CDP/CCP/CLEP

DATA PROCESSING EXAMINATIONS

Certificate in Data Processing (CDP)
Certificate in Computer Programming (CCP)
Computers and Data Processing Subject Exam (CLEP)

A basic review manual in computer data processing, this reference guide includes study questions covering computer hardware, software, management and other EDP topics.

Useful to the newly graduated student *and* the experienced EDP technician, this book will help you find your weaknesses and do something about them *before* the test.

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CDP/CCP/CLEP DATA PROCESSING EXAMINATIONS

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ARCO PUBLISHING COMPANY, INC.
NEW YORK

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PREFACE

If you have Electronic Data Processing (EDP) experience and the training, you should sit for the next Certificate in Data Processing (CDP) Examination. This test will help you in getting ahead and in obtaining a better EDP job. The CDP certificate adds to job qualifications--something beyond the college degree. This certificate demonstrates computing experience and/or academic work, and character qualification as well as examination success. The CDP certificate provides a new recognition of data processing knowledge and training.

Individuals taking the February CDP test need not take all five sections; but once a section is passed, all remaining sections must be completed during the next three testing years. The CDP Examination is concerned with the following sections, each containing 60 questions:

Section 1: Data Processing Equipment
Section 2: Computer Programming and Software
Section 3: Principles of Management
Section 4: Quantitative Methods
Section 5: Systems Analysis and Design

The February CDP Examination changed little from the previous tests. It is known that there were additional accounting and audit questions as well as ethical-legal type questions on the examination. There was less emphasis on the history of data processing (at least one question) and unit record equipment use (fewer questions about interpreters, sorters, calculators, collators, and similar machines). Do not expect any questions exactly from the ICCP Study Guide as was the case in recent Examinations. All questions will be a four alternative choice. The CDP Examination will be given in May 1979, and the information should be available in June, 1978 from the Institute for Certification of Computer Professionals at 304 East 45th Street, New York, New York, 10017, telephone A/C 212-888-3208.

There is increased interest at ICCP to promote a separate certificate examination for the senior-level computer programmer (Computerworld, March 28, 1977, p. 12). The examination for the Certificate in Computer Programming (CCP) will be given in October, 1978 for the second time; three separate examinations (250 questions) will be offered: Systems Programming, Business Programming, and Scientific Programming. Many of the areas to be tested are similar to sections of CDP Examinations, i.e., "data and file organization, principles and techniques of programming, programming languages, interaction with software and hardware as well as people problems in business, scientific and systems programming applications."

The bulletin information for the February, 1978 CDP Examination starting on page 69 is included only to give an idea of what to expect concerning deadlines, fees, and other related information about the test. The CDP Examination fees may be subject to change.

A professional engaged in computer operations, programming, system design, or first-level management must:

1. Be precise and logical in thought and in oral and written communication.

2. Be creative and eager to learn new techniques--no matter how much he already knows.

3. Dislike repetitious activity for himself and others.

4. Be aware of the major historical and current trends in the data processing field.

5. Work effectively with colleagues without jealousy or sensitivity.

6. Exercise sound judgment, consistent with his age and experience, in the true interest of his employer.

It is important to realize that a professional environment supports the professional staff by maximizing the effect of their special skills and abilities and by minimizing redundant or duplicate activity. Prerequisite to a professional environment is a firm management commitment to disciplined, orderly planning and activity. If professionals are to comply with project control procedures, documentation requirements, and technical standards, the organization cannot be constantly changing the rules and shifting priorities in response to every little problem. Managers and data processing professionals must share a sincere belief that these disciplines have practical benefits. In some organizations, management and the professional staff have come to respect each other and to trust each other to perform consistently within the disciplined structure.

