**SECTION-9**

**DISASTER MANAGEMENT DURING EARTHQUAKE**

**Introduction**

1. Earthquakes are considered to be one of the most dangerous and destructive natural hazards. The commencement of this phenomenon is usually sudden with little or no warning. It is not yet possible to predict earthquakes and to make preparation against damages and collapse of man-made structures. Earthquake generates a set of horizontal and vertical vibrations of the ground which result in destruction of structures. Earthquakes may be defined as a natural phenomenon which tends to create panic due to the trembling vibrations or sudden undulation of a portion of earth’s crust caused by splitting of a mass of rock or by volcanic or other disturbances.

**Characteristics of an Earthquake**

2. The basic characteristics of an earthquake are as under:-

(a) It is not yet possible to predict magnitude, time and place of occurrence of an earthquake.

1. The onset is usually sudden.
2. Earthquake-prone areas are generally well identified and well known on the basis of geological features and past occurrences of earthquakes.
3. Major effects arise mainly from ground movement and fracture or slippage of rocks underground. The obvious effects include damage to building and infrastructures alongwith considerable causalities.
4. About 200 large magnitude earthquakes (M>6.0) occur in a decade.
5. The world’s earthquake problem seems to be increasing with the increased population, high rise buildings and crowded cities.

**Effect of Earthquake**

3. In general terms, typical impacts and effects of earthquake disasters tend to be:-

1. Loss of Life.
2. Injury.
3. Damage to or destruction of property including crops.
4. Disruption of production.
5. Disruption of lifestyle.
6. Loss of livelihood.
7. Disruption to essential services.
8. Damage to national infrastructure and disruption to administrative and organisational systems.

(j) Sociological and psychological after-effects.

4. Following problem areas need particular attention in case of Earthquake Disasters: -

1. Severe and extensive damage, creating the need for urgent counter measures especially search and rescue and medical assistance.
2. Difficulty of access and movement.
3. Widespread loss of or damage to infrastructure, essential services and life support systems.
4. Recovery requirements (restoration and rebuilding) may be life extensive and costly.
5. Occurrence of earthquake in areas where such events are rather rare may cause problems due to lack of public awareness.

**Organisation**

5. To effectively carry out the tasks and render timely assistance, it is necessary that the NCC be organised into sectors and sub-sectors without disturbing the existing command and control structure. Each state could be divided into a number of sectors. These sectors to conform to the areas of responsibility of groups with group commanders being the sector commanders. Sub-sectors are organised on the same analogy. The sector and sub-sector commanders should maintain a close liaison with the civil administration. They should keep an update on the resources available in their respective areas. They must refresh themselves with the disaster relief plans of the civil administration. All sector and sub-sector commanders will maintain an information folder, which will have the following data of their respective areas:-

(a) Road map of their area of responsibility.

(b) List of Primary Health Centres and Government Hospitals and their locations.

(c) List of Private Medical Aid Centres/Hospitals and their location.

(d) Names, addresses and telephone numbers of all state functionaries including ANOs and PI Staff.

(e) Details of Army units likely to be deployed.

(f) Details of Civil Relief Programmes already drawn up.

(g) Exisitng communication network.

(h) Government shops / godowns from where rations can be immediately drawn.

(j) Availability of transport, both government and private.

**Execution of Assistance**

6. The collector will exercise the powers and undertake responsibilities of the District Disaster Manager. The warning or occurrence of disaster will be communicated to all concerned including local units of defence services and sector/sub-sector commanders of NCC. Immediately, counter-disaster measures would come into operation. This will bring into force the following:-

(a) The District Collector/ Divisional Commissioner will activate the District Control Room. Simultaneously the sector HQ and sub-sector HQ of the NCC in the affected district will be activated.

(b) The District Disaster manager may in case of large-scale disaster, get in touch with the local defence units for assistance for rescue, evacuation and emergency relief measures. The request will be communicated to NCC sector and sub-sector HQ.

(c) The Onsite Operation Centre will become operational. Similarly sub-sector commanders will issue warning to the columns to be ready to move at short notice. The communication network will become operational and flow of information to sector HQ will commence.

(d) Communication from the Disaster Control Room to the site operation centre, transit camps, feeding centres, relief camps and cattle camps will be activated. This should also be used by NCC.

(e) The District Disaster Manager will send the preliminary information report and action taken report as per the available information to the Chief Secretary, Relief Commissioner/Emergency Operation Centre and the Divisional Commissioner. Concurrently NCC sub-sector HQ will forward their preliminary information report and action taken report to sector HQ and neighbouring subsector HQs. The columns will be moved to disaster area after clearance from sector HQ.

7. **Important Points**

(a) Keep in mind that most problems from a severe earthquake result from falling objects and debris (partial building collapse, ceiling plaster, light fixtures etc) and not from ground movement.

(b) Shelves for bookcases etc should be fixed to the walls. Remove heavy objects from shelves above head level. Do not hang plants in heavy pots that could swing free of hooks. Bookcases, cabinets or wall decorations can topple over and fall.

(c) Locate beds away from the windows and heavy objects that could fall. Do not hang mirrors or picture frames over beds.

(d) Secure appliances that could move causing rupture of gas or electrical lines. Know location of master switches and shut-of valves.

(e) Make sure the overhead lighting fixtures are well secured to the ceiling and move heavy unstable objects away from exit routes.

(f) Replace glass bottles with plastic containers or move them to the lowest shelves.

(g) Be aware that with a severe earthquake, all services such as electricity/water will probably be down. Emergency services may be extremely limited for a few days.

(h) Emergency stores like water, long lasting ready to eat food, first aid kit medicines tools, portable radio, flash light, batteries, blankets, warm jackets fire extinguisher and telephone/mobile etc be kept in a secure place at your residence or in your car.

**SECTION-10**

**SETTING UP RELIEF CAMP DURING**

**DISASTER MANAGEMENT**

**Introduction**

1. Relief measures in the aftermath of disasters cover search, rescue and evacuation, relief for livestock, clearance of debris, disposal of dead, control of fires, damage assessment and shelter for victims. Setting up of relief camps encompasses shelter provision as part of emergency relief operations and long-term rehabilitation plans. Shelter provision can differ in view of peculiarities of location, climatic conditions and availability of resources. Inevitably, there will be a need for siting temporary relief camps in the proximity of the affected settlements for which tents may be required.

2. NCC cadets as trained and organised youth can contribute immensely for conditioning and preparing the locals in mitigating affects of disasters. The location of a displaced person camp may range from a spontaneous to an organised settlement from over a wide area to a concentration in a very limited area, from rural settlement to urban settlement. Site selection, planning and the provision of shelter have a direct bearing on the provision of other assistance. Decision must be made as part of an integrated approach taking into account, advice from experts, and views of displaced people. A solution that maintains and fosters self-reliance among the displaced is always preferable.

**Criteria for Site Selection**

3. **Social Needs**. In most circumstances the choice will be limited and any land meeting even minimum standards may be scarce. Once a site is located, it is wise to determine the reason to select or reject and examine whether the reason (e.g. no water or because it floods in the monsoon) would exclude use by displaced people.

4. **Water**. The single most important site selection criteria is the availability of an adequate amount of water on a year-round basis. A site should not be selected on the assumption that water can be acquired merely by drilling, digging or hauling. Where water is readily available, drainage often becomes the key criterion. For effective drainage therefore, the entire site should be located above flood level at a minimum of three meters above the water table, preferably on a gently sloping area. Marshes or areas likely to become marshy or soggy during the rainy season should be avoided. The watershed of the area may be a consideration.

5. **Open Space**. The site must provide a sufficient amount of usable space for the displaced population. WHO recommends a minimum of 30 square meters per person, plus the necessary land for communal and agricultural activities and livestock. Of this, 3.5 square meters is the absolute minimum floor space per person in emergency shelters. Since there is always the possibility that more people may arrive, the site should be large enough to allow for major expansion. If the population has been displaced due to civil strife, the site should be removed from areas of potential conflict.

6.  **Accessibility**. The site must be accessible by vehicles and close to communication links, sources of supplies and services such as food, cooking fuel, shelter material, and national community services.

7. **Environment**. The area should be free of major environmental health hazards, potential diseases and harmful insects such as mosquito and tsetse fly. Climatic conditions should be suitable for habitation throughout the year.

8. **Soil and Ground Cover**. The soil should allow for water absorption and the retention of human waste. Rocky or impermeable sites should be avoided. If possible, land suitable for vegetable gardens and small scale agriculture should be selected for the site.

9. **Land Rights**. The land should be exempt from ownership rights or grazing and other uses by local population. Any use of the land must be based on formal legal arrangements in accordance with the laws of the country.

10. **Transit Centre**. There may be a need to set up a reception or transit centre, through which displaced people pass on the way to a long-term settlement site. These centres must have the same considerations as those relevant to long-term settlements.

**Site Planning**

11. At the onset of an emergency, the immediate provision of essential goods and services is more important than efforts to change the way people have already arranged themselves.

12. Site planning should take potential need for expansion into account.

13. Site planning should first consider the characteristics and needs of the individual family and reflect the wishes of the community as much as possible.

14. A ‘displaced-persons’ settlement is not a natural community. Particular care will be required to ensure that special needs are met.

