



Symbol of Excellence

H.K. Hi-Tech

College of IT & Management

PGDCA 1<sup>st</sup> Semester, MS – 01 (Introduction of IT)

(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) What is a computer system? What are the various components of a CPU? Also explain its working.  
(b) What are the things that computers can do? Also explain the various characteristics of computers?
- Q.2 (a) What do you mean by operating system? Explain its various functions.  
(b) Explain the main features of UNIX operating system.
- Q.3 (a) What do you mean by dial-UP internet accounts? Explain.  
(b) What is Internet? How can a LAN be connected to Internet.
- Q.4 Explain the concept of encapsulation, inheritance, polymorphism, operator overloading, function overloading and data hiding in context of OOP.
- Q.5 What are the components of a LAN? Discuss the merits and disadvantages of the topologies in a LAN. How do protocols affect the efficiency of a chosen topology?
- Q.6 (a) Differentiate between TCP and IP.  
(b) Describe the World Wide Web. How is it different from the Internet?
- Q.7 (a) What is a printer? What are the three types of Printers?  
(b) What is a plotter? What is its principal use?  
(c) How is a light pen used? Is it an input or output device?
- Q.8 (a) Explain the software tools required for making the multimedia building blocks Text, Audio and Video.  
(b) Explain the use of computer in scientific, business and education applications/ fields.



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(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

1. (a) Explain the terms 'DATA' and 'INFORMATION' with the help of suitable examples.  
(b) What is meant by data processing?  
(c) Explain the process of transforming data into information.  
(d) What are the factors affecting processing speed?
2. (a) Draw a neat block diagram of a computer system. Also discuss functions of each unit.  
(b) What do you understand by 'Software'? Differentiate between 'System-software' and 'Application software'.
3. (a) Write about different generations of programming languages. Also discuss the reasons behind the emergence of each generation of P.L.  
(b) Justify the use of memory in computers. Write a short note on Secondary Memory.
4. (a) What is an operating system? Give ten functions that an operating system performs.  
(b) What is a graphical user interface? Identify some O.S. that use GUI. Also discuss advantages of GUI.
5. (a) Distinguish between LAN and WAN.  
(b) Discuss the basic components of a communication system.  
(c) What is HTML? Justify the significance of HTML.  
(d) Discuss the features of the language JAVA.
6. (a) What are the threats to computer/information security? Discuss the preventive measures.  
(b) What are the key factors do you believe make computers an essential part of our lives in today's world?
7. Discuss the applications of computers in the following areas:  
(a) Business                      (b) Industry                      (c) Education                      (d) Remote Sensing
8. (a) Differentiate between object-oriented programming and procedural programming. Also discuss the causes behind the emergence of object-oriented programming.  
(b) Explain the terms 'Classes' and 'Object' in the context of OOPs, with the help of a suitable example.  
(c) What is 'Polymorphism'? Illustrate with examples.



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(Old Question Paper)Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1. What are the basic operations performed by any computer? Explain clearly the difference between primary and secondary memory. Also explain the difference between a hard disk and a CD-ROM.
- Q.2. What is an Operating System? Why is it necessary for a computer system? Also explain the various functions normally performed by an operating system.
- Q.3. What is a Text Editor? Explain text editors available in DOS and UNIX and their various commands with the help of examples.
- Q.4. Explain different modes of connecting to Internet. Also explain ISPs and Internet address and standard address.
- Q.5. Explain different HTML formatting tags, tags for hyperlinks and image insertion.
- Q.6(a) Explain the basic concept of OOP with examples.  
(b) How does OOP overcome the short-comings of traditional programming approaches?  
(c) How is the data hidden and safe if encapsulation is implemented? Explain with example.  
(d) Do you think OOP is more closer to real world problems? Why and how?
- Q.7. Explain the following: (a) Polymorphism (b) Inheritance (c) Multi-lingual applications.
- Q.8. What is a Computer Network? Explain various types of topologies used in a Network. How a LAN be connected to an Internet? Also explain the role of TCP/IP.