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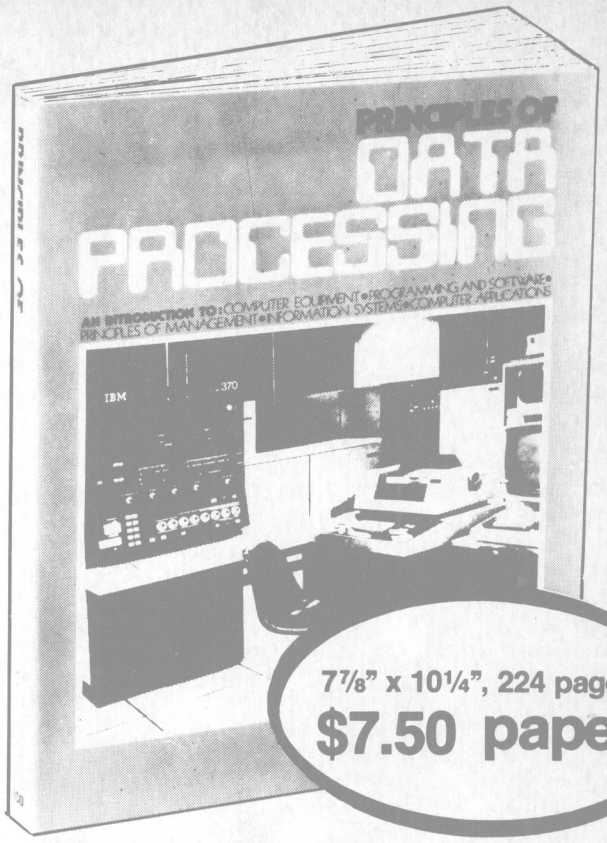
This book was written as an introduction to the principles of electronic data processing and provides a comprehensive review document of all major subject areas in the field today. This one volume reference guide, includes a broad variety of multiple-choice study questions in virtually any aspect of computer hardware, software, management and other EDP topics. As a convenient EDP manual, it should be of considerable value to managers who face computer problems and work with data processing personnel as well as the undergraduate EDP technician who will be able to use this book of data processing principles as his guide to professional development in preparing for advanced positions in the computer world.



7⅞" x 10¼", 224 pages, $7.50 paper

James W. Morrison

PRINCIPLES OF DATA PROCESSING

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Introduction

Equipment

- Computers and Peripheral Equipment
- Data Processing
- Computer Components and Functions
- Internal Processing Arrangements
- Input-Output Devices
- Input-Output Media
- Data Transmission
- Baudot
- ASCII Code
- Time-Sharing Illustration
- DTSS System
- References

Programming and Software

- Computer Programming and Software
- Meta Programming Systems
- Programming Languages
- Sample COBOL Program
- Sample Sales Analysis Report in COBOL
- References

Information Systems

- Systems Analysis and Design
- Defining the Systems Responsibility
- Data Processing Systems Analysis
- Economic Feasibility Study Model
- System Implementation Guidelines
- Management Factors in Computer Selection
- References

Computer Applications

- Simple Linear Equations
- Paths of Projectiles
- Orbits of Planets
- Atomic Theory and Theoretical Physics

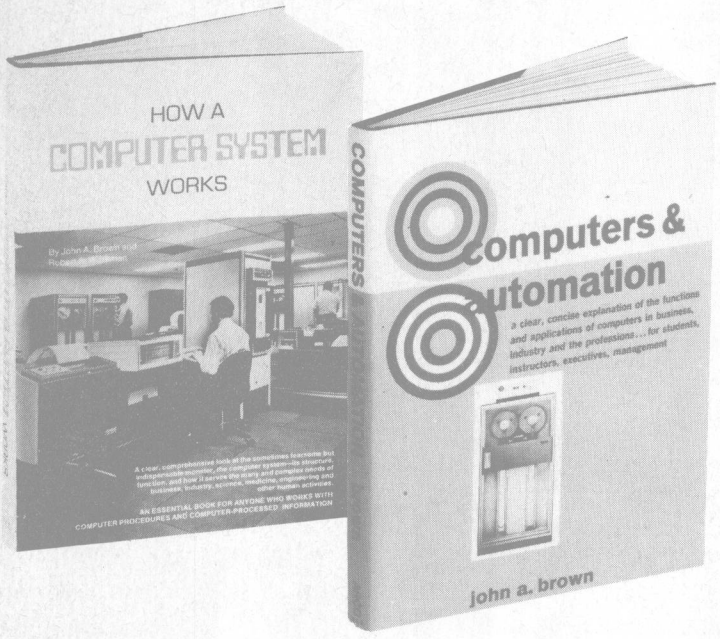
Principles of Management

- Data Processing Management
- Executive Responsibilities for Data Processing Activities
- Data Processing Department Administration
- Systems and Programming Management
- Installation/Operation Management
- References

Please send payment of $7.50 (plus $1.00 for postage and shipping) to
Arco Publishing, Inc., Dept. PDP, 219 Park Ave. South, New York, N.Y. 10003

