

EEE 471

Name: Othman Alkhatib Alkhatib

Dept: Elect Eng

matlab: 1A11104162

i) Signal processing condenses measurements to extract information about a state of an object parameter or study. Signal processing can be described from different perspectives. To a sensor designer it is one part of a sensor system so as to various other fields signal processing is taken from a different point of view. To an electrical engineer, it is restricted to digitalization, sampling filtering and spectral estimation.

Signal processing systems include:-

- Digitalization - (Sampling time and quantizing to amplitude)
- Band pass and base band filtering
- Beam forming
- Coherent integration

41) In artificial intelligence an expert system is a computer program imitating the decisions of a expert. An expert system usually consists of 4 components

i) knowledge

ii) Base, the search or inference system

iii) a knowledge acquisition system

iv) user interface.

Expert systems are designed to solve computer problems by reasoning through bodies of knowledge. represented mainly as if rather than through conventional procedural code.

The expert system can also be split into two subsystems, the inference system and the knowledge base. The knowledge base contains the facts & rules. The inference engine applies said rules to facts to deduce new facts. Inference can also

include explanation & debugging