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(Old Question Paper)Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1. Define the following: (a) Persona Computers (b) Mainframes (c) Supercomputers  
(d) Client-Server Computing (e) Work Stations.
- Q.2(a) How does a static RAM differ from a Dynamic RAM? Which RAM would you prefer in your computer an why?  
(b) What are the various types of optical disk? Discuss the advantages and limitations of optical disk. What are its various uses?
- Q.3(a) What do you mean by Output Devices? Discuss the structure, working and uses of the common output devices.  
(b) Differentiate the following: (a) Compiler and Interpreter (b) Linker and Loader.
- Q.4. Write down the classification and generation of programming languages with examples. Also discuss the various characteristics of a good programming language.
- Q.5(a) What is a LAN? What are its main objectives? How does it differ from WAN?  
(b) List out the relative advantages and disadvantages of asynchronous and synchronous modes of data transmission.
- Q.6. Define and distinguish between data processing and data processing system. Describe four important ways in which electronic data processing system differ from manual data processing systems.
- Q.7. Explain the following: (a) Data Hiding (b) Data Encapsulation (c) Operators Overloading  
(d) Inheritance (e) Polymorphism
- Q.8. Write short notes on any four of the following:  
(a) Operating system as a resource manager (b) Multi-lingual applications  
(c) Weather-Forecasting applications (d) Switches, bridges and Routers  
(e) Gopher (f) Network Protocols (g) GUI-Windows



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(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) Define the terms data, information, knowledge and intelligence. Relate these terms with business activities.  
 (b) Write the name of five input devices and five output devices. Explain any four of them.  
 (c) Distinguish between micro-computers, mini-computers, mainframe computers and supercomputers. Write at least five differences. Also write on name for each category.  
 (d) What do you mean by Primary Memory Differentiate between SIMM, DIMM and RIMM.  
 (e) What are the units of speed of CPU, memory capacity, DASD capacity, data channels speed, input speed, output speed? You can write with examples.
- Q.2 (a) What are the major components of a motherboard? How is it responsible for the performance of the computer systems? Write the name of four mother-board manufacturers. Also name the major motherboards.  
 (b) What is the major function of an operating system? How is operating system related with system software?  
 (c) Differentiate between batch processing, on-line processing and real-time processing. Write examples also.  
 (d) What are the basic features of CD-ROM? How is it different from CD-R and CD-RW?
- Q.3 (a) What is the difference between third generation and fourth generation languages? Write three names of each of these.  
 (b) What is Cache Memory? Differentiate between L1 and L2 Cache.  
 (c) What is the difference between and active matrix and passive matrix flat panel display? Write main features of VDU.  
 (d) Write five typical commands of DOS, UNIX, Windows 98 and Novell Netware.
- Q.4 Differentiate between four of the following: (a) Intranet, LAN, WAN and Extranet  
 (b) Peer-to-peer network and client server networking (c) DVD-ROM, DVD-R and DVD-RW  
 (d) Gopher, Tel net and WWW (e) Command, Instruction and Icon
- Q.5 Attempt any four parts:  
 (a) Explain the concept of priorities in relation to operating system.  
 (b) What are the different types of system softwares? Name two from each category.  
 (c) What does multimedia presentation software enable you to do? Write the name of at least three multimedia softwares.  
 (d) What is the difference in multi-programming and multiprocessing?  
 (e) What are the basic features of Novell Netware?
- Q.6 (a) What are the reasons for networking among computers and computer related devices?  
 (b) What is GUI? What are the basic advantages of windows operating system over DOS and UNIX?  
 (c) List LAN technologies. Explain in detail Ethernet Technology.  
 (d) What are Network Protocols? Explain each of them by writing their major functions.
- Q.7 (a) What are the information technology tools used in Scientific Research, Business operations such as Marketing and Inventory Management, Manufacturing, Planning and Forecasting? Write their applications for each field.  
 (b) What re various components of data communication security? What is the role of digital signature and encryption for data communication security?  
 (c) What is Firewall? How will you implement firewall in your organization?
- Q.8 (a) What is Object Oriented Programming?  
 (b) Explain the concept of function overloading by writing a program in any object oriented language.  
 (c) Explain the process of operators loading by writing a program in any object oriented language.  
 (d) What is the meaning of inheritance in relation to object oriented programming? Explain with real life example.
- Q.9 Write short notes on any four of the following:  
 (a) Multilingual Software (b) Information Integrity (c) Graphic User Interface  
 (d) Switches and Bridges (e) Remote Sensing (f) TCP/IP  
 (g) Command Interpreter (h) Privacy and Security of Information



