



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

A

Workshop

Report

On

Estimation and Valuation by using of Microsoft Excel



Organized by

DEPARTMENT OF CIVIL ENGINEERING, PIET

Mr. Mukul Nama
Event Co-coordinator

Dr. P.N. Dadhich
(HOD Civil, Department)



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

Objective

To Enhance the skills of students in quantitative analysis of building materials with the help of Microsoft Excel

About the Workshop:

The Three Days workshop Conducted on “**Estimation and Valuation by using of Microsoft Excel**” on the date **15th to 17th Jan 2019**. The Department of Civil Engineering organized an Workshop for introducing the use of Microsoft Excel in quantitative analysis of building materials and billing. Microsoft Excel is one of the software can be used for arithmetic calculation and plotting different type of graphs. The calculation time can be saved by efficiently using MS excel.

Venue- BB-26

Time – 8:00 am -3.00 pm

Date - 15th to 17th Jan 2019

Resource Person- Mr. Rohit Sharma MD Texel Group

Work Plan

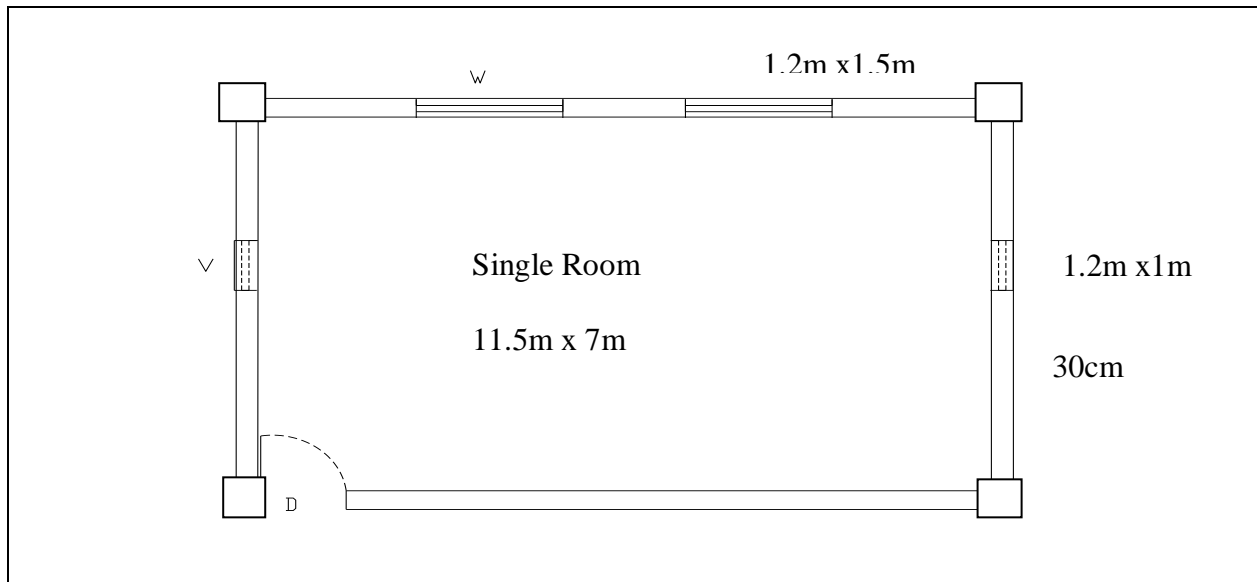
1. Drawing the plan and elevation of the chosen building on the site.
 2. Preparing detail sheet of estimate and billing.
-
1. **Drawing the plan and elevation of the chosen building on the site.**



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA



1. Detail Sheet

S N	Particulars of items	No	Length h (m)	Breadth h (m)	Height / Depth (m)	Quantity y (m ³)	Explanation	Rate	Cost

Participation:

The activity was well attended. The participants were interested students of 2nd year of branch civil engineering. There were student's participants and 5 faculty members in the workshop while the workshop was planned for 42 participants.

Methodology of workshop estimating and billing

1. Prepared a plot of selected building for cost analysis on the site.



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

2. Measured the dimensions of each part of building.
3. Prepared a detail sheet on the Microsoft Excel containing quantities of each dimensions.
4. Decided suitable rates of each work item according to Basic Schedule Rate (BSR).
5. Obtained cost of each work items by multiplying quantity with rate by using operations in excel.
6. The total cost of construction of the building is calculated by taking summation of costs of individual work item.

Expected Outcome

With this departmental organized Workshop student got the proper knowledge about estimating and billing of a building material and use of MS excel to reduce the time consumption in computation of quantities. In this workshop students are also introduce to go through different standard codes for evaluating the rates of different items of work and finalizing the cost of construction of a building.

A sample work out come

A working excel spread sheet submitted by a student is given below

Objective: To prepare an estimate of two room plan on excel sheet using long wall short wall mmethod.