ARCO LIBRARY OF COMPUTER LITERATURE

Study Guides For The Computer Community

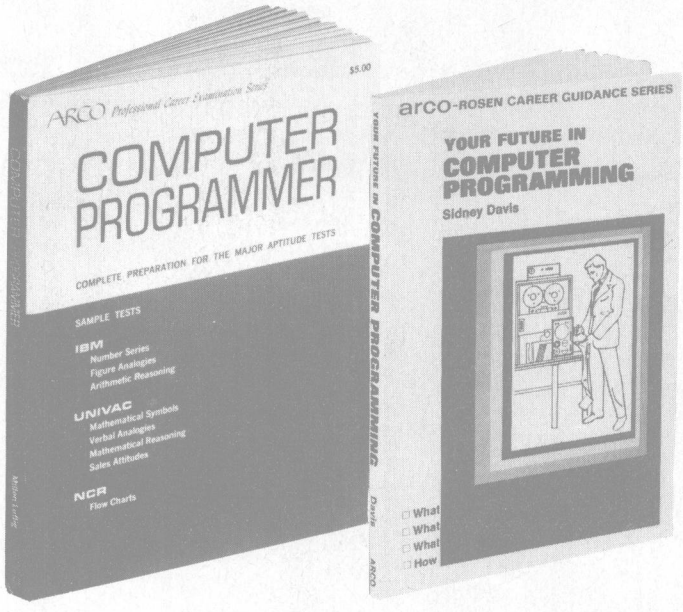


HOW A COMPUTER SYSTEM WORKS. Brown, John A.; Workman, Robert S. A clear, comprehensive look at that sometimes fearsome but indispensable monster, the computer system—its structure, function, and how it serves the many and complex needs of business, industry, science, medicine, engineering and other human activities. *illustrated 6-1/2" x 9-1/4"; 288 pages.*
0-668-03423-8 LR cloth $8.95
0-668-03424-6 paper $5.95

COMPUTERS AND AUTOMATION. Brown, John A. A clear, concise explanation of the functions and applications of computers in business, industry, and the professions—for students, instructors, executives, and management. *LC 73-76928; © 1974; revised edition; 77 photographs and line drawings; index; 6-1/2" x 9-1/4"; 248 pages.*
0-668-01623-X cloth $7.50
0-668-01745-7 paper $5.95

COMPUTER PROGRAMMER. Luftig, Milton. Includes actual questions from exams given by National Cash Register and sample test questions and answers patterned after the exams given by IBM, Remington Rand, and other big companies; the samples include questions based on number series, figure analogies, arithmetic reasoning, mathematical symbols, verbal analogies, sales attitudes, and flow charts. *LC 74-82865; © 1975; fourth edition; 7-7/8" x 10-1/4"; 256 pages.*
0-668-01232-3 paper $8.00

YOUR CAREER IN COMPUTER-RELATED OCCUPATIONS. Koller, William. © *1978; 5-3/8" x 8"; 160 pages.*
0-668-04610-4 LR cloth $5.95
0-668-04622-8 paper $2.95



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CDP EXAMINATION INFORMATION

For additional information, applications, or copies of this Certificate in Data Processing Examination Study Guide, contact:

Institute for Certification of Computer Professionals
304 East 45th Street
New York, New York 10017
(212) 754-3208 (until 8/29/77)
(212) 888-3208 (after 8/29/77)

or any of the member groups listed in this booklet.

The CDP Examination is administered under the auspices of the Institute for Certification of Computer Professionals by the Professional Examinations Division of The Psychological Corporation.

APPLICATION PROCEDURE

In order to be scheduled for the Certificate in Data Processing Examination (CDP), the enclosed Application must be completed and returned, together with the appropriate fee (see page 11), in the envelope provided by the deadline on page 3. An incomplete or incorrectly filled out Application will be returned to the candidate.

Use only a number 2 pencil in completing the Application. Since the Application will be optically scanned, do NOT use a ball-point pen, colored pencil, or any other type of writing instrument. Read these instructions completely before attempting to complete the Application.

