

Answer 2) The Chernobyl accident in 1980 was the result of a flawed reactor design that was operated by inadequately trained personnel.

- (i) The resulting steam explosion and fires released at least 5% of the radioactive reactor core into the environment with the deposition of radioactive materials in many parts of Europe.
- (ii) The United Nations Scientific Committee on the Effects of Atomic Radiation has concluded that, apart from some thyroid cancers, there is no evidence of a major public health impact attributable to radiation exposure 20 years after the accident.
- (iii) Larger number of people were evacuated as a result of the accident.
- (iv) On 24th February, Ukraine informed the International Atomic Energy Agency that Russian forces had taken control of all facilities at Chernobyl.
- (v) On March 9, the Chernobyl nuclear plant was disconnected from the electricity grid. The IAEA stated that it did not see a critical impact on safety as a result.

Ethical issues involved in the chernobyl disaster :-

- (i) Due to this large scale disaster the attention to professionalism and competence problems of modern society have increased rapidly.
- (ii) Ethical dominats followed by Specialists are directly ~~depent~~ dependent on the risks faced by humanity.
- (iii) This disaster changed the viewpoint of the world. The problems related to nuclear reactors were not only discussed by scientists but also by general public in regards to their safety.
- (iv) There was a flaw in design of the reactor and the Engineers operating on it ignored it, which is a ethical crime when it is concerned to the life of large number of people. The workers did not take the necessary security measures thus, resulting in such a large scale accident.
- (v) This accident opens the eyes of scientists and Engineers towards the moral ethics that they must follow when they are making something which can lead to disasters of not operated properly.