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Answer1)

(a) No. of user inputs = 30
No. of user outputs = 20
No. of user inquiries = 08
No. of files = 7
No. of external interfaces = 6

we draw The table firstly

Measurement parameter	Count		weighing factor Simple Average Complex
No. of external input(EI)	30	*	4 = 120
No. of external output(EO)	20	*	5 = 100
No. of external inquiries (EQ)	8	*	4 = 32
No. of internal files (ILF)	7	*	10 = 70
No. of external infaces (EIF)	6	*	7 = 42
Count-total			364

Now Fi for moderate case = 2
So Sum of all Fi (i ← 1 to 14) = 14 * 2 = 28

$$FP = Count\text{-}total * [0.65 + 0.01 * \Sigma(Fi)]$$
$$= 364 * [0.65 + 0.01 * 28]$$
$$= 364 * [0.65 + 0.28]$$
$$= 364 * 0.93$$
~~$= 447.72 = 448$~~
$$= 338.52$$

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(B) Four Shortcomings of LOC are:-

(i) Lack of accountability: Lines of code measure suffers from some fundamental problems. A few think it ~~isn't~~ isn't useful to measure the productivity of a project using only results from the coding phase, which usually accounts for only 30% to 35% of the overall effort.

(ii) Lack of Cohesion with functionally: Though experiments have repeatedly confirmed that effort is highly correlated with LOC functionally is less well correlated with LOC. That is skilled developers possibly able to develop the same functionally with far less code so one program with less LOC may exhibit more functionally than another similar program. Especially LOC is a poor productivity measure of individuals because a developer who develops only a few lines may still be more productive than a developer creating more lines of code.

(iii) Adverse Impact on Estimation: Because of the fact presented under point (a), estimates based on lines of code can adversely go wrong in all possibility.

(iv) Developer's Experience: Implementation of a specific logic differs based on the level of experience of the developer. Therefore number of lines of code differs from person to person. An experienced developer may perhaps implement certain functionality in fewer lines of code than another developer of relatively less experience does though they use the same language.