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PGDCA 1<sup>st</sup> Semester, MS – 02 (Computer Programming and Problem Solving)  
(Old Question Paper)

H.K. Hi-Tech

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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 Define the following with the help of examples:  
(a) Identifiers (b) Variables (c) Constants (d) Operators (e) Expression (f) Keywords
- Q.2 Explain the various Problem Solving Techniques with the help of suitable examples.
- Q.3 (a) What are Data Types? What are data type modifiers? How do they affect base data type?  
(b) Discuss the precedence of operator in C.
- Q.4 (a) Write the syntax and purpose of the following statements:  
(i) While (ii) Do While (iii) For (iv) Switch (v) If- Else  
(b) Discuss the console I/O functions in detail with suitable examples.
- Q.5 How are strings manipulated in 'C'? Write a program to find the occurrence of a character in a given text.
- Q.6 (a) What do you mean by Storage Classes? Explain the various storage classes available in C with examples.  
(b) How is call-by-value method of function invoking different from call-by-reference method? Explain with the help of suitable examples.
- Q.7 (a) Write a program in 'C' to sort a given sequence of N numbers in ascending order.  
(b) What is a header file? What is its purpose? Why is it necessary to include header file in program? Explain their benefits also.
- Q.8 Write short notes on the following: (a) Structure and Union (b) Malloc () and Calloc () functions  
(c) Address of (&) and value at (\*) operators in case of pointers. (d) File operations  
(e) Pre - Processor Commands.



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PGDCA 1<sup>st</sup> Semester, MS – 02 (Computer Programming and Problem Solving)  
(Old Question Paper)

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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 What is the significance of algorithm and flow charts in solving problems? Are algorithm steps written using a computer language? Justify using a suitable example and draw a flow chart for the same.
- Q.2 (i) Sketch the structure of a 'C' program for finding out the average of n numbers.  
(ii) Distinguish between identifiers and data types in 'C' languages. Give examples of both.
- Q.3 Explain the purpose of each of the following:  
(i) Library functions (ii) C pre-processor (iii) Logical operator
- Q.4 Compare the following control structures with examples:  
(i) If-else and Switch (ii) While and Do-While (iii) For loop and Nested for loop
- Q.5 What is the advantage of using functions? Describe the following in the context of functions:  
(i) Local and global variables (ii) Arguments (iii) Recursive functions
- Q.6 What is an array? Write a program in 'C' to check whether a given number is prime or not. Show the usage of arrays in the program by taking an input of n numbers. the program should stop execution if the number entered is '999' and print all prime numbers detected so far. Show the usage of 'break' statement if possible.
- Q.7 (i) How can array of pointers be used to minimize the amount of data swapping required when sorting an array of strings?  
(ii) Give an example program to show when an array of structures would be needed.
- Q.8 Describe the usage of the following functions: (i) Strcpy and strcmp (ii) Fopen and fclose  
(iii) Fseek and ftell (iv) Getchar and putchar (v) Printf and scanf



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PGDCA 1<sup>st</sup> Semester, MS – 02 (Computer Programming and Problem Solving)  
(Old Question Paper)

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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 Explain flow charts and algorithms. Also write flowchart and algorithm for comparing 3 numbers and display the largest number.
- Q.2 Explain different data types in 'C'.
- Q.3 Explain loops and control statements in 'C'.
- Q.4 Explain the different operators available in 'C'.
- Q.5 Explain user defined and library functions of 'C'.
- Q.6 Explain array and Multidimension array in 'C'.
- Q.7 Write a program in 'C' to store the roll no. and marks of 5 subjects of a class in a file. Then read the contents of file and display the roll no. and total marks obtained by each roll no. of class.
- Q.8 Explain pointers in 'C'. Also explain operations on pointers and array of pointers.



