

integrated with signal processing ensembles.

- ii) Write about the principles of a smart transmitter and discuss some (6) aspects of its development in recent years.

(OR)

- b) i) With appropriate diagram, discuss how Plasma Enhanced Chemical (7) Vapour Deposition (PECVD) technique improves over simple chemical vapour deposition technique.
- ii) Depict the four micromachining techniques. (7)

- 23. a) i) Show the importance of filtering operation and classify its types in (8) detail.
- ii) Discuss about the process of quantization in data conversion. (6)

(OR)

- b) i) Briefly on the discussion of anyone type of D/A converter. (8)
- ii) How voltage to frequency converter is performed for conditioning (6) the signal.

- 24. a) Describe in detail about generalized configurations and functional descriptions of measuring instruments.

(OR)

- b) With neat sketch, explain the components of digital transmission system.

- 25. a) Elaborate in detail about the two major categories of accelerometers.

(OR)

- b) i) Enumerate the operation of infrared imaging systems. (10)
- ii) Express the methods used in acoustic emission holography. (4)