1. Remove the Application from the envelope in the center of this booklet and turn the Application so that the word "PAGE 1" appears in the upper left corner. Print your last name, skip a space, then first name, starting in the first box to the right of the arrow. After printing your name, make a single HEAVY line within the brackets around each letter in the column directly below each letter of your name. Be sure to cover the letter completely.
2. In the row of empty boxes under "NUMBER AND STREET" and "CITY, STATE, and ZIP CODE" print your mailing address and blacken in the corresponding letters or numbers in the columns below each letter or number of your mailing address. Abbreviate wherever possible, using the appropriate address and state or province abbreviations from the following lists:

Addresses

APARTMENT	APT	NORTH	N
AVENUE	AVE	PARK	PK
BOULEVARD	BLVD	PARKWAY	PKWY
BOX	BX	PIKE	PI
CIRCLE	CIR	PLACE	PL
CITY	CTY	POINT	PT
COLLEGE	COL	POST OFFICE	PO
COMMUNITY	CMTY	PORT	PT
COUNTRY	CNTY	ROAD	RD
COURT	CT	ROUTE	RT
DRIVE	DR	SCHOOL	SCH
EAST	E	SOUTH	S
FORT	FT	STATION	STA
GARDEN	GDN	STREET	ST
HEADQUARTERS	HQ	TERRACE	TR
HEIGHTS	HTS	TRAIL	TRL
HIGHWAY	HWY	TRAILER	TRLR
JUNCTION	JCT	TURNPIKE	TPKE
LAKE	LK	UNIVERSITY	UNIV
LANE	LN	WAY	WY
MOUNT	MT	WEST	W
MOUNTAIN	MT		

States and Provinces

ALABAMA	AL	GEORGIA	GA
ALASKA	AK	HAWAII	HI
ARIZONA	AZ	IDAHO	ID
ARKANSAS	AR	ILLINOIS	IL
CALIFORNIA	CA	INDIANA	IN
CANAL ZONE	CZ	IOWA	IA
COLORADO	CO	KANSAS	KS
CONNECTICUT	CT	KENTUCKY	KY
DELAWARE	DE	LOUISIANA	LA
DIST. OF COLUMBIA	DC	MAINE	ME
FLORIDA	FL	MARYLAND	MD
MASSACHUSETTS	MA	UTAH	UT
MICHIGAN	MI	VERMONT	VT
MINNESOTA	MN	VIRGINIA	VA
MISSISSIPPI	MS	VIRGIN ISLANDS	VI
MISSOURI	MO	WASHINGTON	WA
MONTANA	MT	WEST VIRGINIA	WV
NEBRASKA	NE	WISCONSIN	WI
NEVADA	NV	WYOMING	WY
NEW HAMPSHIRE	NH		
NEW JERSEY	NJ	ALBERTA	AB
NEW MEXICO	NM	BRITISH COLUMBIA	BC
NEW YORK	NY	LABRADOR	LB
NORTH CAROLINA	NC	MANITOBA	MB
NORTH DAKOTA	ND	NEW BRUNSWICK	NB
OHIO	OH	NEWFOUNDLAND	NF
OKLAHOMA	OK	NORTHWEST TERRITORIES	NT
OREGON	OR	NOVA SCOTIA	NS
PENNSYLVANIA	PA	ONTARIO	ON
PUERTO RICO	PR	PRINCE EDWARD IS.	PE
RHODE ISLAND	RI	QUEBEC	PQ
SOUTH CAROLINA	SC	SASKATCHEWAN	SK
SOUTH DAKOTA	SD	YUKON TERRITORY	YT
TENNESSEE	TN		
TEXAS	TX	FOREIGN	FR

Canadian candidates should indicate their zip code in the space provided on Page 2. Candidates with foreign mailing addresses should put the name of their country in the space provided for Canadian zip code on Page 2.

3. If you have previously filed an Application under another name or address, print that name and/or address in the space indicated directly below the name grid.
4. *DANTES (Defense Activity for Non-Traditional Education Support) candidates only:* Indicate your branch of military service in the designated section, and enter the testing center name. In the lower right corner of Page 2, indicate and grid your DANTES testing center number.
5. In the area labeled "FEES", blacken in the boxes following Application Fee (if you are applying for the first time), Testing Fee, and each section you plan to take. To the right, indicate the appropriate amounts to be paid, add them, and record and grid the total amount due in the section labeled "TOTAL AMOUNT ENCLOSED".
6. In the space entitled, "Have you ever previously filed an application for the CDP Examination?" indicate no or yes. If yes, indicate the month and year.
7. *Turn to Page 2 of the Application.*
8. Choose the most convenient testing center from the list on page 9 and indicate the testing center number, city, and state in the space provided under "GENERAL INFORMATION". Blacken in the forresponding numbers in the columns under "TESTING CENTER NUMBER".
9. In the section under "Which of the following options do you choose with regard to ICCP's use of your name and address:" indicate your choice by blackening in the space next to the appropriate option.
10. Enter and grid the last two numbers of your "YEAR OF BIRTH".
11. To the right, indicate any professional affiliations you have by blackening in the space under the initials of the appropriate organization. If you have no professional affiliations, blacken in the space under NONE.
12. Under "HIGHEST EDUCATIONAL LEVEL" blacken in the appropriate box to the right of the highest educational level you have attained to date. Do NOT blacken more than one box.
13. If you have a college degree, indicate your major in the section under "DEGREE MAJOR".
14. Enter the appropriate "COLLEGE ATTENDANCE" information in the center of the page and fill in the appropriate boxes immediately below, relating to substitution of academic credits for work experience.