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PGDCA 1<sup>st</sup> Semester, MS – 02 (Computer Programming and Problem Solving)  
(Old Question Paper)

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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) In what way does flowcharts and algorithms contribute in Problem solving? Explain with an example.  
(b) Enumerate the various methods of solving problems.
- Q.2 What are the rules for naming variables in 'C'? What are the various data types with which a variable can be defined? Give the distinction between integers and floating point numbers.
- Q.3 (a) Explain the following C functions:  
(i) Scan f and Print f (ii) Get char and Put char (iii) Get s and Put s
- Q.4 (a) Give the various forms which an 'IF' statement in C can have. Explain with examples.  
(b) Explain with example where a 'for' loop is suitable and where a 'do-while' loop is suitable.
- Q.5 What is a 'Function'? How is a value returned from a function? Write a recursive function in C that generates Fibonacci series.
- Q.6 "Pointers are intimately associated with arrays." Comment. Can the use of array of pointers minimize the amount of data swapping when sorting an array of string? Justify.
- Q.7 What is the difference among arrays of structures, arrays within structures and pointers to structures? Explain with examples.
- Q.8 Explain the following with suitable examples:  
(a) Str cat (b) Str cpy (c) Malloc (d) Str cmp (e) Fopen



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PGDCA 1<sup>st</sup> Semester, MS – 03 (Digital Electronics)  
(Old Question Paper)Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) Prove the following:  
(i) A positive logic AND operation is equivalent to a negative logic OR operation and vice versa.  
(ii) A positive logic NAND operation is equivalent to a negative logic NOR operation and vice versa.  
(b) Prove the following using De Morgan's Theorems:  
(i)  $AB + CD = \overline{\overline{AB} \cdot \overline{CD}}$  (ii)  $(A+B) \cdot (C+D) = \overline{\overline{A+B} + \overline{C+D}}$   
(c) Do the following: (i) Convert  $(247)_{10}$  into Octal (ii) Convert  $(0.6875)_{10}$  into Octal  
(iii) Convert  $(3287.5100098)_{10}$  into Octal (iv)  $-48 - 23$  using 2's complement  
(v) Convert  $(A72E)_{16}$  into binary.
- Q.2 (a) Discuss the following IC characteristics  
(i) Power Dissipation (ii) Fanout (iii) Noise Immunity (iv) Operating Temperature Range  
(b) Draw the circuit diagram for active pull up or totem pole output and discuss it in detail.
- Q.3 (a) Minimize the following expression using K Map and realize it using NAND gates only:  
 $F = AB + A\overline{C} + C + AD + A\overline{B}C + ABC$   
(b) Design full subtractor circuit.
- Q.4 (a) Draw the circuit diagram for one digit BCD subtractor and explain it.  
(b) Draw the circuit of 32 : 1 MUX using two 16:1 MUX and one 2:1 MUX and explain it.
- Q.5 (a) State and explain the common uses of flip-flops.  
(b) Draw the block diagram of bidirectional shift register and explain it.
- Q.6 (a) Draw the circuit diagram of 3 bit binary ripple counter using J-K flip-flops and explain its working with the help of output waveforms.  
(b) Design a 3 bit synchronous counter. Use T flip-flops.
- Q.7 (a) Obtain  $2048 \times 8$  memory chips. Draw the diagram also.  
(b) Draw the diagram for 16 bit ROM array and explain it.
- Q.8 Discuss the following in detail:  
(a) R-2R ladder D to A converter (b) Successive Approximation A to D converter



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PGDCA 1<sup>st</sup> Semester, MS – 03 (Digital Electronics)

(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) Explain various logic gates.  
(b) Design a 4-bit adder using half adder.
- Q.2 (a) Design a gate circuit of 4 : 1 Mux.  
(b) Design a full subtractor using 3 : 8 decoder and required logic gates.
- Q.3 (a) Design a 7-Segment LED Display.  
(b) Explain Tristate Buffer
- Q.4 (a) Design a 2 bit comparator circuits.  
(b) Explain Fan-in/Fan-out properties of logic gates.
- Q.5 (a) Design a D-flip-flop using J-K flip-flop.  
(b) Design a 3-bit counter.
- Q.6 (a) Explain R-2R DAC.  
(b) Explain successive approximation ADL.
- Q.7 Write short notes on any *two* of the following:  
(a) ROM (b) TTL (c) CMOS



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PGDCA 1<sup>st</sup> Semester, MS – 03 (Digital Electronics)

