MANAGEMENT PROGRAMME

Term-End Examination June, 2021

MS-058 : MANAGEMENT OF R & D AND INNOVATION

Time: 3 hours Maximum Marks: 100

(Weightage: 70%)

Note: Attempt any **four** questions. All questions carry equal marks.

- 1. (a) Evaluate the possible negative impacts on society of technological developments, particularly on health and environment.
 - (b) "Development is closely related to design." Explain. In what way has the development process been changing?
- 2. (a) "Corporate function of R & D is a managerial rather than technical function."

 Discuss and identify the contents of this function.
 - (b) What are the basic requirements for successful partnering in innovation and R & D ? Do you visualise difficulties cropping up in such processes ? How would such difficulties be overcome ?

- **3.** (a) What is the genesis of team concept? How do individuals connect themselves into a team?
 - (b) Explain the concept of project lifecycle, with examples relating to a specific technology or product.
- 4. (a) What is meant by the "potential" value of an invention or discovery and why is it important? Why are quantitative methods inadequate for measuring R & D outputs?
 - (b) Discuss the salient features of the incentives and support measures provided by the following countries for promotion of R & D and technology development.
 - (i) Japan
 - (ii) Korea
 - (iii) U.K.
 - (iv) U.S.A.
- 5. (a) What are the differences in commercialisation approach between developed and developing nations? How do developed nations score over developing nations in R & D business?
 - (b) What is meant by R & D funding in an organisation? Discuss the various considerations to be kept in view while allocating funds for R & D in an organisation.

- **6.** (a) What do you mean by the term Patent? What is the procedure for patenting in India? What kind of inventions are not patentable?
 - (b) How can engineering and technical consultants facilitate the process of R & D and innovation? Is the cost of consultancy in a firm justified in terms of expected returns?