15. The overall physical layout of a site as well as other aspects of the site should reflect a decentralised community-based approach focusing on family, village or ethnic group.

**Specific Infrastructure Design Considerations**

16. **Latrines**. While water requirements often determine site selection, sanitation requirements can dictate the site layout. If latrines are used there should be at least one for every 20 persons. To avoid contaminating water sources, latrines should have an effective drainage system that is easy to repair, both for rainwater and waste water.

17. **Water Distribution**. Water will often be pumped from the source to an elevated point in order to allow gravity feed distribution.

18. **Roads and Pathways**. The site should be accessible from other sites and contain all-weather roads and pathways connecting the various areas and facilities.

19. **Administrative and Community Services**. At the onset of an emergency, it may be difficult to foresee all the administrative and community services likely to be required. Therefore, where adequate space is available, free areas must be allocated for future expansion of these services. The following administrative and community services are often required:-

(a) **Likely to be centralised**:

(i) Camp administrative office.

(ii) Essential services co-ordination offices (health care, water supply)

(iii) Tracing services (Overhauling, repair facilities etc).

(b) **Likely to be decentralised**:

(i) Bathing and washing areas.

(ii) Community services (health centres, social service centres).

(iii) Supplementary feeding centres.

(iv) Education facilities.

(v) Institutional centres (such as for the disabled or unaccompanied old, infirm and children).

20. **Physical Layout**. The basic principle of any physical layout of a camp is that it should be organised into small community units. The location of centralized services will depend on the specific situation and in particular the space available. Warehouses should be located near the administrative office for security reasons.

**Shelter**

21. Shelter must provide protection from the elements, space to live and store belongings, privacy and emotional security. Shelter is one of the most important determinants of general living conditions and is often one of the largest items of non-recurring expenditure. Neither pre-fabricated buildings nor specially developed emergency shelter units have proved effective in displaced persons emergencies. Both are ineffective due to their inappropriateness, high unit cost, transport problems, and inflexibility. Emergency shelter arrangements will already have been constructed before such systems can arrive. For similar reasons, tents are often not an effective means of providing shelter. If a continued high density of occupation is unavoidable, fire resistant materials may be needed. Housing should meet the cultural and social requirements of a displaced person’s home.

22. Material and design should meet the minimum technical standards for the different local seasons. Roof material must be strong enough to withstand damage by the sun, rain, snow and winds. Raised flooring is required in areas of high rainfall. Wall material must afford privacy and protection from the elements. If the site lies in a hazard-prone area, the design of buildings and their siting should conform to hazard-resistant criteria. In buildings where cleanliness and hygiene are particularly important, the floor should be of cement or at least washable.

**Conclusion**

23. Emergency shelters, including communal buildings, should be built by the displaced people themselves provided adequate organization and material support is given. This will help to ensure that housing will meet their particular needs. Work by displaced people will reduce their sense of dependence and can cut costs considerably.

**SECTION-11**

**ASSISTANCE IN REMOVAL OF DEBRIS**

**Introduction**

1. It is very essential to formulate a co-coordinated procedure/management of debris removal during and after a disaster. It is the responsibility of State Government for coordinating debris removal in event of a disaster. Debris that are eligible for clearance and removal include trees, sand/gravel, building, wreckage, vehicles and personal property. Debris removal and emergency protective measures are necessary to eliminate immediate threats to life, public health and safety, damage to public or private property and ensure economic recovery of the affected community to the benefit of the community at large.

**Removal Process**

2. The debris removal process is divided in three basic planning requirements:-

(a) **Damage assessment**. It means to ascertain the damage caused due to natural disaster, which will help to ascertain the help required from all sources.

(b) **Resources Available**.To identify the resources available to meet these needs. The various agencies can be local government, state agencies and other voluntary organizations.

(c) **Use of Resources**.To organize efficiently use of resources to the requirement in the event of natural disaster. To ensure overall effective use of these resources an overall plan is formulated under one head of the organisation to coordinate working of all resources.

3. Debris removal is a major component of most disaster recovery operations. Following a disaster, debris removal must begin immediately to protect public health and safety. Debris is caused by following:-

(a) **Tornadoes**. Damage is caused by high velocity rotating winds. Debris consists of damaged and/or destroyed structures, trees and personal property.

(b) **Floods**. The damage is caused by flooding and high velocity of water. Debris from landslides consists primarily of soil, ground, rock and some construction material.

(c) **Earthquakes**. The damage is caused by shock waves and earth movement. Debris consists of building materials, personal property and sediments caused by landslides.

**Priority for Removal**

4. The main sources of debris removal are to provide way for relief operations to commence by clearing of way with resources available and at the same time ensuring proper disposal of debris as per policy laid down. The priority for removal of debris could be as under:-

(a) **Priority I**. To remove debris that damage entry and exit for emergency services, public health and safety.

(b) **Priority II**. To remove debris that pose a threat to life and safety, e.g. damage to public structures, bridges and road ways.

(c) **Priority III**. To remove debris that cause hindrance to the process of rehabilitation of disaster affected area.

(d) **Priority IV**. To remove debris on private property. It is the responsibility of the owner to make arrangements for removal of debris from his property. Efforts will be made to provide all necessary assistance required.

**Debris Redemption Methods**

5 There are several methods available for debris removal like, burning, grinding, chipping, burying and recycling. All these methods have their own advantages and disadvantages. The debris needs to be dumped at a site, It is the responsibility of the local government to notify such sites.

6. After a disaster has terminated, it is necessary to return the debris holding areas back to their pre-disaster usage, this can be done by removal of debris, environmental assessment and environmental restoration.

**Debris Removal Guidelines**

7. (a) **Debris Removal From Public Property**. Debris on public property must

be removed to allow continued safe operation of government functions.

(b) **Private Property**. This is the responsibility of the individual property owner aided by insurance settlements and assistance from volunteer agencies. However fire and extended coverage insurance policies are expected to have specific coverage for debris removal and demolition of heavily damaged structures. However, an eligible local or state government may pick up and dispose off disaster-related debris placed at the curb by those private individuals.

(c) **Drainage Structures**. Debris removal from certain drainage structures may have to meet the following criteria:-

(i) **Reservoirs**. May be eligible in accordance with the criteria for debris basins. Removal of debris that poses immediate threat of clogging or damaging intake or adjacent structures may be eligible.

(ii) **Natural Streams**. Not normally eligible for assistance. Only debris that causes a threat to lives or public health and safety or damage to improved property from a 5 year flood event is eligible. It includes reservoirs and natural streams and may be eligible. The pre-disaster level of debris in the channel or basin is of particular importance to determine the amount of disaster-related debris.

(d) **Roads and Highways**. Debris to be cleared from roads and highways, including the travel lanes and shoulders, roadside ditches and drainage structures, and the maintained right-of-way.

(e) **Recreational and Wilderness Areas**. Debris removal is essential when it affects public health or safety or proper utilisation of such facilities. Trees frequently constitute a large part of debris in such areas.

8. **Coordination of Local Resources**. It is the responsibility of local administration to maintain an inventory of all resources in the form of personnel and equipment and their capabilities for response to a clean-up operation. This will include a working knowledge of the local contractors as well.

**Role of NCC**

9. NCC cadets have a significant role to perform in augmenting the debris removal operations in conjunction with civil and army authorities. They can be gainfully employed in spreading public awareness and information about the magnitude of the situation, debris removal, identification and guidelines, disposal areas, environmental standards utilized and associated health risks. They can be employed for reporting/controlling illegal dumping activity.

**SECTION-12**

**COLLECTION AND DISTRIBUTION OF AID MATERIAL**

1. **Introduction.**  Collection and distribution are essential steps in the loop of demand and supply. The normal items reach the common man from the manufacturers through a well laid out delivery systems where in many organisations work as a well oiled machine, however on the occurrence of a disaster this chain is completely broken down. Till this chain is not established there is an urgent need to create alternate methods of collection and distribution of emergency articles so that they reach the effected persons.

**Source and Nature of Aid Material Required**

2. To understand and help in this process it is essential to identify the sources and the types of aid material which will be required. The various sources and nature of aid material are discussed in succeeding paras.

3. **Type of Aid Material**. The types of Aid material required can be divided as under:-

(a) **Personal Clothing and bedding Items**. Personal items such as clothing for personal use, bedding, rain coats, blankets and other articles of bedding and shoes.

(b) **Medical and Life Saving Equipment**. In the medicalfield, items like, medicines and life saving drugs, provision of doctors and nursing staff, ambulances, mobile hospitals and equipment for immediate medical needs.

(c) **Housing and Shelters**. As a number of people are likely to become homeless due to damage to building and shelters there would be a need for housing facility and include shelter provision such as tentage pre- fabricated huts, water proof material for temporary overhead protection.

(d) **Transportation**. Restoration of transport system may take a long time. Thus transportation to move effected personnel to safer areas must be catered for by government organisations and NGOs.

(e) **Debris Clearing Equipment**. The effected area require to be cleaned off debris. Equipment varying from mechanical machines to hand operated equipment will be required . Some items which may be required are cranes, bulldozers, tippers, shovels, pick axes, drills and hand drills and ordinary hammers.