(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1(a) Why universal and basic gates are so? Also realise all the basic gates from only NAND gate and then with only NOR gates.  
(b) Realise X-OR gate with only four NAND gates.
- Q.2(a) Realise  $y = (A + \overline{B.C})(C + \overline{D}).A$ .  
(b) Minimize the following expression using K-map and realise with NAND gates.  
 $f(A, B, C, D) = \sum m (1,2,4,8,9,12,13) + d(0,2,5)$   
(c) Differentiate between latch and flip-flop.
- Q.3(a) What is full adder? Draw its truth table and logic diagram. Also explain the concept of look ahead carry.  
(b) Explain the concept of seven segment display.
- Q.4(a) Explain the different characteristics of Digital IC's.  
(b) Realize NAND gate with the help of TTL logic with its circuit diagram.
- Q.5(a) What is Master Slave flip-flop? Why do we require it? What is the significance of race around condition?  
(b) Differentiate with examples between synchronous and asynchronous counters.
- Q.6(a) What is the different between Multiplexer and Encoder?  
(b) How is BCD subtraction done? Explain with circuit diagram.
- Q.7(a) What is Ring Counter? How is it implemented?  
(b) Draw and explain the working of bi-directional shift register.
- Q.8 Write short notes on the following:  
(a) A/D converter (any one type) (b) Nine's complementor circuit (c) Tri state buffer



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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 Draw and explain universal and basic gates with their truth table.
- Q.2 Solve the expression and draw its circuit diagram using NAND gates only:  
 $f(A, B, C, D) = \Sigma (1, 3, 6, 9, 14, 15) + d (4, 10, 13)$
- Q.3 Differentiate between decoder and demultiplexer and encoder and multiplexer.
- Q.4 (a)  $(101010)_2 + (011101)_2 =$   
 $(010110)_2 + (010101)_2 =$   
 (b) Draw and explain 7 Segment LED display.
- Q.5 (a) Enumerate the different characteristics of IC's.  
 (b) Draw and explain MOS: (i) NAND (ii) NOR gates
- Q.6 (a) What is JK flip-flop? Why is it required when SR flip-flop is there?  
 (b) Draw and explain bidirectional shift register.
- Q.7 (a) What is a Ring Counter? Draw and explain its working.  
 (b) Draw and explain tri-state buffer.
- Q.8 Write short notes on any two of the following:  
 (a) ROM cell organization (b) D/A Converter (any one) (c) BCD Adder



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Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 Explain in detail the activities performed each phase of systems development life-cycle.
- Q.2 "Feasibility study is the compressed capsule version of the entire system development process." Elaborate.
- Q.3 (a) Discuss the key strategies for eliciting information about the user's requirements. Which strategy would you consider the best and why?  
 (b) What is a Data Flow Diagram (DFD) Explain the various symbols and conventions used in the DFD with an example?
- Q.4 What methods does the designer consider in file organization? What factors determine the method chosen?
- Q.5 Define Quality Assurance. What levels of quality assurance must a system meet? What are the factors that affect the quality of a system?
- Q.6 (a) Discuss the design process in detail. What is the role of documentation tools in system design?  
 (b) What is the significance of modularization in design phase? What are module specifications? Explain.
- Q.7 What are the activities undertaken during system implementation phase? What is post-implementation review?
- Q.8 Write short notes on the following:  
 (a) Business system (b) Fact finding techniques (c) Audit trails (d) Cost/benefit analysis



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PGDCA 1<sup>st</sup> Semester, MS – 04 (SAD)  
(Old Question Paper)Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) What is System? Explain different types of Information System.  
(b) Who are the participants in the Software development team? Discuss the role of system analyst in detail.
- Q.2 What are the common methods for performing cost-benefit analysis? What are the inputs and outcomes of each method?
- Q.3 (a) List the common traditional methods of collecting information system requirements. Compare and contrast different methods.  
(b) Write short notes on the following:  
(i) Data Flow Diagram (ii) Data Dictionary (iii) Decision Trees (iv) Decision Tables
- Q.4 Explain the following:  
(a) Input Design (b) Process Design (c) User Interface Design (d) File/Database Design
- Q.5 (a) What is Software Quality Assurance? Discuss the activities of SQL.  
(b) Explain the role of Documentation Tools in System Engineering. What are various documentation tools?
- Q.6 (a) Explain the following:  
(i) Sources of Projects Request (b) Project Selection  
(b) Explain the technical and economical feasibility of system.
- Q.7 (a) Why are training and support critical for the success of an information system?  
(b) Describe the various ways software vendors provide customer support.
- Q.8 Write short notes on the following:  
(a) System Controls (b) Audit Trials (c) Reliability of Software (d) Implementation of System



