	Utech
Name:	
Roll No.:	To Agree 1/ Exercising 2nd Explored
Invigilator's Signature :	

# CS/M.Tech(ECE-N)/SEM-3/MCE-301/2011-12 2011

### **MANAGEMENT**

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

#### GROUP - A

Answer any *five* of the following.  $5 \times 4 = 20$ 

- What do you understand by technology and business? What 1. are the most relevant managerial factors in the firm's success or failure?
- 2. Explain how scientific knowledge and technology is related to the standard of living in the society. Give the flow diagram how knowledge leads to economic growth.
- 3. Write the meaning of management and explain what are the major parameters involved.
- 4. Explain with examples what do you understand by Creativity, Innovation and Invention?

40641-(N) [ Turn over

#### CS/M.Tech(ECE-N)/SEM-3/MCE-301/2011-12

- 5. A registered dealer registered under W.B. Value Added Tax Act, 2003. The dealer purchased goods from Durgapur for Rs. 2,00,000 (including VAT @ 13.5%). He sold the same goods to an unregistered dealer in Kolkata for Rs. 2,50,000. Calculate the amount of input VAT, output VAT and net VAT to be paid by the registered dealer.
- 6. Write short notes on the following:
  - a) FOB
  - b) CIF
- 7. From the following information determine :
  - i) EOQ
  - ii) No of orders
  - iii) Time gap between two orders

Monthly usage - 500 units

Procurement costs - Rs. 200/order

Material costs - Rs. 12/unit

Carrying cost per unit per month Rs. 0.05.

#### **GROUP - B**

Answer any *five* of the following.  $5 \times 10 = 50$ 

- 8. a) What are the activities of the organization included in the Management of Technology contributing to economic growth?
  - b) Explain with suitable diagram market growth at different stages of the technology life cycle and also product life cycle.

- c) How in a country Nation's Productivity and Per Capita
  Income are measured?
- d) If the country's total population is 100 crore, yearly GDP is Rs. 20,000 billion and total hrs. worked in the year in 1000 Hrs, calculate Nation's Productivity and Per Capita Income. 2 + 3 + 2 + 3
- 9. a) Explain the methods used in Technology Forecasting.

  Using graphical representation of performance *vs* time explain how technology forecasting changes pattern from higher growth to lower one.
  - b) Describe the process flow in a Project Management.

6 + 4

- 10. a) Describe how technology is created through R & D.
  - b) Discuss the management proces of R & D in an organization.
  - c) What are the strengths and weaknesses of R & D?

3 + 5 + 2

- 11. a) What is the fundamental definition of Management?
  - b) Who is called the Father of Modern Management?

    Critically discuss 14 principles of Administrative theory of Management? 2 + 1 + 7
- 12. a) What is communication? What are its importance?
  - b) What should be the guidelines to make communication effective? 2 + 3 + 5

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## CS/M.Tech(ECE-N)/SEM-3/MCE-301/2011-12

- 13. From the following information determine the tax liability of Mr. Roy for the A.Y. 2011-2012
  - i) Net salary received Rs. 4,80,000
  - ii) Tax deducted at source by the employer Rs. 45,000
  - iii) Professional Tax deducted during the year Rs. 1,800
  - iv) Mr. Roy has a let out house property in Kolkata and rent received during the year Rs. 1,00,000
  - v) Water tax and sewerage tax paid Rs. 10,000( 60% paid by the owner of the house property )
  - vi) Interest received from savings bank A/C Rs. 18,000
  - vii) Tuition fees received Rs. 62,000
  - viii) Life Insurance Premium paid on his son's name Rs. 50,000
  - ix) Rs. 60,000 invested in PPF
  - x) Children education expenses paid Rs. 18,000
  - xi) A bank loan of Rs. 2,00,000 taken for repairing of house property. During the year Rs. 30,000 paid as interest and Rs. 25,000 paid as repayment of principal amount of loan.