(f) **Animals and Live Stock**. The disaster also effects livestock. It will also require immediate fodder and rehabilitation. This is important as major outbreak of epidemics are due to death of animals.

(g) **Disposal of the Dead**. This aspect needs speedy attention, the recovery of bodies, identification, handing over to relatives, maintaining of proper records and eventually ensuring that all the dead get disposed with dignity. Equipment and personnel relating to the same will be required.

(h) **Communication**. The entire command and control is based on speedy restoration of communications so that adequate nets on radio sets can be established and telephone line are restored at the earliest.

(j) **Food, Water and Cooking Facilities**. Food is the major require-ment of the effected population. Food needs to be provided so that they can survive. Some of the things which will be required are survival food kits which may be air dropped or given via road or water routes. Other items are dry rations, fresh vegetables, pre - cooked food packages, water in dispensers and bottles for individuals and in water bouser for cooking and general use.

(k) **Electricity and Lighting Facilities**. Darkness and destruction are enough to demoralise and kill the spirit of survival. Therefore provision of lighting facilities is very essential. Some items like lanterns, patromaxes, gas lights need to be provided and all efforts must be made towards restoration of electricity at the earliest.

4. **Sources of the Items**. Whenever there is a disaster, in addition to the Government Organisations a large number of NGOs and more so the general public flows with generousity and stores are received from a large number of agencies, such as :-

(a) Central Government Organisations including Defence Services.

(b) State Government Organisations.

(c) Non Government Organisations (NGOs).

(d) Educational Institutions.

(e) Social Welfare Organisations.

(f) Resident Welfare Organisations.

(g) Red Cross.

(h) International Organisations, like WHO etc.

(j) Individuals.

5. **Collection**. Government Agencies and Non Government Organisations (NGOs) are the primary collection agencies. All items need to be collected and sifted as per the requirement/groups and categories. It has been often observed that a large number of items get collected but do not reach the effected persons due to lack of planned and coordinated collection and distribution system. The following need to be kept in mind:-

(a) Establish collection centres at various locations of the state keeping in mind the provisioning capabilities of the locality.

(b) Collect items as per categories initially itself to avoid wasting time in sifting and repacking.

(c ) Perishable items of food to be collected at special centres to ensure speedy transportation.

(d) Do not collect items which are not required.

(e) Ensure that the next stage/ centre of collection is ready to accept these items and proper records are maintained of the arrival and dispatch of packages.

(f) Sift the packages as per priority of requirement.

(g) Ensure life saving drugs are routed through different collection and distribution channels to avoid delay.

6. **Distribution**. The distribution system is the most essential process for the timely receipt of emergencies items during and after a disaster. The entire process of rehabilitation depends on this system. Initially it is recommended to make the Public Distribution System (PDS ) as the base for the distribution as it is a already available functional chain of supply. Additional manpower may be required and minor adjustment will also be required keeping in mind the situation on ground. However the following needs to be also done:-

(a) Establish distribution system as per the concentration of population and the established refugee camps and rehabilitation centres.

(b) NGOs should carryout work in consultation with government agencies to ensure that proper flow of required material is received by all the people.

(c ) Individual organisation must also work in consultation with government organisation as per the priority of the items to be distributed.

(d) Ensure that adequate items are distributed and records are maintained and given as per the available details of family members. Initially minimum requirement should be provided per family which can be subsequently increased with more availability of items.

(e) If the collection process has been properly carried out it will save time and the material would reach the effected persons with speed.

(f) The entire area should be divided into grids during rehearsal stage and adequate facilities should be put in place during this stage for use at a later date.

(g) The bulk breaking of the items would have already been carried out at the collection stage. However, if for the limitation of transportation it is required to be repacked, it must be done speedily.

.

(h) Major essential items can be moved by air, road, rail, waterways or a combination of any of these means depending on the ground situation.

**Role of NCC Cadets**

7.NCC cadets can play an important role in the collection and distribution of items. Some of the tasks which can be performed by them are as under:-

(a) **Collection Stage**

(i) The Cadets must be incorporated in the process at the planning stage itself to identify the sources, the areas of importance and the agencies which they are likely to work with.

(ii) Cadets can help at the time of collection and help in maintaining records.

(iii ) Help in the sifting of articles and bulk breaking and packaging.

(iv) Help in dispatch of items by various means.

(v) NCC can establish their own collection and distribution centres as they are closely associated with schools and colleges all over the country and even in the remotest areas of our country. These can be opened at unit/ group level.

(vi) NCC is working and coordinating with government at the central and also at the state and district level and thus by their disposition they are ideally suited for a parallel net work with other organisations.

(b) **Distribution**

(i) Can be co-opted with the PDS system.

(ii) Work along with NGOs or other organisations.

(iii) Work independently in the chain of NCC collection and distribution system.

(iv) Work alongwith Defence Forces who are major contributors in crisis management.

(v) Operate and man various posts established for escorting and guiding delivery agents with adequate signal communications.

**SECTION-13**

**MESSAGE SERVICES**

**Introduction**

1. In the context of disaster management, fail-safe communication is vital during a wide range of actions, from the significant phase of ‘preparedness’ to impart knowledge, mass education and public awareness, to warning of impending threat of disaster, intimation to authorities calling for various resources and conducting disaster management. The basic requirements of unfailing and good communications during disaster are thorough knowledge of situations, clarity and conciseness of the message upto assimilation of the message received and correct and immediate response.

2. The various methods of communications may include:-

(a) Messengers.

(b) Telephones including Cell phones.

(c) Two-way radio (VHF).

(d) Field Telephone.

(e) Signal transmission through propagation of waves as follows:-

(i) **Ground Wave**. Long and Medium waves range upto 30 Kms.

(ii) **Space Wave**. VHF and UHF waves range upto 50Kms.

(iii) **Sky Wave**. HF waves making use of ionosphere layer existing upto a height of 150-200 Kms from the surface of the earth. Range from 100 Kms to 1000 Kms.

(iv) **Tropospheric Scatter**. For forward propagation height range upto 8-10 Kms from the surface of the earth.

(f) Satellite.

(g) Dial-up modems (Internet including e-mail and Fax).

(h) Local Area Networks (LANs).

(j) Signals.

**Phases of Communication**

3. There are two basic phases of communication for which action to be taken is as follows:-

(a) **Prior to a Disaster**.

(i) Assessment of all probable causes of disaster likely to occur in the area is required to be made.

(ii) All resources to be identified.

(iii) Contingency action plan.

(iv) Communication personnel placed ‘On call’.

(b) **After A Disaster**.

(i) Set up the communication facilities.

(ii) Convey facts without creating any panic.

**Tips for Essential Communication**

4. When an emergency or disaster is determined, it may become necessary to evacuate an entire facility. In some situations normal utility services, including electricity and telephone services may become non-existent. Some tips with regard to an alternate site to be considered are as under:-

(a) Communication equipment should be located at a safe site for use in an emergency and disaster situation e.g. at a height in case of floods.

(b) Plans for all possible contingencies, from a temporary or short-term disruption to a total communications failure, must be considered.

(c) Procedures for restoring communications systems must be established.

(d) Options may include messengers, telephones, portable two-way radio sets, amateur radios, field telephones, point-to-point private lines, and satellite and VHF/UHF/HF radio transmitters.

(e) Determine the broadcast/reception area or zone of influence of the messages.

(f) Identify the organisation/firm that is responsible for provision and controlling of the sets.

(g) Location of the messenger services and tele-communication facilities.

(h) Lay down standard operating procedures for operation of the communications facility and functioning of the message services.

**CHAPTER-VII**

**SOCIAL SERVICE**

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**SECTION-1**

**WEAKER SECTIONS OF OUR SOCIETY AND THEIR NEEDS**

**Introduction**

1. India is still divided into many [endogamous groups](http://en.wikipedia.org/wiki/Endogamous_group), or [castes](http://en.wikipedia.org/wiki/Castes) and sub-castes, as a result of centuries of practicing a form of social hierarchy called the [caste system](http://en.wikipedia.org/wiki/Indian_caste_system). The traditional caste system, leads to severe [oppression](http://en.wikipedia.org/wiki/Oppression) and [segregation](http://en.wikipedia.org/wiki/Segregation) of the lower castes and other weaker sections and limits their access to various freedoms e.g, [education](http://en.wikipedia.org/wiki/Education) and employment. According to ancient scriptures such as ‘[Manu Smriti](http://en.wikipedia.org/wiki/Manu_Smriti)’, caste is ‘[Varnasrama Dharma](http://en.wikipedia.org/wiki/Varnas)’, which means ‘offices given according to colour’. The practice of caste in India followed this rule.

2. After independence the constitution of India included safeguards for suppressed and other backward classes. The constitution came into effect from [26 January](http://en.wikipedia.org/wiki/January_26) [1950](http://en.wikipedia.org/wiki/1950). The Indian constitution prohibits any discrimination based on [religion](http://en.wikipedia.org/wiki/Religion), [race](http://en.wikipedia.org/wiki/Race), [caste](http://en.wikipedia.org/wiki/Caste), [sex](http://en.wikipedia.org/wiki/Sex) and place of birth. But, while providing equality of opportunity for all citizens, the constitution also contains special clauses to ensure reservation, ‘for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes’.

