case of a loan account the bank is a creditor and the customer is a debtor.

When a customer deposits money, it means the bank has borrowed money from the customer. The amount deposited becomes the property of the bank. The bank can make use of the money as it is absolutely at the disposal of the bank. In other words, when money is deposited in the bank, the ownership passed to the bank. The bank undertakes to repay on demand a sum equal to the amount deposited. But the customer has no right to claim identical or same coins or notes deposited by him. The bank can pay the amount deposited by him in any kind of notes and coins. Thus a bank is not a mere depository or trustee.

The debt due by a banker to his customer differs from ordinary commercial debts in one important respect. In the case of ordinary commercial debt, demand for payment by the creditor is not necessary. In other words, the debtor himself has

to pay money to the creditor. But in the case of debt due from a banker, demand for payment is necessary. In other words, the customer who has deposited money in the bank must ask the bank to pay money. He must demand payment. Then only the bank has to pay. Otherwise, the bank may close the account of the customer and return the amount without notice. As a result, it may dishonour cheques issued by the customer before the closure of the account. This may injure the credit or the reputation of the customer.

When bank accepts money on a current account, it promises to honour its customer's cheques use in so far as the amount is sufficient and available. The obligation to repay the amount is limited to the branch where the account is kept. In other words, customer can issue cheques on the branch of the bank where the account is kept. A modern bank performs a number of services to the public and its customers. When a customer deposits securities and valuables for safe custody, the banker becomes a trustee. He must return the articles deposited to the customer in tact. Although the articles are in the possession of the banker, the ownership lies with the customer. The customer can claim them whenever he wants. The customer is only a beneficiary in this case.

When a banker purchases or sells securities on behalf of his customer, he is only acting as an agent. The customer is the principal and the banker an agent. Similarly, when a banker collects cheques, dividends or bills on behalf of his customer, he is acting as an agent of the customer.



**Type the following in double line spacing with a margin of ten degrees:-**

During the period 1895-1905, many path breaking discoveries were made which not only ushered in revolutions in several disciplines of science but also changed our very understanding of some of the prevailing concepts in science. The discovery of electron by Josph John Thomson in 1897 was one such discovery. In fact, the discovery of electron is one of the greatest discoveries of modern physics. The electron was the first of fundamental constituents of all matter to be proposed and in the last hundred years, it has withstood all the tests of elementarily. The discovery of electron has not only revolutionised scientific thought but also our ways of life. Once electron was proposed as a fundamental constituent of matter, the scientists started building models of atomic structure. Atoms in their normal states are not electrically charged. So, as the electrons are negatively charged, it became obvious that the atoms also carry a charge of positive electricity to counterbalance the negative charge. Gradually, the physicists built up an idea how these charges were arranged in an atom. Among these models, the Rutherford model had the most lasting influence. Rutherford discovered that the atom consisted of a heavy positively charged core surrounded by electrons. The existence of proton was recognised in 1914.

In 1931, neutron was discovered by James Chadwick and the number of elementary particles rose to three i.e., electron, proton and neutron. However, with the advent of particle accelerators, hundreds of so called elementary particles were discussed. To scientists, it was a real shock. They were not prepared to face so many elementary particles. From the very beginning of human civilisation, the idea of fewer basic constituents of nature has

fascinated man. To overcome this complexity, a new model viz., quark model was proposed. According to this model, all the particles experiencing strong interactions are made of still smaller constituents called quarks. The idea that the protons and neutrons are really composite objects made of quarks was experimentally supported in 1969. Today, the elementary particles and interaction between them are described by the Standard Model.

According to this model, elementary particles are classified as leptons i.e., these particles interact with electromagnetic and gravitational fields but beyond that they interact only through weak interactions, hadrons and gauge bosons. Leptons and hadrons interact by exchanging gauge bosons. Each type of the gauge bosons is responsible for a different fundamental force. Photons mediate the electromagnetic force which affects all charged particles; gravitons mediate the force of gravity; gluons mediate the strong interaction which affects quarks; and weakens mediate the weak nuclear force. The Standard Model is quite successful in explaining the existing available experimental data but it has failed to address many important questions in subatomic physics. For example, still we do not know how the masses of quarks, leptons and gauge bosons are generated. The Model also failed in unifying all the four fundamental forces manifested in nature. Recently, a new theory known as Superstring Theory has been proposed which unifies all the four fundamental forces of nature.