SN	Particulars	no.	Length	Breath	Height / Depth	Quantity	Rate	Cost
1	Excavation Work		(m)	(m)	(m)	(m ³)	Rs/:-	Rs
	Long Wall	2	10.4	0.8	1.2	19.968	200	3993.6
	Short Wall	3	5.5	0.8	1.2	15.84	200	3168
					Total	35.808		7161.6
2	Lime Concrete in foundation							
	Long Wall	2	10.4	0.8	0.4	6.656	3600	23962
	Short Wall	3	5.5	0.8	0.4	5.28	3600	19008
					Total	11.936		42970
3	Brick work in foundation & plinth							
	for 1st footing							
	Long Wall	2	10.2	0.6	0.3	3.672	4000	14688



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

	Short Wall	3	5.7	0.6	0.3	3.078	4000	12312
	for 2nd footing							
	Long Wall	2	10.1	0.5	0.3	3.03	4000	12120
	short Wall	3	5.8	0.5	0.3	2.61	4000	10440
	for 3rd footing (plinth)							
	Long Wall	2	10	0.4	0.5	4	4000	16000
	Short Wall	3	5.9	0.4	0.5	3.54	4000	14160
					Total	19.93		79720
4	Brick work in super structure							
	Long Wall	2	9.9	0.3	3.8	22.572	4000	90288
	Short Wall	3	6	0.3	3.8	20.52	4000	82080
					Total	43.092		172368
	Deduction							
	Doors	2	1.2	0.3	2.1	1.512		
	Windows	4	1.2	0.3	1.5	2.16		
	Ventilaters	4	0.8	0.3	0.5	0.48		
	Lintel for Doors	2	1.2	0.3	0.2	0.144		
	Lintel for Windows	4	1.2	0.3	0.2	0.288		
					Total brick work(Net)	38.508	4000	154032
5	Damp proof course							
	Long Wall	2	10	0.4	0.02	0.16	1000	160
	Short Wall	3	5.9	0.4	0.02	0.1416	1000	141.6
					Total	0.3016		301.6
6	12 mm plaster (cement sand 1:6)							
	Long Wall	2	9.3		3.8	70.68	600	42408
	Short Wall	3	6		3.8	68.4	600	41040
					Total	139.08		83448
7	R.C.C. Work							
	Roof Slab	1	10	5.9	0.2	11.8	10000	118000
	Lintel for Doors	2	1.4	0.3	0.2	0.168	10000	1680
	Lintel for Windows (top & bottom)	4	1.4	0.3	0.2	0.336	10000	3360
	Lintel for Ventilater(top & bottom)	4	0.8	0.3	0.2	0.192	10000	1920
					Total			124960
					Grand Total			192593

Outcome:



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

We found estimating and billing is a very important part of study for civil engineers. We learnt how to measure dimensions of various parts of a building by distometer, computing the material quantity requirement on the excel sheet, rates of different items of work with the help of BSR and finalizing the total cost of construction of a building. The study of use of excel in computation of quantities of materials and cost was the main target of this Workshop. This workshop facilitated to enhance the skills and confidence of students for quantitative analysis of building material by using MS excel and give them chance to apply the theoretical knowledge to practical field.

Poornima Institute of Engineering & Technology, Jaipur
Department of Civil Engineering
Evaluation 2018-19

Sr. No.	Reg. No.	Name of Student	Maximum Marks 10
1	PIET17CE001	ABHISHEK PRAJAPAT	7
2	PIET17CE002	ADITYA GAUTAM	4
4	PIET17CE004	AKASH SHARMA	6
5	PIET17CE005	AMAN VAISHNAV	5
6	PIET17CE007	ARVIND .	8
8	PIET17CE009	ATUL MEENA .	7
9	PIET17CE010	CHANCHAL MEENA .	8
10	PIET17CE011	CHARANPREET SINGH	AB
11	PIET17CE012	CHINMAY SHARMA	4
12	PIET17CE013	DEEKSHA SHARMA .	8
13	PIET17CE014	DEEPAK CHOUDHARY	9
14	PIET17CE015	DEEPAK SHARMA	8
15	PIET17CE016	DEVENDRA BHATT .	AB
16	PIET17CE017	GOVIND KUMAR SHARMA	7
17	PIET17CE018	HARSH VARDHAN GAUR	5
18	PIET17CE019	HARSHIT SISODIYA .	4
19	PIET17CE020	HITESH KUMAR SHARMA .	5
20	PIET17CE021	JATIN AGRAWAL	7
21	PIET17CE022	JITESH MEENA .	4



POORNIMA

INSTITUTE OF ENGINEERING & TECHNOLOGY

Affiliated to RTU, Kota • Approved by AICTE & UGC under 2(f) • Accredited by NAAC and NBA

22	PIET17CE023	JULFIKAR ALI .	4
23	PIET17CE024	KAMLESH KUMAR YADAV	6
24	PIET17CE025	KOMAL SAHARIYA	AB
25	PIET17CE026	KRISHNA BAIRWA	AB
26	PIET17CE027	KRISHNA YADAV	6
27	PIET17CE028	KRITESH MAHESHWARI	6
28	PIET17CE029	LOKENDRA SINGH .	7
29	PIET17CE030	MAHENDRA KUMAR .	6
30	PIET17CE031	MANISH SINGH SHEKHAWAT	5
31	PIET17CE032	MUKESH KUMAWAT	7
32	PIET17CE033	NILESH KUMAWAT	4
33	PIET17CE034	NIRANJAN KRISHNIYA	8
34	PIET17CE035	PRADHUMAN MEENA	AB
35	PIET17CE036	PRAHLAD CHOUDHARY	6
36	PIET17CE037	PRATHAM PRAJAPAT .	8
37	PIET17CE038	PUNEET DADHICH	3
38	PIET17CE039	RAHUL DEO	8
39	PIET17CE041	RAHUL KUMAR JANGID	AB
40	PIET17CE042	RAHUL SUKHWAL .	8
41	PIET17CE043	RAKESH KUMAWAT	4
42	PIET17CE044	RAMBHAROS MEENA	4