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15. In the upper right under "EMPLOYMENT INFORMATION", print the information requested concerning your present and most recent employment in data processing.
16. In the section labeled "PRESENT EMPLOYMENT", indicate month and last two digits of year started, total number of years and months employed at your present organization, and the codes for the type of organization in which you are presently employed and your position from the following lists:

Type of Organization

01 Insurance
02 EDP Services
03 Education
04 Government
05 Public Utilities
06 Mining/Construction
07 Transportation
08 Consulting/Services
09 Financial
10 Retail/Marketing
11 Distribution
12 Research/Engineering
13 Other Non-Manufacturing
50 Equipment (including Computers)
51 Instruments/Electrical
52 Chemicals/Allied Products
53 Printing/Publishing
54 Food/Tobacco
55 Primary/Fabricated Metal
56 Transportation Equipment
57 Petroleum/Rubber
58 Paper/Paper Products
59 Textiles/Apparel
60 Other Manufacturing

Position

11 President/Owner/Partner or General Manager
12 Vice President (Assistant Vice President)
13 Treasurer/Controller/Financial Officer
14 Research
21 Director/Manager Operations, Planning, Administrative Services
22 Director/Manager/Supervisor Data Processing
23 Systems Manager
24 Manager/Supervisor of Programming
25 Education Administration
26 Educator/Teacher
27 Consultant
28 Applications Engineer
29 Manufacturer's Sales Representative
31 Systems Analyst
32 Methods Analyst
33 Operations Research
34 Accounting
35 Programming (Business Applications)
36 Programming (Scientific Applications)
37 Programming (Software Systems)
41 Engineering
42 Marketing
43 EAM Operating
44 EDP Operating
99 Other

17. Under "PREVIOUS EMPLOYMENT" indicate and grid the number of years and months in each of your three most recent positions indicated above.
18. Date and sign the Application. NOTE: If you are applying for the first time, a CDP holder or your supervisor must complete the section below your signature. *This is required of all first-time candidates.*
19. Mail the completed Application together with the required fee (see page 11) in the envelope provided to:

Institute for Certification of Computer Professionals
Post Office Box 2497
Grand Central Station
New York, N.Y. 10017

(Note: Do NOT use Special Delivery, Certified, or Registered mail for return of Applications.)

Admission Cards showing the exact place of the examination will be sent approximately three weeks before the scheduled testing date. (See page 10 under "Admission to Testing".)

DANTES candidates only: Military candidates who are connected with the Defense Activity for Non-Traditional Education Support (DANTES) program should apply to take the CDP Examination through the regular channels within their respective branch of service.

CDP ELIGIBILITY REQUIREMENTS

Although any interested individual may take the examination, in order to receive the Certificate in Data Processing of the Institute for Certification of Computer Professionals, a candidate must complete the following requirements:

1. Experience:
Have at least 60 months of full-time (or part-time equivalent) direct experience in computer-based information systems.

The 60 months need not be consecutive or in a single position. Acceptable forms of experience include that in data processing systems, programming, management, and teaching computer-based information systems. Systems and programming experience gained while employed by data processing equipment manufacturers, service centers, management consulting firms, or educational institutions may also be applied toward this requirement. Clerical, keypunch, direct sales, or experience gained in connection with formal classwork will NOT be considered acceptable.

2. Academic Alternative:
Candidates having less than five years work experience may substitute college-level academic work for up to two years of experience on the following basis *provided official transcripts of academic work are submitted to ICCP* before the examination date:

a. *24 months* = Bachelor's or graduate degree in data processing or computer sciences.
b. *18 months* = Bachelor's or graduate degree in related area including accounting, business, engineering, mathematics, sciences, and statistics.
c. *12 months* = Bachelor's or graduate degree in nonrelated area such as English, foreign languages, history, liberal arts, etc.