### **Type the following in double line spacing with a margin of ten degrees:-**

The invention of paper is closely-linked with the history of human civilisation. Although the modern printing industry is generally considered to have born out of the invention of movable types of Johan Gutenberg in 1455, the Chinese had been printing on paper many hundreds of years earlier. Paper was first produced in China in about 105 AD, when papyrus and parchment were being used in Mediterranean countries. Tortoise shell, bone, metals, stones, bamboo slips, wooden tables and silk were used. as writing materials in China before the invention of paper. It took centuries to perfect the technology of producing vegetable fibre paper. Initially, the raw material used was hemp, rope ends, rags and worn out fishing nets etc. The oldest sample of paper from Wester Han Dynasty was discovered in 1957 in Shaanxi Province of China. The ancient Egyptians used papyrus as writing material, which is derived from the plant *Cyperus papyrus*. The papyrus plant was long cultivated in the Nile delta region in Egypt and was collected for its stalk or stem, whose central pith was cut into thin strips, pressed together and dried to form a smooth thin writing surface. Papyrus is a grass like aquatic plant that has woody, blunt triangular stems and grows upto 4.6 m high in quietly flowing water. The triangular stem can grow to a width of 6 cm. The Egyptians used the stem of the pyrus plant to make sails, cloth, mat, cords and above all, paper. It was adopted by the Greeks and was used extensively in the Roman Empire.

It was used for the production of legal documents. Pliny the Elder, gave an account of the manufacture of paper from papyrus. The fibrous layers within the stem of the plant were removed and a number of these longitudinal strips were placed side by side and then crossed at right angles with another

set of strips. The two layers formed a sheet, which was then dampened and pressed. Upon drying the glue like sap of the plant acted as an adhesive and cemented the layers together. The sheet was finally hammered and dried in the sun. A number of these sheets were then joined together with paste to form a roll, with usually not more than 20 sheets to a roll. As time passed, other fibrous plants started replacing papyrus.

By the turn of 3rd Century A.D., papyrus had already begun to be replaced by less expensive velum or parchment in Europe. Parchment is said to have been invented in the 2nd Century. B.C., the name apparently derived from the ancient Greek city of Pergamum. It is the processed skin of certain animals mainly sheep, goats and calves that have been prepared for the purpose of writing on them. Parchment made from the more delicate skins of calf or lamb came to be vellum, a term that was broadened in its usage to included any especially fine parchment. In modern usage, the terms parchment and vellum may be applied to a type of paper of high quality chiefly made from wood pulp and rags and frequently having a special finish. Nearly all paper is made of cellulose (40% to 50%), hemi-cellulose (20% to 50%), Lignni (20%) and other extractives, which are separated from cellulose. Mainly two types of woods are used in paper making i.e. Softwood - obtained from coniferous tree and Hardwood - obtained from deciduous trees. Softwoods offer more strength but hardwoods give smooth though less strong paper.



**Type the following in double line spacing with a margin of ten degrees:-**

I am an investigator of truth. I do not certify anybody's statement without putting into test. After my time, if anybody desires and work to pursue and to decipher the truth, I have full faith that he would be completely satisfied with his investigation. These are the utterances of a scientist known widely as Galen. Galen tops the list among the eminent persons in the medical science. His works on Medical Science and Anatomy is a milestone and masterpiece in the medical literature of the world. He was the first experimental physiologist. His works were based upon the studies made on apes and other animals. Galen's father was a mathematician and an architect and his father's work influenced him very much in forming scientific attitude. He studied until he was twenty nine years of age and later started practicing medicine with a great zeal and skill to emerge out as an eminent medical scientist.

Galen studied in a medical school in Pergamum. The teachers in the Pergamum Medical School were the followers of the system prescribed by Hippocrates. Later, when Galen studied higher medicine at Smyrna and at Corinth, he made extensive and exhaustive studies in anatomy and physiology. After his final studies in Alexandria, Galen founded his own medical laboratory where he conducted extensive research work on various aspects of the medical science with special reference to anatomy and physiology. During 169 A.D. Emperor Markas Aurelius invited Galen to Rome for further scientific research and higher studies in medicine. Besides, Rome, at that time needed a physician for the military personnel. In Rome, he could find all facilities of his choice and needs pertaining to medical research, studies and treatment.

