Section – I

Answer the following questions in about 500 words each.

1) Highlight the importance and essential requirements of search and rescue (S & R).

Ans: Search and Rescue, often known by the acronym SAR, is the process of identifying the location of disaster victims who may be trapped or isolated, and bringing them to safety and providing them with medical attention. The basic aim of search, rescue and evacuation is to ensure the survival of the maximum possible number of victims. A plan is worked out with the help of local people through aerial surveys and then appropriate steps are taken by the various teams involved, to carry out the procedures. These teams use local volunteers who are well-versed with the local area and can be instrumental in searching. SAR teams also depend on sniffer dogs and heavy machines such as cranes and earth movers etc., to search out and extricate the victims from difficult situations such as collapsed buildings especially after earthquakes. Besides bringing about physical and material relief, the aim is also to control panic and confusion and to provide moral support.

The operation not only includes the disease and temporary relocation in safer areas, but also the measures by which they could survive in the affected place, by providing necessary aid to them, till such time that they can be rescued. Post-evacuation relief through emergency supplies and services is also a part of the relief operations. In case of floods and cyclones, boats, rafts and helicopters are used to carry out the search and rescue operations by forming different teams and carrying out SAR operations in the entire area systematically, each team covering its assigned sector. In such cases, SAR usually includes locating stranded flood victims, who may be threatened by rising water, and as per their need either bringing them to safety or providing them with safe drinking water, food and first aid until they can be evacuated or returned to their homes. A number of the disasters such as floods, cyclones and storms can now be predicted and forecast with the aid of the skills, tools and scientific techniques developed over the past years. On the basis of these forecasts, warnings need to be issued to the people in advance, so that those in the disaster risk areas may brace themselves and take adequate action to mitigate the impact of the coming disaster. At the same time, rescue and relief agencies also may gear up and be placed in a standby position to get into action as soon as required.

For the search, rescue and evacuation process to be effective and useful, there are quite a few essential requirements that have to be available simultaneously, if not in advance. Prime ones amongst these are:

i) Shelter To provide temporary shelter for victims whose houses have been destroyed or rendered unusable. This may involve:
   - Making urgent repairs to some buildings
   - Providing tents or tarpaulin as temporary shelter
   - Accommodating groups of homeless people in community buildings such as schools
ii) Food and Drinking Water
   - To organize and distribute food and drinking water to disaster victims and also emergency workers
   - To estimate damage to crops and food stocks
   - To estimate food reserves available (including unharvested crops) and organize their distribution along with requisitioning additional stocks required.

iii) Communication To establish essential radio, telephone, telex or ft;.<;il links with central bases, control rooms, and head offices of agencies responsible for coordination and provision of manpower, service and material backups. Amateur Radio Operators (HAMs) are often quite helpful.
iv) Clearance and Access To clear the key roads, airfields and ports in order to allow access for vehicles, aircraft and shipping, and to identity and prepare helicopter landing sites in the immediate vicinity of the disaster struck area.
v) Water and Power Supplies To re-establish water and power supplies, or to make temporary arrangements for them, the provision of potable water is often difficult, particularly in the early post-impact stage. Water purifying equipment might therefore have to be obtained and/or water purifying tablets distributed.

vi) Temporary Subsistence Supplies To provide supplies such as clothing, medical kits, cooking utensils and plastic sheeting, so as to enable victims to subsist temporarily in their own area, thus helping to reduce the pressure on evacuation.

vii) Health and Sanitation To take measures to safeguard the health of people in the disaster-stricken area and to maintain reasonable sanitation facilities, including provision of temporary toilets, safe water, garbage disposal service and vector control measures.

viii) Public Information To keep the stricken community informed of what they should do, especially in terms of self-help. And on what action is in hand to assist them. To prevent wild speculation and rumours concerning the future situation that may lead to unnecessary fear and mental stress to the people.
ix) Security To maintain law and order, especially to prevent theft and other crimes, which could add to the misery.