**Classes of Society**

3. The weaker section of society comprise of the following categories:-

(a) Scheduled Caste (SC) and Scheduled Tribes (ST).

(b) Other Backward Classes (OBC).

**Scheduled Caste and Scheduled Tribes**

4. Scheduled Castes and Scheduled Tribes are communities that are accorded special status by the Constitution of India. These communities were considered “outcastes”. These castes and tribes have traditionally been relegated to the most menial labour with little possibility of upward mobility and are subject to extensive social disadvantage and discrimination. The Scheduled Caste people are also known as Dalits and the Scheduled Tribes people as Adivasis. Mahatma Gandhi used the terms Harijans and Girijan , for SC and ST respectively. According to 2001 census, population of SC and ST is approximately 16% and 8% of India’s total population respectively.

**Other Backward Classes (OBCs)**

5. These classes are a group of sub castes which are socially and educationally backward while still having a higher status than scheduled castes or scheduled tribes. As of 2006 approximately 2300 communities are listed backwards. Central and all state governments are enjoined to ensure their social and educational development.

**Problems of Weaker Sections and their Solution**

6. **Problems**. The general problems are widespread poverty, unemployment, backwardness, untouchability and lower status in society. They suffer discrimination in all walks of life vis-à-vis the privileged sections of the society. Scheduled tribes are basically nomads and don’t have any land to settle down or cultivate. OBC comprises persons belonging to backward classes of country and due to backwardness, remoteness or lack of infrastructure and development, job opportunities are grossly insufficient.

7. **Likely Solution**

(a) **Education**. Right approach would be to provide all weaker sections proper primary education , to prevent them from dropping out of school and making them ‘natural competitors’ and to give scholarships at higher level. Number of educational institutes should be increased.

(i) At the village level opening of schools which impart basic education coupled with the vocational skill that can be taught with the naturally available resources e.g. basket weaving, painting printing, tailoring, embroidery, pottery, music, dance, etc will help in achieving self sufficiency. Specially trained teachers should be adequately compensated so that talented people do not hesitate to go to villages.

(ii) School should also educate the villagers on moral values, hygiene, first aid, family planning, budgeting, savings etc.

(iii) Villagers must be educated on the need for educating the girl child as she is the one responsible in bringing up the future generations. She should therefore develop courage, self confidence, competitive spirit and a sense of equality with boys.

(iv) Social evils such as the dowry system, child marriages and superstitions, should be taken up for discussion and their drawbacks be pointed out, so that they become events of history.

(b) **Employment**. Provision of land to landless and helping them in working out a life by providing softer loans for cultivations etc can take care of employment problems to some extent. Taking up of infrastructure projects will help in creating large number of jobs.

(c) **Reservation in Educational Institutions and Govt Jobs**. Reservations are intended to increase the social diversity in campuses and workplaces by lowering the entry criteria for certain identifiable groups who are grossly under represented in proportion to their number in general population.

**Reservation Policy of the Government**

8. Reservation is a term used to describe policies whereby a portion of jobs, positions or academic seats are set aside or reserved for a given group. Government has taken initiatives on a large scale by providing reservations in different fields such as government jobs, educational institution and other such government aided and semi-govt institutions, to help the SCs, STs and OBCs. A certain percentage of seats are reserved for sections so that the discrimination against them can be reduced and they will be provided with equal opportunities to work and grow. The Constitution lays down that 15% and 7.5% of vacancies in government-aided educational institutes and for jobs in the government /public sector are reserved as quota for the SC and ST respectively. Although originally supposed to last for 10 years, the reservation system has continued till date and now applies to higher education and legislative offices also. Currently 22.5% of the seats in higher education institutes under the Central Government are reserved for SC and ST, and 27% for OBCs.

9. It was felt that intended benefits were not percolating down to the deserving candidates of OBC. Well-to-do families only within OBC were reaping the benefits again and again. Hence ‘creamy layers’ in the OBC is excluded from the policy of reservation. This layer includes children of President, Vice-President and Judges of the Supreme Court and High Court. Children of members of the UPSC and State Public Commission, Chief Election Commissioner, Comptroller and Auditor General of India and other persons holding Constitutional positions of this nature, also fall under the creamy layer category. Further, persons with gross annual income of Rs2.5lakh or above are also excluded. The creamy layer also covers children of Group A/Class 1 officers of the All India Central and State Services.

**Points in Favours of Reservation**

10. (a) Social diversity is desirable in campuses and work places. It can bring out hidden talent of society.

(b) One way to do it is to provide relaxed entry criteria for under privileged groups.

(c) Hardship faced by those in general category is due to shortage of seats in professional colleges and shortage of employment opportunities and not due to reservation.

**Points in Favour of Anti Reservation**

11. (a) Economic conditions should be the basis for reservation. Reservation based on economic backwardness can be the only way to give justice to all deprived sections of society.

(b) Reservation decisions are taken keeping political interests in mind.

(c) Allocation of quotas on the basis of caste is a form of racial discrimination and thus contrary to right to equality.

(d) Merit is severely compromised by reserving seats for certain caste-based communities.

(e) Caste system is being kept alive by reservation policy.

**Contribution of NCC Cadets**

12. Our NCC Cadets are from every nook and corner of India. We must therefore utilise this huge potential of eager, helpful, energetic, educated and talented cadets, to achieve our aim of imbibing values and skills amongst the weaker sections of our society which will make themselves self-sufficient and confident. They will cease to be a drain on the resources of India and will become valuable contributors to our economy.

**Conclusion**

13. There is no doubt that the interests of the weaker sections need to be protected and their legitimate needs fulfilled so that we can have a just and fair society where the under privileged are not discriminated against and no section lags behind the other.

**SECTION-2**

**SOCIAL SERVICE AND ITS NEED**

**Introduction**

1. The origin of social service is ancient, stemming from the tenets of the Judaco- Christian teachings. The modern institutional service took shape with the impact of the industrial revolution upon family and community life , substituting as it did an industrial for an agrarian economy, urban living for rural living and creating dependence upon the wage system as a means of livelihood.

**Definition**

2. The term ‘Social Service’ is defined broadly as the provisions made by governmental or voluntary efforts to meet income maintenance , medical care , housing and recreational needs and provisions for the care and protection of recognised special groups.

**Objective**

3. Social service characterises a formalised way of helping people to help themselves. It is based on the reorganization of variations in individual capability and variations in the social structure . The objective is to help the individual to utilise his capability for his own welfare and for that community.

**Methods**

4. There are generally three accepted methods identified in social service which are as under :-

(a)  **Social Case Work**. This aims to help the individual make maximum use of the established community, through understanding the individual in his total situation.

(b) **Social Group Work**. It seeks to help the individuals utilize their fullest capacity for their own welfare and for the welfare of the group as a whole, through understanding of the behaviour of individuals in a group setting.

(c ) **Community Organization**. It attempts to help groups of individuals or groups of agencies to work together so that their combined efforts will be useful for the social welfare of the whole community .

**Types of Social Services**

5. The various types of social services which have been initiated are as under :-

(a) Education.

(b) Family welfare, Medical care, Family planning and Nutrition.

(c) Provision of Water and Cooking fuel, Roads, Electricity and Sanitation.

(d) Old age support systems.

(e) Employment.

(f) Social assistance, Social security and Care & protection.

(g) Housing and Rehabilitation.

(h) Recreation, Sports and Social activities.

**SECTION-3**

**FAMILY PLANNING**

**Introduction**

1. The rapid growth of population is one of the major problems facing the country today. Considering that the population of the country is over1000 million and the annual surplus of births over deaths at 15 million, the population explosion continues. Some social facts like reluctance of uneducated masses and minority groups towards adopting family planning programmes emerge as major constraints. Family planning is not only concerned with limiting the measure of children through preventive measures, but very much related with aspects of health care and better standard of living.

2. Family planning is defined as the voluntary, responsible decision made by individual and couples as to the desired family size and timing of birth. Therefore on the micro level it means children are born because they are wanted and provided for and on the macro level it contributes to the betterment of human life.

3. **Family Planning**. Family planning versus population growth was the motto of the national population policy of independent India since the first five-year plan. Family planning programme is perhaps the most effective policy-intervention to stabilise population size. Since the effect of the program the varies from state to state, the impact also varies from state to state. Contraception is the need of the day to counter the explosive increase of population. After independence, family planning was stepped up. The sole aim was the lowering of the birth rate. However, there was no significant economic or social measures to accompany it.

**Factor Affecting Family Planning**

4. This concept deals with the health consequences of uncontrolled fertility:-

(a) Fatal, infant and childhood morbidity.

(b) Poor physical and intellectual development of the unwanted child.

(c) Pregnancy wastage.

(d) Maternal risk of illness and death.

(e) Father’s risk of hypertension and gastric ulcers.

(f) Marital risk.

(g) Poor nutrition.

(h) Environmental hazards such as overcrowding, poor water supply and atmospheric contamination.

(j) Increased incidents of genetic diseases.

(k) Mental health problems of parents as well as children due to strains caused by large family.

**Methods of Family Planning**

5. Family planning methods are:-

(a) Vasectomy.

(b) Tubectomy.

(c) Conventional contraceptives like condoms and diaphragms.

