



MANIPAL INSTITUTE OF TECHNOLOGY
(Constituent College of Manipal University))

Manipal – 576 104.



Reg. No:

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SECOND SEMESTER M.TECH (CONSTRUCTION ENGINEERING & MANAGEMENT)

END SEMESTER EXAMINATION, MAY/JUNE – 2016

ELECTIVE-I

VALUATION TECHNIQUES IN ENGINEERING (CIE – 562)
(Revised Credit System)

09-07-2016

TIME: 3 HRS.]

[MAX. MARKS: 50

Note: 1. Answer **any FIVE FULL** questions.

2. Any missing data may be suitably assumed & clearly be indicated.

1. a) Distinguish between value depreciation and cost depreciation (02)
1. b) Briefly explain (i) Salvage value (ii) Sentimental value (iii) Iconic models (03)
- 1.c) The present value of a truck is Rs. 9,00,000 and has an expected life of another 15 years. The scrap value may be estimated at 10% of its present value. Determine the annual depreciation and book value for each year up to first 5 years using (i) Constant percentage method (ii) Sinking Fund method at 4% (05)
- 2.a) Briefly explain the Loading factor with reference to standard rent (02)
- 2.b) A property is partly owner occupied and partly rented out and is required to be valued. Prepare the valuation report, given the following data.
 - a) R.C.C. framed building - Ground + 5 upper floors with elevator and water pumps.
 - b) FSI = 1.00 is fully utilized for the plot area of 6000 sqm.
 - c) Second floor is occupied by the owner.
 - d) Land rate = Rs. 4500/sqm.
 - e) Rent from tenanted portion = Rs. 1, 40,000 per month.
 - f) Municipal tax @ 45% of net rateable value
 - g) Insurance premium = Rs. 5000 per annum
 - h) Depreciation for the age of 5 years @ 4%
 - i) Present cost of construction = Rs. 7000/sqm.
 - j) Net rateable value = Rs. 9,00,000
 - k) PV of Re. 1/- per annum allowing interest on capital at 9% and for redemption of capital at 4% for 60 years.
 - l) PV of Rs. 1 payable at the end of 60 years at 7%

- m) Repairs at 10% of gross rent.
 - n) Rent collection and management charges at 5% of gross rent (which includes everything)
 - o) Plinth area of each floor is same (08)
- 3.a) Explain in detail “deferred land value” (03)
- 3.b) Explain the method of valuation by reference to profits(accounts method) (02)
- 3.c) 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 items. If the owner has to pay an amount of Rs. 45,000 towards insurance premium, municipal tax etc., calculate the value of the property. (05)
- 4.a) Explain dominant and servient heritage (03)
- 4.b) What are the rights of a lessee ? (02)
- 4.c) 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. (05)
- 5.a) Discuss the methods of valuation of Agricultural lands (03)
- 5.b) List the various no objection certificates to be obtained in order to start a cinema(02)
- 5.c) Prepare the valuation report of your own house assuming yourself as a registered Bank Valuer (05)
- 6.a) Define easements. What are “Self imposed” and “Legally created” easements? How does an easement extinguish? (04)
- 6.b) A property consists of basement, ground and one upper floor. The plot area is 1800 sqm. The built up area of each floor is 450 sqm. The basement and the ground floor are rented on lease to a Bank for an annual net rent of Rs. 2,00,000/-. The lease period is of 5 years and can further be extended for a term of another 5 years at the option of the lessee. The lease period of 2 years has already expired. The first floor is occupied by the owner and its net fair annual letting value may be estimated at Rs. 90,000/-. Work out the value of the property. YP may be calculated @ 10% on capital and 5% for redemption for the first 3 years. For the owner occupied portion, capitalize in perpetuity with YP. (06)
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