HW 0 solution 3 Wednesday, January 26, 2022 11:48 PM (enh'ty) PROTEIN . NAME SEQUENCE · STRUCTURE · PROTEIN ID (PID) FUNCTION (entity) . NAME . CLASS SUBCLASS FUNCTION ID (FID) MANY - TO- MANY PID FID PROT FUNCTION PROT FUNC A protein has at least one function. C-Cotal participation) But there might be some functions not covered by proteins but other macromolecules Chence partial participation) 1 r more proteins can have the same function aggregate relations hip MANY - TO- MANY PID FID PROT FUNCTION PROT FUNC Assumption -PID Assumption -Not all journal FID or more functions may Lefernces experimentally gene annotation EXPT PREDICTED pregram Confirm a protein function CONFIRMED . Not all gene are used for ( partial porticipation ONE- 70- MANY protein function ONE - TO -MANY JID prodiction GENE ANNOTATION JOURNAL REF 90000 further prediction lises only one gene amotation program AU proteins functions are prodicted or expt confirmed

( total participation)

ANNOTATION PROGRAM (centify) GENE ANNOTATION PROGRAM (contity) ID (41D) JOURNAL REFERENCE (entity) · 10 (310) ONE-70-0NE JOURNAL PROGRAM REFERENCE GENE ANNOTATION PROGRAM Assumption - Not all journel references necessarily need to even discuss gene annotation programs. They can refer to other subjects as well. Cellular Parhway (entity) · ID (LPID) Ternany relationship PATHWAYS Assumptions -PATHWAYS THROUGH · Only "some" proteins function in 1 or more pathways PROT (partial participation) FID Not all pathways are caused out by proteins (partial paricipation) FUNCTION