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PART B - (5 × 13 = 65 marks) 11. (a) (i) Discuss in detail about Basic Operational concepts of a computer (ii) If computer A runs a program in 10 seconds and computer B r the same program in 15 seconds how much faster is A than B? Photoplex. Not & android oup (b) Explain the different addressing modes with suitable examples. Discuss in detail about how the division (11/3) is performed. Elaborate 12. (a) the algorithm used in detail with a sketch. (b) Briefly explain the function of Carry look-ahead adder with a ne 13. (a) State and explain the different types of hazards that may occur in Or (b) Describe in detail about the pipelined implementation of data path wi 14. (a) Explain shared memory multiprocessor architecture with a ne diagram. Or Explain in detail about Flynn's classification with neat diagrams. (b) 15. (a) Elaborate on the virtual memory address translation and TLB wir necessary diagram. binils. Com & binils android off Or Explain in detail about interrupts with diagram. PART C — $(1 \times 15 = 15 \text{ marks})$ 16. (a) Explain the various memory mapping schemes used in cache memor design. Solve the following problems using BOOTH'S ALGORITHM (+13)×(-11) (+13)×(+11) (-13)×(-11) $(-13)\times(+11)$ 2 2041

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