Reg. No.



## MANIPAL INSTITUTE OF TECHNOLOGY

**II SEMESTER M.TECH.** (CONSTRUCTION ENGINEERING AND MANAGEMENT)

### END SEMESTER EXAMINATIONS, APRIL/MAY 2017

#### PROGRAMME ELECTIVE III

#### SUBJECT: VALUATION TECHNIQUES IN ENGINEERING [CIE 5240] REVISED CREDIT SYSTEM (29/04/2017)

Time: 3 Hours

MAX. MARKS: 50

#### Instructions to Candidates:

- ✤ Answer ALL the questions.
- ✤ Missing data may be suitably assumed.

1A.	Explain the term value in connection with cost and price				
1B.	Briefly explain the purposes of valuation				
1C.	Calculate the depreciated replacement cost of a building having the following details using (i) Straight Line method (ii) Sinking fund method Total built up area of all the floors =350 Sqm, Age of the building= 25 years, Useful life of the building= 70 Years, Scrap value = 10%, Sinking fund @ 5%, Present rate of the building= ₹ 35000/sqm				
2A.	Explain "Law of land" and "Right of others" in connection with free hold properties				
2B.	What are the rights and Liabilities of a Lessee				
2C.	What are the rights and Liabilities of a Lessee         Plots with standard width of 18 at main residential locality of a city costs ₹ 2000 per sqm. If the depth of the plot is above 14m, cost increases by ₹ 500 per sqm and if the depth is below12m, cost reduces by ₹ 400 per sqm. It is observed that the cost of plots in other localities decreases by ₹ 200 per sqm per Km distance of locality from main residential locality, but remains constant after 2Km. Value the properties P <sub>1</sub> & P <sub>2</sub> having following details.         Property P1       i) Size 18m x 18m       ii) 2 Km away from main residential locality       iii) Good drainage with flat ground         iv) Facing towards sea.       Property P2       i) Size 18m x 11m       ii) Plot faces secondary road of width of 6m       iii) 5 Km         away from the main residential locality d) undulated ground requiring an average filling of 0.25 cubic meter per sqm of plot at ₹ 250/ cum. E) Well connected by public transport				
3A.	Explain (i) Intangible Rent (ii) Improved rent (iii) Ground Rent	03			

Reg. No.						
----------	--	--	--	--	--	--

# MANIPAL INSTITUTE OF TECHNOLOGY

RED BY	A Constituent Institution of Manipal University				
3B.	A leasehold apartment is purchased by a person with 30 years lease term for ₹ 8000000. The person now wishes to let it out for a monthly rent. If he is expecting a return of 8% on his capital and 3% on redemption of capital, what net rent he should expect from the letting? Also prove the same	04			
3C.	<ul> <li>Value the residential building as of April 2017 using Land and Building method.</li> <li>a) Land extent- 60 ft x 40 ft</li> <li>b) Plinth area constructed- 2300 sft</li> <li>c) Year of construction- 1998 in Manipal</li> <li>d) Composite rate of a property with nearly identical construction adjacent to this property = 1050(land)+2000(building) = ₹ 3050/sft</li> <li>e) Useful life of the building under valuation = 80 Years</li> <li>f) Salvage value 10%</li> <li>g) Compound wall(5 feet high) with gate and open well 45 feet deep with dry coursed rubble masonry</li> </ul>				
4A.	List out the instances of legal easements controlled by the provisions of the Indian easements Act, 1882.				
4B.	What are the items to be included and excluded while measuring the Plinth area as per IS 3861-1966				
4C.	A lessee has constructed a building worth ₹ 14, 00,000 on a leasehold land held by him on 99 years lease with a ground rent of ₹ 900 per month. The lease of 50 years is already over. The building has been let out on a net rent of ₹ 5000 per month for the first 21 years of unexpired period and thereafter for the remaining period the net rent will be ₹ 9000 per month Lessor expects at least 9% return. Adopt 5% for redemption of capital. Work out the lessee's interest in the property.				
5A.	Explain Income Capitalization Method for Agricultural Lands with reference to the owner of farm land is also the cultivator.				
5B.	Briefly discuss the factors to be considered while valuing "Licensed Premises". Also list the NOCs to be obtained	03			
5C.	Determine the standard rent of a building with the following data. (i) Construction Cost Sub structure $₹ 5, 00,000$ Civil Super structure $₹ 45, 00,000$ Elevators $₹ 5, 00,000$ Pumps $₹ 25,000$ (ii) Land Value $₹ 10, 00,000$ (iii) SF@5% for Life (Years) Building 70 Elevator 30 Pump 10 (iv) Other outgoings @ ₹ 5,000/month (v) Municipal Tax @ 30% of gross rent (vi) Adopt net returns @ 8% and 7% (vii) Insurance @ 0.2% of cost of construction (viii) Rent collection and Management charges @5% of gross rent (ix) Annual repairs for the building, elevator and pumps may be assumed suitably	05			