1. Oral pills.

**Measures to Attain Objectives**

6. Effective measures to be under-taken are:-

(a) Voluntary encouragement of family planning can have positive health benefits. In small families mother takes more care of child which is necessary for healthy development.

(b) Stringent laws be enacted to curb the menace and the violators severely punished. Couples violating family norms should be debarred from contesting elections and their voting rights withdrawn. A massive campaign could be launched through the electronic and print media to create conducive environment.

(c) Take steps encouraging a two-child norm so that growing population is controlled.

(d) Educating women particularly in backward and rural areas be taken up with complete sincerity which would help in eradicating this menace.

(e) Early marriage be strictly checked and efforts be made to raise the living standard and improve literacy rate.

(f) Couples adopting family planning should be given all possible assistance. In this regard, couples should be made to attend counseling sessions after marriage in which they should be made aware of the needs and benefits of family planning.

(g) The problem can also be solved by providing basic health care facilities specially to the backward classes and such families to be given assurances that proper health care would make sure their children survive.

(h) Involvement of religious leaders in the programme.

(j) Development of rural areas.

**Conclusion**

7. Family planning assumes greater importance today as population has passed the one billion mark. Rapid growth of population is straining the available resources. In India resources are already scarce. There will be scarcity of land, houses and food coupled with unemployment. This will give rise to crime in the society. There is an immediate requirement to educate the masses involving religious, political and intellectual aspects to motivate them to adopt family planning if we want to see India as the economically and technologically leading nation in the world.

**SECTION-4**

**HIV/AIDS :CAUSES & PREVENTION**

**AND**

**CONTRIBUTION OF YOUTH TOWARDS PREVENTION OF AIDS**

**Introduction**

1. Few diseases have been feared as much as HIV/AIDS has been ever since human beings began efforts to prevent and control major diseases. Although a large number of health problems continue to defy human efforts to control them, none of them presents a challenge greater than the prevention and control of HIV/AIDS. This is mainly because at the moment there is neither a scientifically proven cure for HIV/AIDS nor a vaccine to prevent it. Globally, an estimated 38.6 million people are living with HIV, of which an estimated 4.1 million were new infections. In Asia, an estimated 8.2 million people are living with HIV including 1.2 million new infections last year. In India, an estimated 5.2 million people are living with the virus, most of whom are poor and marginalised. Although HIV is more common in six states of India – Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Manipur and Nagaland – it is present all over the country.

2. HIV is not just a disease. It is a developmental problem. Just as in other countries, the patterns of HIV infection in India reflect underlying patterns of social and economic inequality, such as in terms of distribution of wealth, power, gender relations, women’s status, poverty, lack of sustainable livelihoods, civil unrest and disorder, etc. Several misconceptions about the causes and mode of transmission of HIV/AIDS exist in India. These misconceptions and the social stigma associated with AIDS have been major barriers to prevent and control this disease. They have also been major hurdles in providing the desirable social and medical support to people with HIV infection. A concerted and broad based approach is necessary to mitigate the adverse impact of HIV and AIDS.

**What is HIV/AIDS**

3. Although HIV and AIDS are often used synonymously, they are different. HIV (Human Immuno-deficiency Virus) is a virus that gradually destroys the body’s immune system. AIDS (Acquired Immuno Deficiency Syndrome) is a condition wherein various diseases affect the body because of the body’s weak natural defense mechanism – the immunity. AIDS stand for Acquired (not inborn, but passed from mother to baby), Immune (relating to the body’s immune system, which provides protection from disease causing bacteria/viruses/ fungi); Deficiency (lack of response by the immune system to bacteria / viruses / fungi / cancer cells); Syndrome (a number of signs and symptoms indicating a particular disease or condition).

4. Therefore, AIDS is an acquired condition in which a person may have various diseases that cause similar symptoms, all of which are due to the body’s diminished ability to fight diseases. Anyone who has HIV infection will develop AIDS over a period of time.

**How Does HIV Affect the Body**

5. A special variety of white blood cells called T lymphocytes secrete chemicals that are necessary for destroying the disease causing germs or agents. HIV destroys T lymphocytes (also called T-cells), and thereby reduces the body’s ability to fight diseases. T-cells contain a protein called CD4 on their surface. HIV first attaches itself to CD4 and then fuses with the T-cells to multiply. Fusion with T-cells destroys the T cell and several copies of HIV are produced.

**How Does HIV/AIDS Spread**

6. HIV is present in all body fluids of an infected person and is more in number in blood, semen and vaginal fluids. HIV infection normally spreads when there is contact with these body fluids through four main routes:-

(a) Sexual transmission

(b) Blood transfusion.

(c) Sharing needles and syringes for intravenous drug use.

(d) Mother-to-child transmission during pregnancy, delivery or breastfeeding.

7. **Sexual Transmission**. The most common route of spread of HIV infection is through unprotected sex between two people, where at least one has HIV infection. Unprotected sex means having sex without condom. Although the risk of HIV being transmitted during one sexual act depends upon several factors, it is important to remember that even one episode of unprotected sex with an infected partner can transmit HIV. Increased number of unprotected sex increases the risk of infection. Detailed below are some issues related to sexual transmission of HIV.

8. **Increased Risk for Women**.Women are at greater risk of developing HIV infection through unprotected sex. This means that the risk of transmission of HIV from man to woman is higher than that from woman to man. There are five main reasons why women are at greater risk:-

(a) The semen from the infected male sexual partner remains in the woman’s vagina for a longer time, thereby increasing the duration of contact between infected semen and delicate lining of the vagina.

(b) The surface area of the vagina is larger than the surface of tip of the penis in men, which provides greater opportunity for the virus to enter the body.

(c) Many women with sexually transmitted infections (STIs) do not have any symptoms and therefore do not seek treatment. Presence of STIs increases the risk of HIV transmission.

(d) The gender imbalance makes it difficult for women to exercise their sexual rights. This means that they have less control over, when and with whom, they have sex.

(e) Women are less likely to take treatment, especially for STIs, which increase the risk of HIV transmission.

9. **Sexually Transmitted Infections**. Presence of STIs increases the risk of HIV transmission. People who have ulcers in the genital organs or abnormal discharge either from the penis or the vagina are at higher risk of HIV transmission. Early treatment of STIs reduces the risk of HIV infection.

10. **Anal Sex**. Although anal sex is more common among men who have sex with men (MSM), some heterosexual partners also practice it. Anal sex has higher risk of HIV transmission as compared to vagina sex. This is mainly because the delicate inner lining of the anus gets easily damaged during anal sex. This damage helps the HIV to enter the body easily.

11. **Menstruation**. The menstrual blood of a woman with HIV infection will contain the virus. Thus, sexual intercourse during menstruation with an infected woman increases the risk of the male partner getting HIV infection.

12. **Blood Transfusions**. As per the guidelines of the National AIDS Control Organization (NACO), it is mandatory to test blood for HIV before transfusion. The risk of transmission of HIV through tested blood is therefore very remote. The only possibilities of infection through blood are if the blood was not tested for HIV or the HIV infection was in the *window period*. Window period is the term used for the duration between the entry of HIV in the body and the detection of its antibodies through blood tests. Window period is normally up to three months. This means that during this time, even if a person is HIV infected he/she will test negative. He/she can however transmit infection to others. **Blood donation has no risk of getting HIV infection because the needle and other equipment used for collecting your blood are safe.**

13. **Intravenous Injections**.

(a) When people inject drugs intravenously, they may draw small amounts of blood into the needle. If another person uses this needle immediately, the blood containing HIV will be injected into the second person. Thus, he/she can also be infected with HIV. Normally, people who are addicted to intravenous drugs form a group and share needles with each other. Thus, the infection can spread very rapidly from one to another in the same group. In India, intravenous drug abuse is the most important cause of HIV infection in the North East.

(b) Despite several concerns about the poor sterilisation practices by some doctors, especially in rural areas, HIV infection through injections given at a health centre is not a common mode of transmission in India. This is mainly because most of these doctors, even if they are not qualified, boil them for a short time. HIV is destroyed by even short duration heat and drying. Shorter boiling time for sterilizing needles may not destroy other disease causing germs such as Hepatitis B virus. It is also important to remember that injections that are given in the muscles, under the skin or in the skin layers carry little risk of transmitting the HIV. They however can carry higher risk of transmitting infections such as Hepatitis B.

(c) For several years now, rumours are periodically spread about people with HIV infection intentionally pricking other people with infected needles in public places such as movie theatres, markets, bus-stops etc. with an intention of transmitting the infection to them. These rumours are baseless because of three main reasons:-

(i) There should be adequate amounts of blood containing the virus on the needle before it can cause infection. A needle that has been merely pricked in the body of a person with HIV is not likely to have the number of HIV necessary to cause infection.

(ii) Even if the infected person were to use needle that has been used intravenously, the virus may not be alive if the blood on the needle has dried up.

(iii) When an infected needle is pricked into the muscles, the risk of transmitting the infection is very low.

14. **Mother to Child Transmission.**  Mother to child transmission of HIV can occur in three ways:-

(a) During pregnancy, when the HIV crosses the placenta.

(b) During delivery.

(c) During breastfeeding.

