

COMMON WRITTEN EXAMINATION - 2020/2021



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Higher National Diploma in Quantity Surveying NVQ Level 06 – Semester I				
Construction Economics	F45C002M17	Three Hours		
Answer any five (05) questions only				

ANNEXURE:

- 1. 5% Discount Table
- 2. Drawing -1

Q1.

(i) What are the factors other than initial cost to be considered in lifecycle costing?

(5 Marks)

(ii) Compare the whole life cycle cost of Aluminum and UPVC rain water goods for a building with an anticipated lifecycle of 50 years. The initial costs are Rs.6,500.00 and Rs.3,700.00 respectively and the anticipated lifecycle are estimated at 35 years and 15 years respectively. The current cost of replacing the pipes would be Rs.7,250.00 for Aluminium and Rs.4,200.00 for UPVC. The replacement cost is equal to the initial cost plus an allowance for removing of existing and preparing for new installation. A suggested discount rate for calculation purposes is 5% including the inflation. The effect of taxation can be ignored. (15 Marks)

Q2. M & M sea food hotel (four star) owner appointed you as a maintenance engineer for his hotel maintenance.

(i) State five advantages of good planned maintenance of M & M sea food hotel.

(5 Marks)

- (ii) "Unplanned or contingency will create various challenges in the M & M sea food hotel", examine this statement.
 (5 Marks)
- (iii) What are the user philosophies in the maintenance, briefly explain the reasons for appointing maintenance engineer to conduct the maintenance carried out in the hotel? (10 Marks)

Q3.

 (i) Draft urban land use/ value pattern in the given city location (Galanigama) and explain the key factors that you have accompanied in determining the fluctuations of land value.

(8 Marks)

(ii) Compare and contrast the urban rent gradients in the given urban area as 'A-B' & 'X-Y'.Your answer shall accompany with the urban rent gradient charts. (12 Marks)

Q4.

Design and illustrate the agglomeration of residential and industrial zones, based on the general theories on the locations of activities within an urban area and the land use pattern. (20 Marks)

Q5.

- (i) Describe the main determinants of urban rent gradients. (4 Marks)
- (ii) Explain how far the transport modes and costs influence on the price of a land?

(6 Marks)

(iii) With annotated sketches, explain the typical factors that determine typical rent gradients in urban areas.(10 Marks)

Q6.

Give short notes on any five (5) of the followings.

- (i) Advantages of Preventive Maintenance
- (ii) Preliminary estimating methods
- (iii) Property Development
- (iv) Land Valuation Methods
- (v) Concepts of Environmental Economics
- (vi) Essence of Development Sources of Financing

(5 x 4 = 20 Marks)

Year	Present value of Rs1	Year	Years purchase
	5%		5%
1	0.05228	1	0.05228
1	0.95258	2	1 85041
$\frac{2}{3}$	0.86384	$\frac{2}{3}$	2 72325
1	0.82270	1	3 54595
5	0.78353	5	4 32948
5	0.76555	5	4.52940
6	0.74622	6	5.07569
7	0.71068	7	5.78637
8	0.67684	8	6.46321
9	0.64461	9	7.10782
10	0.61391	10	7.72173
11	0.58468	11	8 30641
11	0.55684	11	8.50041
12	0.53084	12	0.20257
13	0.55052	13	9.59557
14	0.48102	14	10 37966
15	0.48102	15	10.57900
16	0.45811	16	10.83777
17	0.43630	17	11.27407
18	0.41552	18	11.68959
19	0.39573	19	12.08532
20	0.37689	20	12.46221
21	0 35894	21	12 82115
21	0.34185	21	13 16300
22	0.32557	22	13 48857
23	0.31007	23	13 79864
25	0.29530	25	14 09394
25	0.27030	25	11.09591
26	0.28124	26	14.37519
27	0.26785	27	14.64303
28	0.25509	28	14.89813
29	0.24295	29	15.14107
30	0.23138	30	15.37245
31	0.22036	31	15 50281
32	0.22030	32	15.80268
32	0.11987	32	16.00255
34	0 19035	34	16 19290
35	0.18129	35	16 37419
	0.1012)		10.0 / 11 /
36	0.17266	36	16.54685
37	0.16444	37	16.71129
38	0.15661	38	16.86789
39	0.14915	39	17.01704
40	0.14205	40	17.15909
<u>41</u>	0 13528	<u>4</u> 1	17 29/37
42	0.12884	42	17 42321
43	0.12270	43	17 54591
44	0.11686	44	17 66277
45	0.11130	45	17.77407
	0.11150		11.11101
46	0.10600	46	17.88007
47	0.10095	47	17.98102
48	0.09614	48	18.07716
49	0.09156	49	18.16872
50	0.08720	50	18.25593

Discount tables

