### Long Answer Type Questions:

### Q1. Write in detail the role of search and rescue team during a disaster.

**Ans.** Search and rescue is a well planned activity performed by either an individual or a group of specially trained professionals in a search and rescue of causalities from adverse conditions to safety. During the disaster the first and foremost duty of rescue team in life saving procedure in search as well as rescue of the victims from the site of disaster without wasting the time. Moreover the search and rescue workers must take all precautions to shift victims away from the hostile environment without causing further damage to their health and safety. The second most important work which they fellow during their missions that they asses the disaster area and also collect information on extent of damage, likely of loss of property and life. They provide shelter and first aid materials to the victims and done lot of concerned works.

### Q2. What should be the approach to help a fire burnt patient?

- **Ans.** Burn is defined as damage to skin caused by direct contact with dry heat, hot liquids, hot metals, fire flames etc. The best approach to help a fire burnt patient can be summarized as under:
  - **a.** Extinguishing flames on clothes by immediately pouring water is best practice.
  - **b.** Cover the burnt area with clean cloth.
  - **c.** Immediately remove the tight clothing and constrictive jewellery like rings, bangles before swelling and blisters.
  - **d.** Keep on giving plenty of fluids to drink till the victim reaches hospital.
  - e. In electric burns first snap off electric power supply then give first aid to victims.

### Q3. Explain in detail the first, second and third degree of burn.

Ans. The three types of burn are as follows:

- **a. First Degree Burn:** these are superficial burns involving top layer of skin. Skin appears red and very painful.
- **b. Second Degree Burn:** these are partial thickness burns involving two layers named epidermis and dermis. The skin is red having blisters, very painful and the tissue is swollen and wet.
- **c. Third Degree Burns:** These are called full thickness burns and involve all the layers of skin along with deep structures like muscles, vessels and nerves the burns areas are charred and look brown and comparatively less painful.

## Q4. What is safe construction practice?

- **Ans.** Safe construction practice means preparedness and safe building construction practices which can certainly reduce the extent of damage loss during an earthquake. The primary objective of safe construction practice is to prevent collapse of building during earthquake in order to reduce the risk of life. For achieving this objective we must need to follow these steps while construction a building.
  - **a.** Soil testing is first very important steps before the construction of a building
  - **b.** The building should have a simple rectangular plan.
  - **c.** Seismic bands at plinth level.
  - d. Seismic band at cave level of sloping roofs.
  - e. Vertical steel bar at each corner and T-junction of walls.
  - **f.** Materials strength and quality of construction should be good.

#### Q5. What should be the role of community during a disaster?

- **Ans.** The community is an institution in itself, emerging as the most powerful in entire mechanism of disaster management. Community leaders are elected by the people and these community leaders serve as the Nodal body for effective management of disasters. Following are some works done by community.
  - **a.** Provide shelter at the time of disaster
  - **b.** Provide relief and rescue operation.
  - c. Provide correct information to the media and press people.
  - d. Checking rumors.
  - e. Help weaker sections of the community.

### **Short Answer Type Questions**

#### Q6. What equipments should be carried by a rescuer?

- Ans. Equipments for personal safety; Helmet, Life Jacket, Gumboots, Torch, Whistle.
  - **a.** Equipments for safety of victims; ladders, ropes, pulley, hammer, bamboo stick, air filled tubes, first aid kit etc.
  - **b.** Ultra modern search equipment; infrared cameras, acoustic devices, bio radars, life locators.

### Q7. What is ABC formula in disaster management?

**Ans.** ABC formula in disaster management means approach of adopting mitigating functions so as to save the life by maintain the vital functions of airway, breathing and circulation.

### Q8. What should be the constituents of first aid kit?

Ans. First aid is defined as "provision of initial care for the illness or injured not with an idea of cure but to prevent further harm to the victim till medical help

is received." First Aid Kit consists of life jacket, helmet, immediate food, antiseptics, artificial bed, oxygen cylinder, extinguishers etc.

# **Ill effects of Polythene**

### **Q9.** Discuss ill effects of polythene.

- Ans. Plastic bags harm us by polluting the environment, killing animals; aquatic life etc. following are some ill effects of polythene:
  - a. It litters the landscape: Most of the plastic bags after use go into landfills. Once, they became litter, plastic bags find their way into our waterways, parks, beaches, streets and there by ending up littering the environment. If they are burned, release highly toxic gases like phosgene, carbon monoxide, chlorine, sulphur dioxide, nitrogen oxide.
  - **b. It kill animals and aquatic life:** Many animals ingest plastic bags, mistaking them for food and therefore, die the ingested plastic bag remains intact even after the death and decomposition of the animals and it remains in the landscape where another victim may ingest it again.
  - **c. It is non-biodegradable:** Plastic bags are non-biodegradable. They degrade the quality and quantity of environment.
  - **d. It causes health hazards:** During the manufacturing process of polythene bags various harmful Chemicals like colorants, pigments, plasticizers, antioxidants, stabilizers and heavy metals are used. These Chemicals can cause diseases like cancer, degeneration of brain tissue, heart enlargement etc.