15. Although HIV is present in breast milk, it does not mean that the baby will always be infected with it. Also, in a country such as India, the alternative to breast-feeding is bottle-feeding, which is not only expensive but also carries a higher risk of diarrhoea, poor nutrition and as a result death. Since the benefits of breast-feeding are much more than the risk of getting HIV infection, it is recommend that women with HIV infection breast-feed their babies.

16. **Skin Piercing**. There are several cultural practices in India that involve skin piercing such as piercing ears or nose for ornamental reasons, tattooing, etc. Although skin piercing is not currently one of the major routes of transmission of HIV infection in India, it is desirable to use sterilized equipment for prevention of infections such as Hepatitis B.

17. **Oral Route**. Many people believe that kissing, sharing utensils etc. with people who have HIV can transmit the infection. This is not true. HIV has not been shown to be transmitted through saliva. If the virus is ingested in the stomach, the acids in it are likely to inactivate or destroy the virus. The risk through oral route may be there only if there are cuts or wounds in the mouth or bleeding gums.

18. There are several misconceptions about the spread of HIV infection through oral sex. Some studies have indicated that oral sex has higher risk of transmitting HIV infection as compared to kissing. This is because oral sex allows vaginal secretions and/or semen to enter the mouth. In case there are wounds or injuries in the mouth, the virus present in vaginal secretions or semen can easily enter the body. Although the risk of getting HIV infection is lower with oral sex if there are no wounds in the mouth, it is not recommended as an alternative to safer sex, i.e. sex using condom.

**How is HIV Diagnosed**

19. HIV is normally diagnosed through blood tests that detect antibodies to HIV. Although many private laboratories conduct HIV test, it is recommended that they are done only at the Voluntary Counselling and Testing Centres (VCTCs) set up by National AIDS Control Organisation (NACO). At these centres, person’s risk assessment is done before recommending testing for HIV. Counselling is done before and after the test in order to ensure that the person being tested is aware of all the issues related to HIV transmission, prevention, treatment, care and support. In case of a negative test result, the test is repeated after three months to rule out the possibility of the first test being carried out in the window period.

20. Confidentiality is strictly maintained while testing for HIV. This means that no one other than the person being tested is informed about the test results. He/she is encouraged to share the results with those who can offer emotional and other forms of care and support.

21. It is desirable that people with high-risk behaviours test for HIV at the earliest in order to:-

(a) Prevent further transmission of HIV.

(b) Improve their quality of life and longevity by adopting recommended lifestyles and treatment as and when necessary.

**Prevention of HIV/AIDS**

22. HIV/AIDS can be prevented in four main ways:-

(a) Being in a mutually faithful sexual relationship. If this is not possible, then correct and consistent use of condoms for every sexual act, irrespective of the type of sex is essential.

(b) Checking all the blood and blood products for HIV infection before transfusion.

(c) Avoiding drug abuse, especially sharing needles and syringes for injecting drugs.

(d) Reducing the risk of mother-to-child transmission by following recommended guidelines for preventing parent to child transmission of HIV infection.

23. **Condom Use.** Condoms have two main advantages-they prevent infections such as sexually transmitted infections (STIs) and HIV, and also prevent pregnancy. Many people use condoms only for commercial sex. It is important to remember that anyone who is not in a mutually faithful sexual relationship should use condoms for every sex.

24. Some people argue that condoms do not offer complete protection. This is not true. Several studies have persuasively indicated that failure of prevention of pregnancy with condoms is often because of inconsistent and incorrect use of condoms. This is also true for sexually transmitted diseases including HIV/AIDS.

25. Some people complain that condoms, especially those that are distributed free by the government, are probably not of good quality and therefore break during sexual act. These complaints are not valid as several strict quality control methods are adopted during condom manufacturing. They normally break only if they have not been used correctly or have been damaged because of improper storage.

26. A belief that condoms reduce sexual pleasure is one of the major barriers to condom use. This is also not true. There may be a difference in the sensation in the initial stages of using condoms but most people adapt to them very soon. Also, newer condoms such as ribbed condoms, dotted condoms, etc. are reported to enhance pleasure for some people.

27. **Preventing Parent to Child Transmission.** NACO has set up ‘Prevention of Parent to Child Transmission (PPTCT) centres in all districts of the six states where HIV infection is high and in several other hospitals in other states. In these centres, pregnant women are counselled and tested for HIV. If they are positive, they are given medicines for HIV at the time of delivery and caesarean section is done to surgically deliver the baby. This reduces the risk of infection for the newborn from about 45% to less than 2%.

**Symptoms of HIV**

28. Most people infected with HIV are not likely to have any symptoms for about three to ten years. Few develop symptoms earlier while few others may not develop any symptoms for more than ten years. Even if a person does not have symptoms, he/she can transmit the infection to others. This is why it is recommended that anyone who has sex with a partner who is not in mutually faithful relationship should use condoms for every sex.

29. A normal person has about 500 to 1500 CD4 cells per millilitre of blood. When the CD4 count decreases below 200, people with HIV can present with opportunistic infections, which are infections that affect the body because of poor immunity. Opportunistic infections are caused by bacteria, virus, fungus and parasites. They may also get some types of cancer.

30. When HIV progresses to AIDS, the infected person would have had unexplained weight loss of more than ten percent, unexplained diarrhoea or fever for more than one month, fungal infections, tuberculosis or severe bacterial infections.

31. **Tuberculosis**. Since tuberculosis is already one of the major health problems in India, people with HIV infection are at higher risk of getting it. Very often, tuberculosis is the first indication that a person has HIV infection. Although tuberculosis largely affects the lungs, it can affect other organs of the body also. People with AIDS are more likely to get infection in other organs of the body. One of the major concerns related with tuberculosis and AIDS is resistance of the tuberculosis bacteria to several medicines that were earlier effective for its treatment. Common symptoms of tuberculosis include cough, fever, increased sweating at nights, loss of weight and excessive fatigue.

**Ethical Issues Related to HIV Infection**

32. Ethical issues related to HIV infection are mainly for ensuring that a person with HIV infection leads a life of dignity. HIV testing should not be done without informed consent of the person to be tested. This means that the person to be tested should have understood what test results would mean and its likely impact on his/her life. People with HIV infection have as much right to get education, employment and medical treatment from any source as everyone else.

**Role of the Youth in Preventing HIV**

33. HIV is more common in the most productive age group of 15-45 years, and therefore causes major impacts on the economic status of the affected individual, family, community, and the nation at large. The young adults can play a very important role in preventing the HIV at community level, and also minimise its impact at all levels.

34. Youth can assume responsibility in preventing HIV infections. Both men and women share the responsibility of avoiding behaviour that might lead to HIV infections. Equally, they also share the right to refuse sex and assume responsibility for ensuring safe sex. In many societies, however, men have much more control than women with whom and how they have sex. In such cases, men need to assume greater responsibility for their actions.

35. Since everyone is entitled to fundamental human rights without discrimination, people living with HIV/AIDS have the same right to education, employment, health, travel, marriage, recreation, privacy, social security, scientific benefits etc. All should share responsibilities for avoiding HIV infection / re-infection.

36. NGOs and youth have an important and very special role to play. The close inter- personal interaction that NGOs/youth have with people in the communities they work in is extremely useful for implementing the behavioural interventions necessary for HIV/AIDS prevention and care. NGOs have a lot of flexibility and the capacity to accommodate changing programmes and public needs and can innovate and implement new initiatives more easily.

37. The youth needs to be actively engaged not just in spreading awareness about HIV but also in promoting responsible behaviours, especially those related to sexual behaviours and drug abuse. Peer pressure often leads to unsafe behaviours such as experimenting with alcohol, drugs and sex. By creating a positive peer pressure, it is possible to delay the age at first sex, avoid sex before marriage, practicing safer sex, and preventing alcohol and drug abuse. The stereotypical image of a “macho” male needs to be changed to depict responsible behaviours.

38. The young can also play an important role in addressing gender imbalance, which is one of the important factors for underdevelopment and HIV transmission. Increasing values to the roles and responsibilities assigned to women, increasing access to services for women and encouraging them to be involved in decision making at individual, family and community levels can address the gender imbalance.

39. Youth should educate general public by spreading the information that HIV can not be transmitted by the following modes:-

(a) Shaking Hands.

(b) Sharing of Clothes.

(c) Sharing of Food and Utensils.

(d) Sharing of Toilets.

(e) Insect Bites.

(f) Hugging or Kissing.

(g) Working in the same office or travelling in the same vehicle.

(h) Playing or swimming with the infected person.

(j) Coughing, sneezing or in routine patient-care activities (bed- making, feeding etc).

**Conclusion**

40. HIV can be transmitted from person to person only if the body fluids like blood, semen and vaginal fluids come in contact with body fluids of an HIV infected or AIDS patient. Young people, with or without HIV/AIDS, have an important role to play in actively countering discrimination against young people living with HIV/ AIDS. We require to provide a platform for people living with HIV/AIDS, so that we work together according to their interests. We also need to mobilize support of local authorities and community leaders to listen to people living with HIV/AIDS and to combat actively against their discrimination and exclusion. Setting up training programmes, to improve the integration of the young people suffering from HIV/AIDS into society, is the need of the hour.

