

Module IV

17. a). How is data transferred directly between memory and I/O device without the involvement of processor? How is it different from other I/O device? (10)
- b). What is handshaking? Explain asynchronous hand shaking protocol with signal diagrams (10)
18. a). Explain pipelined data path with neat diagram. How does it improve the performance of the system? (10)
- b). Explain hazards in pipeline architecture .How they are overcome? (10)

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