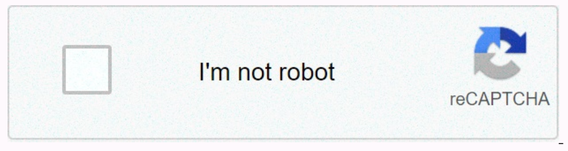

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The page you are looking for may be moved or deleted. Skip Bibliometrics Section Skip Abstract SectionAbstract The computing world today is in the middle of a revolution: mobile clients and cloud computing have emerged as the dominant paradigms driving programming and hardware innovation today. The Fifth Edition of Computer Architecture focuses on this dramatic shift, exploring the ways in which software and technology in the "cloud" are accessed by cell phones, tablets, laptops, and other mobile computing devices. Each chapter includes two real-world examples, one mobile and one datacenter, to illustrate this revolutionary change. Updated to cover the mobile computing revolutionEmphasizes the two most important topics in architecture today: memory hierarchy and parallelism in all its forms.Develops common themes throughout each chapter: power, performance, cost, dependability, protection, programming models, and emerging trends ("What's Next")Includes three review appendices in the printed text. Additional reference appendices are available online.Includes updated Case Studies and completely new exercises. Adve, S. V., and K. Gharachorloo [1996]. "Shared memory consistency models: A tutorial," IEEE Computer 29:12 (December), 66-76. Adve, S. V., and M. D.
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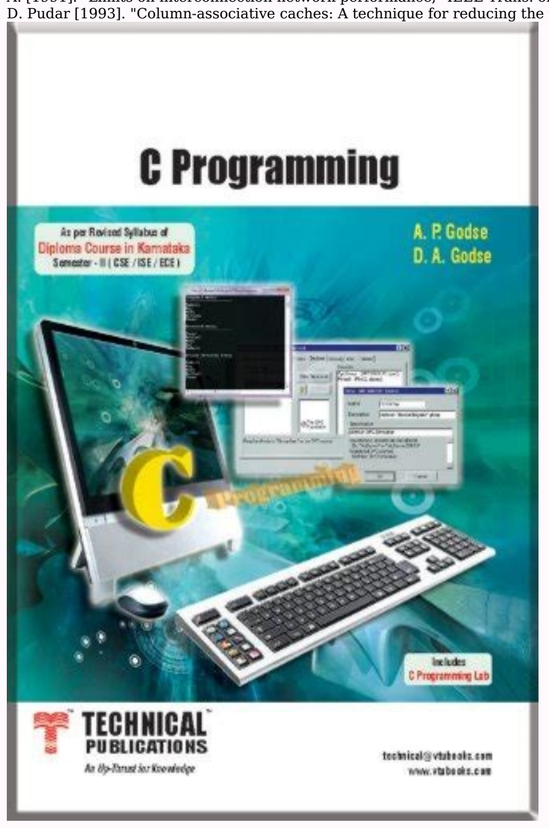

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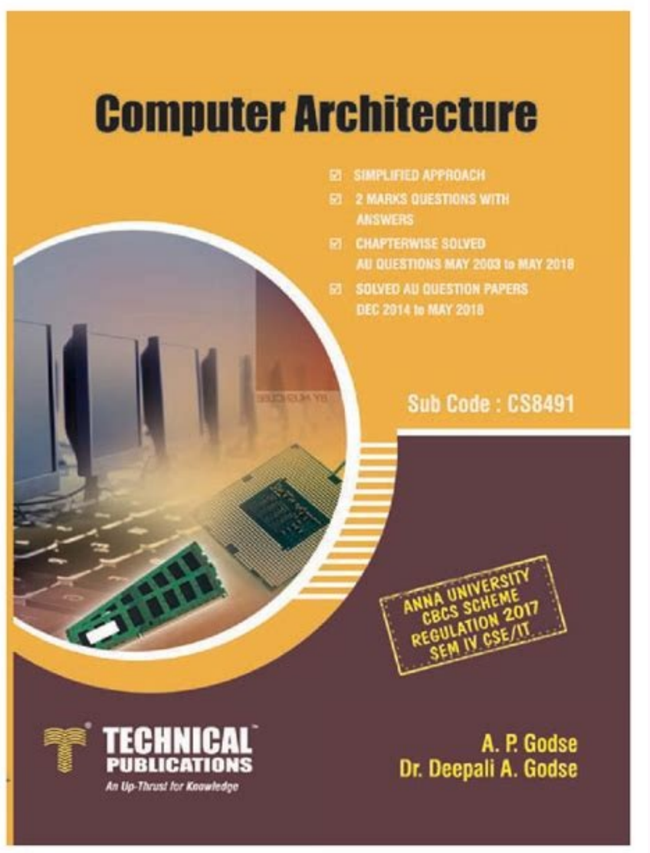