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PGDCA 1<sup>st</sup> Semester, MS – 04 (SAD)  
(Old Question Paper)Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 (a) What is fact finding? What are the various techniques of fact finding? Explain briefly.  
(b) What is data dictionary? What is the use of it?
- Q.2 (a) What is feasibility study? Why and when is it required for system development? Explain the various types of feasibility study.  
(b) What is Cost/Benefit analysis? Explain its importance in system development briefly.
- Q.3 (a) What do you understand by file designing? Discuss important considerations involved in file design activity.  
(b) What are principles of effective input and output designing? What are the essential requirements of such forms?
- Q.4 (a) What is modularization? Discuss the importance of modularization in system design.  
(b) Draw a DFD of a library system?  
(c) How does conversion plan differ from operational plan? Illustrate the purpose of each.
- Q.5 (a) What is project management? Explain various techniques of project management briefly.  
(b) What are the steps involved in maintenance and review? Explain.
- Q.6 (a) What is Software Documentation? Illustrate various types of software documentation and their purpose.  
(b) What are the design objectives? Briefly explain each of these.  
(c) Differentiate between verification and validation.
- Q.7 (a) What do you mean by System Requirement Specifications? Decide SRS of a general payroll system.  
(b) What is software quality? What are the various quality attitudes? Also outline the factors that affect software quality.
- Q.8 (a) Write short notes on the following:  
(a) Audit Trials (b) Decision Table (d) System Control Process  
(b) What does the word 'System' mean? Give at least five examples of common systems.





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(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1(a) What are the main steps involved in system study cycle? Describe in brief.  
(b) Explain the following: (i) Data flow diagram (ii) Structured approach
- Q.2(a) What is feasibility analysis? Explain its role in computer-based projects. Also explain types of feasibility studies briefly.  
(b) Explain the concept of decision tree through an example.
- Q.3(a) What is data dictionary? What is the use of it? Discuss.  
(b) What is application prototyping? Discuss.
- Q.4(a) What do you mean by data validation? What are various methods of implementing data validation checks?  
(b) What do you understand by auditing a system? How will you implement various audit controls in the system?
- Q.5 Write short notes on the following:  
(1) Cost and Benefit Analysis (2) Decision Table (3) Fact Finding (4) Project Review
- Q.6(a) What is the importance of education and training in system implementation? How is Human Relations considerations important in system implementation?  
(b) Explain good qualities of a system analyst.
- Q.7(a) What do you mean by system maintenance? Why is it so costly? How can we reduce maintenance cost? Describe briefly.  
(b) Differentiate between sequential and random file organization. Also discuss the advantages and disadvantages of each.
- Q.8(a) What are the steps involved in system changeover, maintenance and review? Explain.  
(b) Give detailed account of various characteristics of a business organization.



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(Old Question Paper)

Note: Attempt any *Five* questions. All questions carry equal marks.

- Q.1 Define System. What do you mean by system life-cycle? Name and describe each phase of system life-cycle in brief.
- Q.2(a) What is candidate system? How does it relate to the feasibility analysis?  
(b) What are the elements of project control that aid in the management of an initial investigation?
- Q.3 What are the different fact finding techniques? Explain each of them in brief. Also discuss the pros and cons of each technique.
- Q.4(a) What is a form? What are the different types of forms? What factors do you consider while designing a form?  
(b) What are the objectives of input design? Describe the various data validation controls.
- Q.5(a) What is a structured walk through? What is its purpose?  
(b) Distinguish between implementation, conversion and changeover.
- Q.6(a) Define quality assurance. What levels of quality assurance must a system meet? Explain.  
(b) What is the role of the audit control trail in conversion?
- Q.7 Write short notes on the following: (a) Decision tables (b) Maintenance
- Q.8 Distinguish between the following:  
(a) Break-even analysis and net present value (b) Procedure Design and User Interface Design