During this period of his stay in Rome, Galen could conduct as many as 400

experiments in medicine. But, unfortunately, only a few out of these 400 experiments are available to us. One important and interesting investigation among the many of Galen is his unquestionable statement made in connection with the blood circulation. He also studied the functions of the heart, its muscular layers, its valves etc. His sincere studies in this area of the human anatomical structure enabled him to prove beyond doubts is that the veins are the blood carriers. This fact was not known to anybody for quite a long time till the time of Galen. Galen made a study of the nervous system also and realised that all the nerves report message to the brain.

Through the spinal cord and it is the nervous system that controlled the movement of the diaphragm in breathing. The experiments that he conducted on muscles are still amazing to the medical world. His investigation in this area happened to be the first of its kind. According to Galen, muscles always act in antagonistic pairs or groups to relax or to constrict in various parts of the body. He also felt that the body movements are controlled by the Central Nervous System and this condition was called Paraplegia by Galen. All the medical studies made by Galen were very systematical and they were made on the lines of Hippocrates. He proclaimed to the world for the first time about the human anatomy in a scientific manner and he also made the world know clearly the major functions of every organ of the human system and how best they could be taken care of for a healthy existence of man. Most of the postulates of medical science were known by the Galenic System in the good maintenance of the human body and its organs.



### **Type the following in double line spacing with a margin of ten degrees:-**

**Nurses** care for the sick and the injured and help people to stay well. It is a demanding career and involves shift duty. The profession requires intelligence, compassion and stamina and rewards one with the privilege of making a difference to the people's lives. Nurses observe, assess and record symptoms, reactions and progress of the patients, in the process, establishing communication lines with them. They assist physicians and surgeons during treatment and examination besides assisting in rehabilitation and convalescence. They work under the direct supervision of nursing departments and in co-ordination with physicians. Their work area may be general, operating room, maternity room duty, emergency rooms, intensive care units or outpatient clinics. Nurses also work in physicians consulting rooms, private homes, school infirmaries, industries, home nursing services, etc.

The nursing profession demands being cheerful with a desire to help others and the mental strength to work with even the seriously ill. It requires common sense, practical bent of mind, unflappability, sympathy for the old, young and the sick without sentimentality, an interest in medicine without morbid curiosity about illness, sensitivity with a certain amount of toughness so as not to get too emotionally involved and organising ability. Patience, sense of humours to put up with inevitable short tempers and difficult people, the ability to judge when to be firm and how to be firm.

But not rude, powers of observation, ability to take up responsibility one moment and to do exactly as instructed the next are

some characteristics required by a nurse. General duty nurses work together with other members of the healthcare team to assess the patient's condition and to develop and implement a plan for healthcare. The range of duties include taking patient's temperature, pulse and blood pressure, changing dressings, assisting patients with personal care, conferring with members of the medical staff, helping prepare a patient for surgery and completing any number of duties that require skill and understanding of patient's needs surgical nurses oversee preparation of the operating room and the sterilising of instruments, assisting surgeons during operations and coordinating the flow of patient cases. Private duty nurses may work in hospitals or in patient's home. Their services are designed for individual care of a person and are carried out in co-operation with patient's physician.

Midwifery is a unique combination of applying complex practical and high-tech skills, teaching parentcraft and counselling. Midwives traditionally look after mother and child from pregnancy to childbirth and a few weeks after. They are equipped to provide antenatal and post-natal advice, support and instruction and take full responsibility during birth in straight forward cases and call a doctor in case of complications, which they are trained to spot at an early stage. Often, midwifery is included in the nursing curriculum. A blend of formal training in theory and practical aspects is the normal approach to nursing training. After Class X, one can take up the 18 months Auxiliary Nurse Midwife or Multipurpose Health Worker Course. It is conducted by various hospitals all over the country. Admission is normally based on merit in Class X Board examination.



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Once a company becomes aware of the possibilities of knowledge systems and technology, there is a tendency to rush in and implement technology as an end in itself. But this should be avoided. A successful strategy must solve a business problem, therefore an opportunity oriented approach may be preferable to a technology oriented approach. Knowledge management opportunities are usually present in various forms such as: decisions, systems, people, and core competence. A Company should survey itself to discover in which areas it can best apply knowledge management. Making decisions is one of the most important functions of any management in a company. There are many types of decisions. A company should inventory all decisions it makes regularly especially high volume, recurring ones and then consider building a knowledge system for each decision in the inventory. Such a system either could help make the decision or could automate the standard, recurring cases.

