

NAME - SKASTFALI

DEPT - CSE.1 ROLL - 37

SEM - 5th

1. Enter the following tasks, resources & materials for the following project and calculate cost for each resource and material using tabular format and also calculate the total cost of the project.

Tasks	Duration (indays)	Resources	Standard Rate	Materials	M. Cost	Dependency
T ₁	5	R ₁ , R ₂	R ₁ = \$14/Hr	M ₁	M ₁ = \$12	indep.
T ₂	4	R ₃ , R ₄	R ₂ = \$10/Hr	2M ₁ , M ₂	M ₂ = \$16	indep.
T ₃	5	R ₁ , R ₅	R ₃ = \$12/Hr	3M ₂	M ₃ = \$8	T ₁
T ₄	7	R ₂ , R ₃	R ₄ = \$15/Hr	M ₂ , 3M ₃	M ₄ = \$12	T ₂
T ₅	8	R ₄ , R ₅	R ₅ = \$16/Hr	2M ₃ , 2M ₄		T ₄

Cost of project :-

Resource	Total Working hours	Cost of resource (in \$)
R ₁	(5+5) 8 = 80 hrs	14 × 80 = \$1120
R ₂	(5+7) 8 = 96 hrs	10 × 96 = \$960
R ₃	(4+7) 8 = 88 hrs	12 × 88 = \$1056
R ₄	(4+8) 8 = 96 hrs	15 × 96 = \$1440
R ₅	(5+8) 8 = 104 hrs	16 × 104 = \$1664

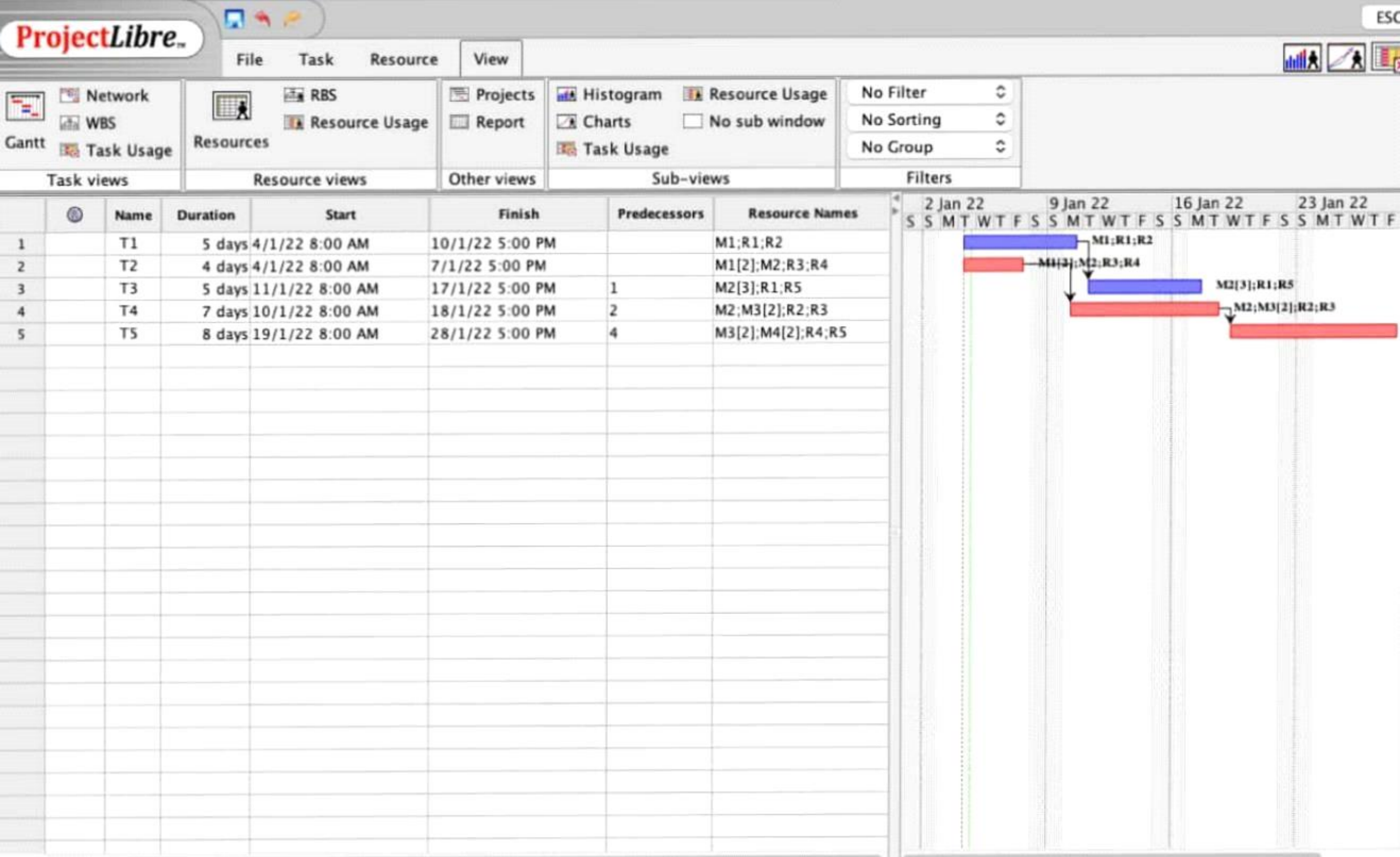
Material	Total units required	Cost of material (in ₹)
M1	$1+2=3$	$12 \times 3 = 36$
M2	$1+3+1=5$	$16 \times 5 = 80$
M3	$2+2=4$	$18 \times 4 = 72$
M4	2	$12 \times 2 = 24$

Total cost of project = $(1120 + 960 + 1056 + 1440 + 1664 + 36 + 80 + 72 + 24)$
= \$ 6452.

2. Consider the following project and find out the expected time (te) for each task.

Tasks	time in (days)			predecessors
	to	tm	tp	
PTW-1	2	4	6	none
PTW-2	2	3	10	none
PTW-3	4	6	8	PTW-1
PTW-4	1	5	15	PTW-2

Signature _____



$$t_e = (t_o + 4t_m + t_p) / 6$$

$$PTW-1 \rightarrow t_e = (2 + 4(4) + 6) / 6 = 4 \text{ days}$$

$$PTW-2 \rightarrow t_e = (2 + 4(3) + 6) / 6 = 4 \text{ days}$$

$$PTW-3 \rightarrow t_e = (4 + 4(6) + 8) / 6 = 6 \text{ days}$$

$$PTW-4 \rightarrow t_e = (1 + 4(5) + 15) / 6 = 6 \text{ days}$$