**SECTION-5**

**CANCER, ITS CAUSES AND PREVENTIVE MEASURES**

**Introduction**

1. Six million worldwide die of cancer every year. The present rapid growth rate of cancer is required to be controlled or retarded to prevent an epidemic-like situation in India. If growth of cancer is not controlled, it may lead to a ‘National Crisis’. Sixty percent cancer cases are preventable and it is curable if detected and treated in time. Experts strongly feel that improved level of cancer awareness to the masses will help prevention of cancer considerably. NCC as a disciplined organization with assistance and co-operation of Non Governmental Organizations can play a vital role by educating masses on cancer awareness. There are billions of cells in the human body. Normally they grow in a well-regulated pattern. But when cancer sets in, a group of cells, suddenly starts multiplying and forms a tumor or lump. As the tissue progresses in the degree of malignancy, it invades the original site where it has occurred and through blood vessels or lymphatic channels can reach distant parts of the body.

# Types of Cancer

1. Different types of cancer that men and women suffer are :-
   1. Oral cancer.
   2. Larynx cancer.
   3. Lung cancer.
   4. Cervical cancer.
   5. Breast cancer.
   6. Prostate cancer.
   7. Colon cancer.

# Causes of Cancer

3. Main causes of cancer are:-

(a) Prolonged chewing of tobacco, zarda, pan and pan masala.

1. Heavy smoking.
2. Excessive drinking.
3. Poor oral hygiene and inadequate dental care.
4. Air and water pollution.
5. Deficiency of balanced diet.

**Effects of Cancer**

4. (a)Pain.

1. Mental anguish.
2. Results in loss of work.
3. Expenses to family.
4. Loss of loved one.

**Cancer Signs**

5. An early detection of cancer can lead to an early cure. The cancer signs are:-

1. A change or lump anywhere in body however small.
2. A persistent sore throat that does not heal.
3. A change in a mole or a prominent new spot on the skin,
4. A constant cough or hoarseness.
5. Frequent difficulty in swallowing.
6. Persistent indigestion.
7. Vomiting and coughing of blood.
8. Persistent diarrhoea or constipation.

(j) Blood in urine bowel movement.

1. Weight loss without causes.
2. Abnormal vaginal bleeding.
3. Unexplained loss of appetite.

6. Early **warning sings** due to **gutka and tobacco** chewing are:-

1. Any sore and ulcer on tongue, cheek or gums that does not heal within a fortnight.
2. Red and white patches on the lips or mouth.
3. A lump of swelling anywhere in the mouth or neck.
4. Difficulty in walking.
5. Difficulty in speech.
6. Repeated bleeding in the mouth.
7. Numbness in the mouth.

7. Warning signs of **lung cancer**, which kills more people than any other type of cancer, are:-

1. Increasing cough and breathlessness.
2. Change in voice.
3. Pain in chest.
4. Lump in neck.
5. Coughing out blood.

### Preventive Measures

8. Endeavour should be made to prevent cancer from ever occurring by :-

1. Avoiding smoking.
2. Avoiding tobacco in any form.
3. Good oral hygiene.
4. Avoiding diet high in processed and preserved meat, smoked and salted

food.

1. Avoiding obesity.
2. Handling asbestos and certain dyes with precaution.
3. Early treatment on detection.

**Myths About Cancer**

9. (a) Cancer is contagious and infectious.

**Fact** : Cancer is not transmitted by touching, eating from the same plate, kissing or sexual intercourse.

1. Severe depression can cause cancer.

**Fact**: Cancer is a physical phenomenon and not related to emotions as its cause. However, depression affects the disease adversely.

1. Cancer is a disease of the blood.

**Fact** : Though cancer cells travel through blood, it is not caused by any imbalance or impurity in the blood.

1. Cancer spreads very fast after a knife (i.e surgical knife) touches it.

**Fact** : This impression has been created by the fact that many patients die soon after a surgery. This actually means that there was delay in diagnosis or treatment and by the time surgery was performed, the disease had spread substantially and became unmanageable. The patient did not die because of surgery.

1. Cancer is a product of the ills of modern civilisation.

**Fact**: Indications of bone cancer have been found even in Egyptian mummies, more than 3000 years old. ‘Ayurveda’ also deals with cancer.

1. Cancer is God’s punishment for sins committed.

**Fact**: Religious man like Ramakrishna Paramahamsa Dev and Maharshi Raman had cancer.

1. Irregular food habits may cause cancer.

**Fact** : No co-relation exists However, irregular food habits may cause other gastric problems.

1. All moles and warts will become cancer.

**Fact** : Not necessarily. Attention is to be paid only when colour or size changes and if there is any discharge from them.

(j) All lumps in the breast are malignant.

**Fact** : Only a small percentage is malignant . However, all lumps need attention and self-examination helps in early detection of tumour in breast.

1. Children do not get cancer.

**Fact** : Unfortunately there is no lower age limit for cancer.

(l) Nausea and other side effects mean the treatment is working.

**Fact** : Each patient responds differently to the treatment. Some get a lot of side effects, some hardly any.

(m) Pain killing medicines are habit forming and hence should be avoided as far as possible.

**Fact** : People do not get high on pain killer and hence these do not cause addiction. Patient should not wait till the pain becomes unbearable and then ask for a pain killer. It is easier to control the pain when it is mild.

1. Over a period of time pain control drug will stop working.

**Fact** : At times the body may become used to a particular drug. In that case another drug or a combination of drugs or an increase in the dosage of the present drug may be prescribed.

(o) Homosexuals and lesbians are more vulnerable to cancer.

**Fact** : No scientific correlation exists.

(p) Neglected piles may turn into cancer.

**Fact** : Piles is enlargement of vein in the rectal wall and cancer is found above this area. However, bleeding through rectum should be carefully investigated.

(q) Cancer cannot be prevented.

**Fact** : Through at present no anti cancer vaccine is available, careful life style like healthy food habit, avoiding tobacco and betel products, limiting alcohol intake etc may help in preventing cancer.

(r) Physically weak people are more prone to cancer.

**Facts** : No scientific correlation exists.

( s) Cancer is incurable.

**Facts** : With timely detection more than 80% cancer is fully curable.

1. A patient of TB cannot get cancer.

**Facts** : Cancer may develop in a TB patient or a patient having any other disease.

**Conclusion**

10. Cancer is not a contagious disease. There is a life after cancer. Sixty percent of the cancers can be prevented through life style changes, diet, exercise, weight control, alcohol in moderation and non consumption of tobacco in any form. More than eighty percent cancer is completely curable if detected and treated early. We must not get scared of cancer but must fight cancer with full sincerity. There is an urgent need to organise cancer awareness programmes in print and electronic media to reach out to the people in a meaningful manner.

**SECTION-6**

**CONTRIBUTION OF YOUTH TOWARDS SOCIAL WELFARE**

**Introduction**

1. Youth constitute the most creative segment of any society. Their role and contribution are vital to all societies and more so in a country like India with wide social, cultural and other demographic diversities. Youth constitute about 34 % of the total population of India and their role and contribution towards social welfare and nation building can not be ignored. For a better understanding of the subject it is important to first understand the basic of social welfare.

**Definition of Social Welfare**

2. Social welfare has been defined by a United Nations expert group as “ Organised activity that aims towards a mutual adjustment of individuals and their social environment”. Social welfare is considered as including the attempts made by governments and voluntary organizations to help families and individuals by maintaining incomes at an acceptable level. This can be achieved by providing medical care and public health services, adequate housing and community development, facilitate social adjustment, facilities for recreation , in addition , pass legislation and creating facilities to protect against exploitation and to care for the underprivileged social groups. It will also include subject relating to education.

**Contribution of Youth Towards Social Welfare**

3. The contribution of youth towards social welfare have been discussed in the succeeding paras :-

(a) **Leadership.** Youth are the leaders of tomorrow and young and vibrant youth are essential for future leadership. Support is provided to voluntary organizations to participate in youth development programmes. Youth need to involve themselves in activities which will develop creditable leadership.

(b) **Community Service.** Youth need to work in social welfare activities and community services. Therefore, Community Service has been developed as an integral part of the curriculum for education, instruction and training of all students enrolled in educational institution so that youth can fruitfully understand and contribute in community service.

(c ) **National and Cultural Integration.** The youth, when organized as youth force will contribute for the promotion of national and cultural integration of the country. Fostering and developing interaction between youth from different parts of the country specially the isolated border and tribal areas will help in achieving national integration. It should be the endeavour of youth to motivate the general public to work against the separatist forces and ensure unity of the country is maintained.

(d) **Education and Literacy.** The Youth need to educate themselves and subsequently get into the process of providing quality education to all sections of society. They need to promote education and self development capabilities of the rural youth specially of girls and youth in backward areas.

(e) **Environment.**  The youth must understand the importance and implications of environment on the society and the ecological wealth of the nation. They must help in improving and protecting the environment. They need to engage in aforestation programmes and cleaning of rivers and lakes and disposal of degradable and non degradable waste.

(f)  **Health Care and Family Welfare.** They must promote awareness and involvement in social programmes pertaining to health and family welfare. Programmes such as ‘Youth against AIDS’ campaign, ‘Pulse Polio’, ‘Small Family’ norm and various immunization programmes should be promoted. They must also volunteer in manpower intensive programmes at the implementation stage.