### Q10. What should be done to avoid polyethene?

- Ans: There are various ways by which use of polyethene can be avoided or reduced.
  - **a.** Use of tote (shopper ) for carrying shopping goods.
  - **b.** Use of jute bags.
  - **c.** Use of self made paper bags or cloth bags.
  - **d.** Use of wooden made shopping bags.
  - e. To educate the masses regarding minimizing the use of polythene.

# **Read Safety Education**

## Q11. Define Accident and mention its causes.

- **Ans:** Accidents are suddenly occurring events or episodes that cause loss of life and damage to property. There are various cause of accidents.
  - **a.** Speeding while driving and reckless driving
  - **b.** Use of mobile phone while driving.
  - **c.** Drowsy driving, falling asleep in the wheel.
  - **d.** Listening to loud music while driving.
  - e. Looking or talking with other passengers while driving.
  - **f.** Rubber-Necking-means looking on other things in the road like watching other accidents, looking at sunset etc.
  - g. Defective Automobile and Automobile parts.
  - h. Defect on Roadway Construction.
  - i. Poor weather conditions.
  - **j.** Drink driving and driving while under the influence of a Narrotic substance.
  - **k.** Bad road Conditions.

### Q12. Who can prevent accidents?

### Or

### Who can avoid accidents?

- **Ans:** There are different segments of people who are responsible to avoid road accidents. Following are some who are responsible sections of society.
  - **a. Traffic Police:** They need to persuade safe behavior among people, by applying the law.
  - **b. Civil Society:** They need to be involved in initiating and supporting local action to improve road safety.
  - **c. Policy Formulators:** They need to be aware of the problems and implement solution through policy making and policy implementation at departmental and ministerial level.
  - **d. Teachers:** They need to receive in service training in Road Safety Education in order to give planned Educational opportunities to their students.
  - e. Drivers: They need to be making aware of children's limitations in traffic.

## Q13. Describe Motor Vehicle (Amendment) Bill, 2016.

Ans: The Motor Vehicle (Amendment) Bill,2016 was introduced in the Lok Sabha by the union Minister of Road Transport and Highways, Sri Nitin Gadkari, on 09-08-2016.

Government of India has approved the Bill to improve road safety Scenario in country. The bill seek to amend Motor Vehicle Act( MVA) 1988.

Features of Motor Vehicle (Amendment) Bill, 2016.

- a. Increase compensation for Hit and Run cases to 2 lakh from 25000.
- **b.** If school bus drivers are caught driving drunk, Rs 50,000 fine will be imposed with imprisonment for three years. "Immediate cancellation" of license will take place, causing death of a child in certain circumstances will result in Rs 2 lakh fine, and imprisonment for a term not less than 7 years.
- **c. Violating traffic signals** three times will result in Rs 15,000 fine, license cancellation for a month and a compulsory refresher training.
- d. E- Governance : It focuses on improving delivery of services.
  - **i.** Online learning licenses.
  - **ii.** Increase period of driving licensed Validity.
  - **iii.** Do away with the requirements of educational qualification for transport licensed etc.
- e. Offences Committed by juveniles: The owner or guardian will be deemed guilty in cases of offences by the juveniles. Juvenile will be tried under JJ Act and the registration of Motor Vehicle will be cancelled.

## Q14. Traffic offences and penalties in India.

**Ans.** The India Road rules, titled "Rules of the Road Regulation", were brought into effect since July1989. These rules are applicable to the Indian drivers ( all Inclusive of two, three and four wheels), while on the road to ensure am orderly traffic and a safer Journey. Violation of these "Rules of Road Regulation" is a punishment transgression as per the city specific traffic police rules and the "Motor Vehicle Act".

An Indicate list of the possible offences and their respective penalties is formulated below.

- a. RRR: Rules of Road Regulation 1989.
- **b.** MVA : Motor Vehicle Act 1988.
- c. CMVR: Central Motor Vehicle Rules 1989.

## Q15. Describe 4 E's to prevent accidents.

Ans: Road accident can be prevented in four main ways, namely the four E's.

## a. E: Engineering- by altering the environment:

Structure plays a crucial role in controlling road accidents which can be created by planning improvements such as traffic signals, pedestrian crossing ,Junction layouts and speed control humps.

## b. E: Execution - by Imposing laws.

Accidents can be reduced by the Executions of the law. Traffic police need to ensure the proper implementation of the law of land to reduce road accidents.

# c. E: Encouragement - by the use of publicity campaigns:

The active involvement of the civil Society which attempts to inform and educate road users with a view to persuade them to change their behavior to make accidents less likely. The awareness can be made through newspapers, ratio, television, magazines, books etc.

# d. E: Edification - by gaining and using knowledge.

Road accidents can be prevented by gaining appropriate and proper knowledge. It is recognized that Road Safety Education programmes should be evaluated on the basis of class assignments, models, case studies etc.