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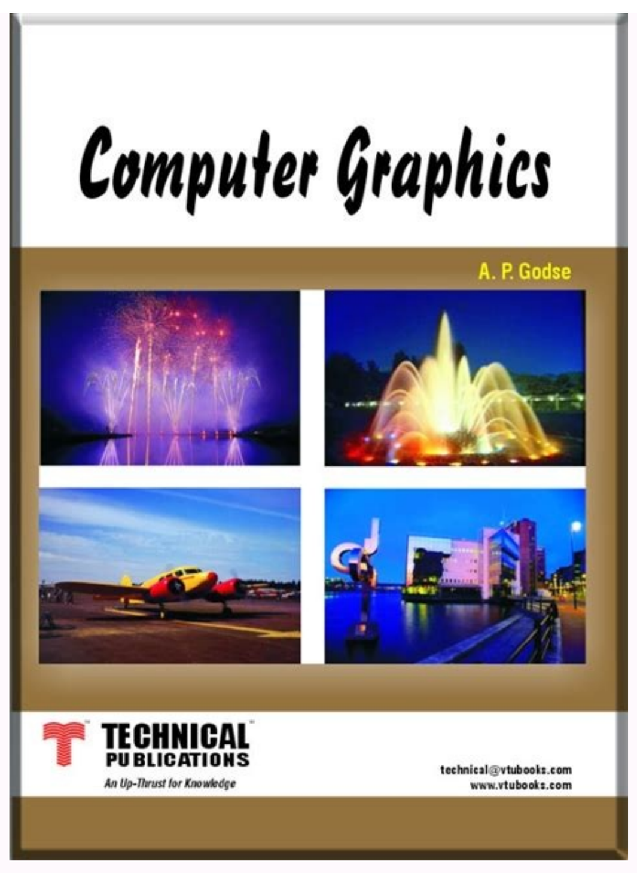

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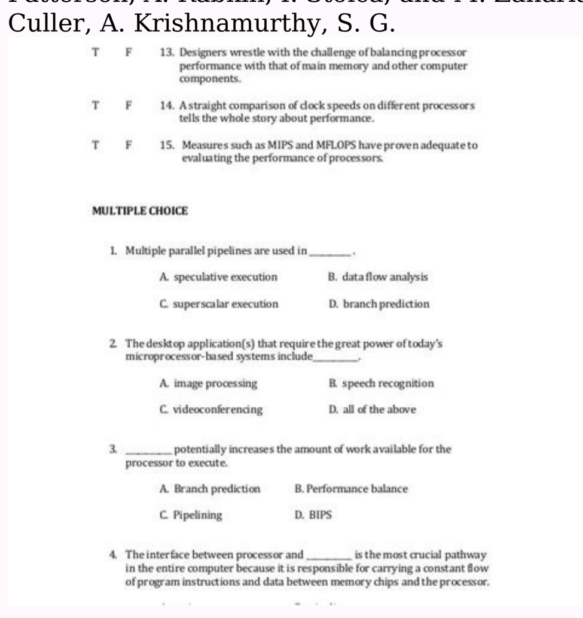
T F 13. Designers wrestle with the challenge of balancing processor performance with that of main memory and other computer components.

T F 14. A straight comparison of clock speeds on different processors tells the whole story about performance.

T F 15. Measures such as MIPS and MFLOPS have proven adequate to evaluating the performance of processors.

MULTIPLE CHOICE

1. Multiple parallel pipelines are used in ________.

A. speculative execution B. data flow analysis

C. superscalar execution D. branch prediction

2. The desktop application(s) that require the great power of today's microprocessor-based systems include ________.

A. image processing B. speech recognition

C. videoconferencing D. all of the above

3. ________ potentially increases the amount of work available for the processor to execute.

A. Branch prediction B. Performance balance

C. Pipelining D. BIPS

4. The interface between processor and ________ is the most crucial pathway in the entire computer because it is responsible for carrying a constant flow of program instructions and data between memory chips and the processor.

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It uses C programming language to implement various algorithms explained in the book.The book is divided into two parts. The first part focuses on a wide range of exciting topics such as illumination and colour models, shading algorithms, line, curves, circle and ellipse drawing algorithms, polygon filling, 2D and 3D transformations, windowing and clipping, 3D object representation, 3D viewing, viewing pipeline, and visible surface detection algorithms.The second part focuses on multimedia basics, multimedia applications, multimedia system architecture, evolving technologies for multimedia, defining objects for multimedia systems, multimedia data interface standards, multimedia databases, compression and decompression, data and file format standards, multimedia I/O technologies, digital voice and audio, video image and animation, full-motion video and storage and retrieval technologies.It also describes multimedia authoring and user interface, Hypermedia messaging, mobile messaging, integrated multimedia message standards, integrated document management and distributed multimedia systems. Case Study : Blender graphics - Blender fundamentals, drawing basic shapes, modelling, shading and textures.