A company's mainline information systems might have knowledge intensive components where application of knowledge technology may be feasible. Alternative knowledge technologies handle complexity and volatility much more readily than conventional procedural coding techniques and might make such applications feasible. Volatile pricing schemes and complex accounting processes are two mainline system functions where the applications of knowledge technologies has been implemented successfully.

Professional knowledge workers typically spend 80 percent of their time on overhead tasks and mundane decision making and 20 percent on exceptions and creative problem solving. To make these people more effective a company should identify all large, homogeneous groups of

professionals in the organization, inventory each group's of business functions, and then consider how to combine knowledge technology with other computing technologies to provide a one stop, multifunction, comprehensive performance support system for each group. Knowledge technology Is not the only technology required to build such systems but it might well be the component that makes them worth building.

We need to expand our system-building efforts beyond expert systems to more comprehensive knowledge systems that can accommodate knowledge in any form; text, video, rules, cases, procedures or human expertise. We need to expand our Knowledge engineering efforts, beyond capturing knowledge from humans to capturing knowledge from whatever repository contains it reference books, working papers, training materials, legislation, patents and so on . We need to expand our toolkit beyond traditional technologies to a more comprehensive set of knowledge technologies. Our toolkit must accommodate all forms and sources of knowledge. Rule processing object oriented programming case based reasoning, hypermedia, neural nets, group work, and even good old procedural coding tools all have a role. A performance support system should do more than automate business as usual. It might be necessary to dismantle specialized departments that perform very narrow tasks in favour of a case management approach that allows one person or department to perform all tasks related to a case. Such efforts using a performance support system have reversed the 80/20 percentages in several, companies.



**Type the following in double line spacing with a margin of ten degrees:-**

Pollution refers to contamination of natural ingredients of environment. Air is a mixture of different gases which form an equilibrium. When this equilibrium of gases is disturbed beyond the limits fixed by environment itself, air-pollution occurs. If a gas increases or decreases to the extent that it cannot be reverted to its definite ratio by virtue of natural balance, it disturbs the ratio of gases present in the air and consequent results are seen in the forms of acid-rain, green house effect increased respiratory problems and related lung and heart diseases, ozone-layer depletion, smoky fog and damage to plants, property etc. In India, the common sources of air-pollution are industrial, traffic and domestic emissions including thermal power stations, fertiliser factories, textile mills and sugar factories, etc.

Water pollution is defined to mean such contamination of water and such alteration of the physical, chemical and biological properties of water or such discharge of any sewage or trade effluent or any other liquid, gaseous or solid substance into water that is likely to create a nuisance by way of physical appearance, odour, taste or render such water harmful and injurious to public health, for the purpose of domestic, commercial, industrial, agricultural or other legitimate uses or to health of animals or aquatic life. Water pollution is caused by dumping of domestic wastes like sewage and industrial wastes in rivers, lakes or on open places.

Excessive use of fertilisers and pesticides in agricultural practices, the gaseous effluents changed into acids on coming in contact with humid atmosphere and acid-rains and bathing of human-beings and animals, cleaning of utensils and throwing of half

burnt or unburnt corpses into lakes, rivers and ponds. Water pollution results in many water-borne diseases, which include malaria, Japanese encephalitis, dengue, filariasis, cholera, typhoid, conjunctivitis, amoebiasis, diarrhoea, jaundice, dysentery, intestinal worms and parasites which may cause polio, dental fluorosis, stomach diseases, skin-infection, lung diseases, pain in joints, bow legs to name a few and killing of plants and animals inside and outside the water.

In India, there is now a wealth of documented evidence from all over the country of the adverse effects of water pollution. Almost all rivers including Ganga, Yamuna, Godavari, Narmada and Brahmaputra and lakes, many ponds are heavily polluted. In some areas, even the ground water had been found to have pollutants mixed in it. The state of affairs needs immediate attention at local, regional and national levels. Increased use of chemical fertilisers, flood watering, pesticides, insecticides and herbicides and excessive use of soils have changed the soil ecology and have degraded it so much that it has lost its basic elements which maintain the soil fertility and natural soil structure. This phenomenon is known as soil pollution. The effect of noise on human beings and other organisms depends upon its intensity, frequency and duration. Today, noise can be expressed in units called decibels. 85 decibels is considered as the tolerance limit of noise. When noise-level crosses this limit, noise-pollution takes place. Noise pollution is caused by heavy traffic, blaring music over loud-speakers, jet-lanes and industries.