(g)  **Physical Education and Adventure Training.** The youth must understand the importance of physical education for health and physical fitness with a view to increasing individual productivity and the value of sports as a means of recreation and with a potential for promoting social harmony and discipline .

(h) **Old Age Care**. Our basic social fabric and the joint family system inherently provide for old age care. However with the break down of the joint family system the need for old age care has increased. The youth must contribute to the well being of the senior citizen of the society by taking care of their aged and provide them financial security and moral self respect and make all efforts to ensure that they have a secure old age with adequate housing and health care.

(j) **Watershed and Waste Land Development.** These two are one of our major resources which need to be continuously protected and systematically proclaimed and developed and can be used for various social welfare activities . Youth has genuine potential for this nature of work. They must contribute in these programmes and ensure that these areas are protected from unscrupulous elements who may enter these areas of interests for personal gains.

**Conclusion**

4. Our youth are the strength of the family , village , locality and the community . They are also the future of our nation. We must take all necessary steps to mobilize this most idealistic, inspired and energetic section of our society in the mission of nation building and social welfare.

**SECTION-7**

**NON- GOVERNMENT ORGANISATION AND**

**THEIR CONTRIBUTION TO THE SOCIETY**

1. For the progress and development of the country, there are mainly two types of organizations, Government and Non Government.

2. **Government Organisation**. The steps undertaken by the government for the overall development of the nation and the society are included in the charter of duties of our government organisation. The government fully controls such actions which are directly or indirectly undertaken for such developments. Some of the works undertaken by government organisation are implementation of Five year plans, Welfare and empowerment of women, Rozgar yogana, Child welfare programme, Literacy programme and AIDS awareness programme.

3. **Non Government Organisations**. These organisations are controlled by members of society, who form a group or groups and work towards social welfare and nation building. People with common objective and aspirations, together make organisations called Non Government Organisation (NGOs) and get them registered. An NGO is a non-profit group or association that acts outside of institutionalised political structures and pursue matters of interest to its members by lobbying, persuasion, or direct action. Their goals are primarily non-commercial. They collect funds both from people and the government.

4. NGOs firstly make survey of various problems, collect information about them, organize various demonstrations, give speeches and wherever action needs to be taken, they take with full vigour. They understand social problems, the causes, affects and create necessary infrastructure to overcome them. NGOs usually gain at least a portion of their funding from private sources. Major sources of NGO funding include membership dues, grant from international institutions or national governments and private donations.

5. Some of the examples of important NGOs are:- **Shri Niketan Yojna**-Started by Ravinder Nath Tagore, **Seva Gram Yojna**-by Gandhiji, **Gram Yojna** by Vinoba Bhave, **Child Relief and You**, **Helpage India**, **People for Animals**(PFA), **Society for Prevention of Cruelty** **to Animals** (SPCA). **International Red Cross** and **Red Cresent Movement** are the world’s largest group of humanitarian NGOs.

**Types of NGOs**

6. Some of the types of NGOs are as follows:-

(a) **INGO**. It stands for International NGOs.

(b) **BINGO**. Business oriented International NGO.

(c) **RINGO**. Religious International NGOs.

(d) **ENGO**. Enviornment NGO.

**Activities of NGOs**

7. Following activities are undertaken by NGOs:-

(a) Blood Donation.

(b) Adult Literacy.

(c) Anti Dowry Drive.

(d) Anti Leprosy Drive.

(e) Anti Drug Drive.

(f) Tree Plantation.

(g) Environmental Programmes.

(h) Help in natural calamities such as Flood, Earth-quake.

(j) Educating people about the ill-effects of AIDS and education for prevention of the same.

(k) Family Planning Programmes.

(l) Community Development Work.

(m) Promotion of Social-equality.

(n) Wildlife and Animal Care.

(o) Human-rights.

(p) Awareness Campaign.

(q) Child Care.

(r) Polio Eradication drive.

(s) Providing schooling facilities especially in remote villages and rural areas.

(t) Creating and providing health and hygiene infrastructure and facilities to reduce diseases and help in creating a healthy and fit population.

(u) Cottage Industry.

(v) Orphanage and Old Age Homes.

**Conclusion**

8. NGO are the true example of selfless service and teamwork. Employees are highly committed to the aims and the principles of the organisation. They share equal contribution with government organisation and social welfare programme. Though government on its part has introduced a number of programmes, however government cannot be entirely successful without the active participation by each member of society. NGOs provide the necessary platform towards this end.

**SECTION-8**

**DRUG TRAFFICKING AND CRIME**

**Introduction**

1 A `DRUG` is a substance–solid, liquid or gas that brings about physical and / or psychological changes. Drugs affect the central nervous system. They act on the brain and can change the way a person thinks, feels or behaves. These drugs are known as psychoactive drugs. Drug menace is one of the most serious problems facing the world. Drug trafficking is considered as a greater problem than drug consumption.

**Types of Drugs**

2. There are three main types of drugs affecting the central nervous system:-

(a) **Depressants**. Depressants are drugs that slow down the function of the central nervous system. Depressant drugs do not necessarily make a person feel depressed. They include:-

(i) Alcohol.

(ii) Cannabis.

iii) Barbiturates, including Seconal, Tuinal and Amytal.

(iv) Benzodiazepines (Tranquilisers), Benzos, Tranx, such as Rohypnol, Valium, Serepax, Mogadon, Normison and Eupynos.

(v) GHB (Gamma- hydroxybutrate), or Fantasy

(vi) Opiates and Opioids, including Heroin.

(b) **Stimulants**. Stimulants act on the central nervous system to speed up the messages to and from the brain. They make the user feel more awake, alert or confident. Stimulants increase heart rate, body temperature and blood pressure. Other effects include appetite, dilated pupils, talkativeness, agitation and sleep disturbance. Mild stimulants include:-

(i) Ephedrine used in medicines for bronchitis, high fever and asthma.

(ii) Caffeine in coffee, tea and cola drinks.

(iii) Nicotine in tobacco.

(c) **Hallucinogens**. Hallucinogens affect perception, People who have taken them may believe they see, hear and perceive things that are not really there or what they see may be distorted in some way. The effects of hallucinogens vary a great deal, so it is impossible to predict how they will affect a particular person at a particular time. Hallucinogens include:-

(i) Dhatura

(ii) Ketamine

**Legal Drugs**

3. Laws and regulations control the availability, quality and price of the legal drugs. For example tobacco may not be sold to persons below age of 18 years .

4. **Illegal Drugs**. Because they are illegal there are no prices or quality controls on the illicit drugs such as heroin. This means that a user can never be sure that the drug they are taking is in fact what they think it is. The user also cannot be sure of a drug`s strength or purity. Various batches of an illegally manufactured drug may have different mixtures of the drug and additives such as poisons, caffeine or even talcum powder.

**Golden Crescent**

5. India due to its geographical location has become a transit route base for illicit heroin, hashish and morphine from Afghanistan, Pakistan and Iran. This area is known as Golden Crescent. Cannabis smuggled from Nepal is mainly consumed in India. Most heroin transiting through India is bound for Europe.

6. A peculiar system of supply and demand that characterizes the Indian drug market is that the user and traders are often the same. To fund drug consumption many users resort to crimes and thefts.

**Users**

7. It was found that all the addicts were taking either cannabis or heroin. Seventy two percent of addicts are in the age group of 20-24 years. Females comprise only 2% of the addicts. Seventy eight percent of addicts come from the families which are facing problems such as loss of one or both parents or separation of the parents, However, no correlation is found between liability for addiction and economical status of the family, as judged by per capita income.

8. Drug addiction is found to be most common in peer group. The other reasons are curiosity (19.85%), pleasure seeking (12%) and mental tension (5%). Majority of addicts (84%) mention that the drug is easily available to them. Education and occupation has no significant effect on the habit. The problem of drug addiction appears to be common amongst youths (20-24 yrs). High incidents in youth may be due to their emotional immaturity. Children from problem families and broken homes, who lack proper parental control and guidance are most likely to become victims of this dreadful habit. In peer groups, Curiosity and pleasure seeking are the common reasons for developing the addiction. The availability and easy access of the drugs contribute towards continuing drug use.

**The Law**

9. Control over cultivation of opium and all matters relating to narcotic drugs and psychotropic substances are regulated by the “Narcotic Drugs and Psychotropic Substances (NDPS) Act and Rules”, which provide for:-

(a) Punishment of upto 20 yrs rigorous imprisonment and fine up to Rupees Two Lakhs for indulging in trafficking of narcotic drugs and psychotropic substances.

(b) Death sentence in case of repeat of this offence.

(c) Forfeiture of property of smugglers.

(d) Regulating of legitimate trade and commerce of NDPS for medicinal and scientific purposes. The “Prevention of Illicit Trafficking in Narcotic Drugs and Psychotropic Substances”( PITNDPS) provides for detention of persons indulging in trafficking of narcotic drugs for 1 to 2 years by an executive order.

**Conclusion**

10. Drug trafficking and consumption has become a global menace. To eradicate this, it requires mobilisation of international communities through a comprehensive approach in combating illicit production, trafficking and consumption of drugs. Government and NGOs should emphasise on education, healthcare, treatment and rehabilitation for effective control of drug abuse.