

Reg. No.

**MANIPAL INSTITUTE OF TECHNOLOGY**

MANIPAL

*(A constituent institution of MAHE, Manipal)*

**II SEMESTER M.TECH. (CONSTRUCTION ENGINEERING & MANAGEMENT)**  
**END SEMESTER EXAMINATIONS, APRIL/MAY 2018**  
**PROGRAM ELECTIVE III**  
**SUBJECT: VALUATION TECHNIQUES IN ENGINEERING [CIE 5240]**  
**REVISED CREDIT SYSTEM**  
**(27/04/2018)**

Time: 3 Hours

MAX. MARKS: 50

**Instructions to Candidates:**

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

1A.	What is standard rent? When and How to fix the standard rent? Briefly explain the Loading Factor in connection with standard rent	03
1B.	Explain (a) Speculative Value (b) Distress Value (c) Assessed Value (iv) Potential Value	04
1C.	A person purchases a leasehold property for Rs.8 Lakhs, lease period being 55 years of which 30 years already expired. What is the amount to be provided annually for redemption of capital at 3%? Suppose the person decides to sell of his/her interest after 10 years, what is the amount of accumulated sinking fund at that stage?	03
2A.	What are the methods of valuation for open Lands? Explain "Abstractive method" in detail.	03
2B.	A lease hold apartment has been purchased by a person with 30 years lease term for Rs.45 Lakhs. The person now wishes to let it out at a monthly rent to get some income, expecting a return of 8% for capital invested and for redemption of capital at 3%. What net income should the person expect from the letting? Prove the same.	03
2C.	A certain leasehold property is held for a long term of lease having 54 years to run at a ground rent of Rs. 5000 per annum. The property is sublet on full repairing lease expiring in 18 years' time at Rs. 4500 per month. The present rental value is Rs. 6500 per month. Value the interest of the lessee. Adopt interest on capital at 9% and for redemption of capital at 4.5%, reversion at 9%.	04
3A.	Explain, (i) Good will Value (ii) Functional Obsolescence in relation to value depreciation (iii) Assets chargeable and assets exempted under wealth tax act	06
3B.	A restaurant is constructed on a free hold plot of land in the business Centre of a city. The gross receipt during a particular year is Rs. 90, 00,000/-. The owner has to spend Rs. 25, 00,000/- for the purchase of food stuff item. If the owner has to pay an amount, of Rs. 45,000 towards insurance premium, municipal tax etc., calculate the value of the property. Other out goings may be assumed at 10% of gross income. YP may be calculated in perpetuity at 12%.	05
4A.	Explain in detail (i) Restriction on the powers of a freeholder (ii) Creation and extinguishment of easements	05

<b>4B.</b>	<p>A building was constructed 20 years back on a freehold tenure land. The building fetches a monthly rent of Rs. 90,000/-. What amount would you recommend for advancing a loan to the owner against mortgage, if the rate of land in that area is Rs. 50,000/m<sup>2</sup>?</p> <p>Adopt, Insurance. = Rs. 3500/annum, Municipal tax= 5% of gross rent, Future life=55 years, Interest rate on capital @8% and for redemption of capital at 5%, Repairs and maintenance charges @ 10% of gross rent, Management &amp; collection charges @6% of gross rent. Land area=900 sqm. PV of Re V-receivable after "n" years@5%</p>	<b>05</b>
<b>5A.</b>	<p>A lessee has constructed a building worth Rs: 5,00,000/- on a lease hold land held by him on 99 years lease with a ground rent of Rs. 500/month. The lease period of 49 years is already expired. The building has been let out at a net rent of Rs. 4500/month for the first 20 years of un-expired period and for the remaining period; the net rent will be Rs. 6000/month. Work out lessee's interest in the property. The free holder expects at least 8% return. Adopt 5% for redemption of capital.</p>	<b>05</b>
<b>5B.</b>	<p>Value the residential building as of April 2018 using Composite rate method.</p> <ul style="list-style-type: none"> <li>a) Land extent- 60 ft x 40 ft</li> <li>b) Plinth area constructed- 2300 sft</li> <li>c) FSI achieved of the building under comparison= 1.50</li> <li>d) Year.of construction- 1998 in Manipal</li> <li>e) Composite rate of a property with nearly identical construction adjacent to this property = Rs.2950/sft (1150 for land &amp; 1800 for construction)</li> <li>f) Useful life of the building under valuation = 80 Years</li> <li>g) Salvage value at 10%</li> <li>h) age of the building under valuation= 20 years</li> </ul>	<b>05</b>