	Utech
Name:	
Roll No.:	To Alarma (y Executing and Explant)
Invigilator's Signature :	

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

1. Choose the correct alternatives for the following :

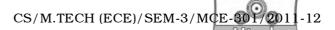
 $7 \times 2 = 14$

- i) Which one is the example of Intangible Property?
 - a) Cash at Bank
- b) Patent
- c) Machinery
- d) All of these.
- ii) In which of the following alternatives 'Artistic and Musical works' are associated ?
 - a) Patent

- b) Trade mark
- c) Copyright
- d) All of these.

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- iii) Hypothesis is
 - a) a tentative statement regarding two or more variables
 - b) a subject of population
 - c) an unpredicted statement
 - d) none of these.
- iv) Secondary data can be collected through
 - a) online database
 - b) case studies
 - c) mechanical devices
 - d) observation.
- v) The approach to learning that views that all knowledge is constructed from a base of prior knowledge is the
 - a) Behavioural approach
 - b) Gestalt approach
 - c) Cognitive approach
 - d) Constructivist approach.



- vi) To help students to find the answer to a question a teacher may use
 - a) closure
- b) cuing
- c) probing
- d) pacing.
- vii) Student will be able to 'identify the errors in a programme written in C++' is an example of an instructional objective at the level of
 - a) remember
- b) understand

c) apply

d) analyze.

GROUP - B

Answer any two questions.

 $2 \times 14 = 28$

2. Find two regression equations from the following data:

<i>X</i> :	6	2	10	4	8	12	14	16
Y:	9	11	5	8	7	11	16	18

Also estimate the value of *x* when y = 7.2.

12 + 2

- 3. a) What are the basic criteria for design a curriculum?
 - b) Explain organization of a technical curriculum.

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c) Mention the stages in curriculum development process. 3

- d) State the purposes of preparation of instructional objectives.
- e) Differentiate between 2 different instructional strategies.3

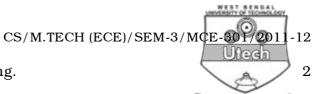
2

- 4. a) State the definition of teaching skill.
 - b) State, in a *tabular form*, the relationship between
 - i) 8 learning phases
 - ii) components of teaching skill and
 - iii) phases of classroom instructional plan. 4
 - c) Differentiate between Formative and Summative evaluations.
 - d) In trial stage of preparation of items an objective type test was administered on 120 students. The distribution of correct responses for 3 items is shown below. All items were responded by all students.

	Total No. of correct responses			
	Item 1	Item 2	Item 3	
1 — 12	8	2	9	
13 — 108	90	80	52	
109 — 120	2	8	9	

Calculate (i) FV and DI of each item and (ii) on the basis of these values interpret appropriateness of each item from the viewpoint of selection of the items for inclusion in a question bank. 3+3

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- 5. a) Define learning.
 - b) Define reinforcement.
 - c) Explain the major difference between positive reinforcement and negative reinforcement with an example.
 - d) Compare Cognitivism and Constructivism based on their applications in the Learning Teaching System.6

GROUP - C

Answer any *two* questions. $2 \times 14 = 28$

- 6. a) Discuss the importance of Intellectual Property Rights. 8
 - b) Discuss about different types of patents. 6
- 7. Explain in detail the procedure of registration of trade mark.
- 8. a) With respect to PERT explain the following: 4
 - i) Node
 - ii) Dummy activity.

b) From the following data pertaining to project P draw a
PERT diagram. Indicate earliest start and latest finish of
the activities. Determine the critical path and the
project completion time.

Activity	Expected duration (week)
1 — 2	6
1 — 3	12
2 - 4	13
3 - 4	5
3 — 5	16
4 — 5	7

9. a) 'Cost Benefit Analysis' is an important tool for determining Economic Feasibility of a project. Discuss.

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b) A Ltd. is considering purchase of a new machine. Two alternative machines, X and Y are available, each costing Rs. 4,00,000. Expected net cash inflows from both the machines are given below:

End of	Machine X	Machine Y	
Year	Rs.	Rs.	
1	60,000	2,40,000	
2	1,20,000	1,80,000	
3	1,80,000	1,20,000	
4	2,40,000	60,000	

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The cost of capital for the company is 10%. You are required to recommend the better alternative to the management of the company.

The PV factor at 10% :				
Yr.	1	2	3	4
PV factor	0.909	0.826	0.751	0.683

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