3. Professional Qualifications:
Each candidate will be required to obtain the signature of a responsible person who can verify both the candidate's work experience and professional qualifications through personal knowledge or access to the necessary information. A CDP holder is to make this verification whenever possible. The candidate's immediate supervisor may be accepted as an alternative when a CDP holder is not in a position to provide the required verification.

4. Examination:
Pass all five sections of the CDP Examination. All five sections of the CDP Examination must be passed within four consecutive testing sessions. Once a section is passed, all remaining sections must be completed during the next three testing sessions. Otherwise credit will be lost for the passed section and the candidate will be required to take it again.

5. ICCP Codes:
Subscribe to the Codes of Ethics, Conduct, and Good Practice. Holders of the Certificate in Data Processing are entitled to use the designation "CDP" after their names. The Council endorses the use of the term "CDP" as meaning that the individual has achieved the credential "Certificate in Data Processing", having met all of the requirements pertaining to it.

COLLEGE TRANSCRIPTS

Candidates electing to substitute academic work for up to two years' work experience (see page 7) must arrange for official transcripts supporting their degree to be sent directly to ICCP (see page 2 for address) by the schools.

Note: Any transcript accompanying the Application or any transcript that does not bear the original signature of the school registrar and/or the original seal of the institution will not be considered official.

Candidates who received schooling in countries other than the United States and Canada may submit alternative proof of courses taken, in the form of a letter from a senior administrative official at each school attended or an evaluation of academic experience by the United States Department of State.

Transcripts must be received by ICCP *before the examination date.*

Candidates meeting the five-year work experience requirement should NOT submit transcripts.

TESTING CENTER INFORMATION

The following cities will serve as testing centers for the CDP Examination. Indicate the code number, city, and state or province of your choice of center on the Application in the space provided.

Established Testing Centers

ALABAMA
501 Birmingham
503 Huntsville
504 Mobile
303 Montgomery

ALASKA
506 Anchorage

ARIZONA
510 Tempe

ARKANSAS
513 Little Rock

CALIFORNIA
313 Long Beach
522 Los Angeles
772 Sacramento
524 San Diego
525 San Francisco

COLORADO
527 Denver

CONNECTICUT
531 Hartford

DISTRICT OF COLUMBIA
536 Washington

FLORIDA
543 Jacksonville
538 Miami
544 Tampa

GEORGIA
548 Atlanta

HAWAII
551 Honolulu

IDAHO
552 Boise

ILLINOIS
555 Chicago
343 Normal

INDIANA
563 Indianapolis
346 Notre Dame

IOWA
349 Davenport
565 Des Moines

KANSAS
571 Wichita

KENTUCKY
574 Louisville

LOUISIANA
577 New Orleans
815 Shreveport

MAINE
582 Portland

MARYLAND
583 Baltimore

MASSACHUSETTS
587 Boston

MICHIGAN
371 Battle Creek
592 Detroit
373 Flint

MINNESOTA
597 Minneapolis

MISSISSIPPI
603 Jackson

MISSOURI
607 Kansas City
609 St. Louis

NEBRASKA
615 Omaha

NEVADA
618 Las Vegas

NEW JERSEY
394 South Orange

NEW MEXICO
626 Albuquerque

NEW YORK
630 Albany
631 Buffalo
634 New York
640 Rochester
641 Syracuse

NORTH CAROLINA
853 Charlotte
408 Raleigh

OHIO
413 Akron
646 Cincinnati
647 Cleveland
649 Columbus
650 Dayton

OKLAHOMA
660 Oklahoma City
661 Tulsa

OREGON
666 Portland

PENNSYLVANIA
425 Carlisle
670 Philadelphia
674 Pittsburgh
679 Wilkes-Barre

PUERTO RICO
746 Rio Piedras

RHODE ISLAND
681 Providence

SOUTH CAROLINA
684 Columbia

TENNESSEE
436 Chattanooga
688 Knoxville
689 Memphis
692 Nashville

TEXAS
694 Amarillo
865 Austin
696 Dallas
700 Houston
701 Lubbock
703 San Antonio

UTAH
707 Salt Lake City

VIRGINIA
714 Norfolk
712 Richmond

WASHINGTON
718 Seattle
719 Spokane

WEST VIRGINIA
721 Huntington

WISCONSIN
888 Eau Claire
886 Madison
724 Milwaukee

CANADA
952 Calgary, Alberta
954 Edmonton, Alberta
956 Halifax, Nova Scotia
960 Montreal, Quebec
963 St. John's, Newfoundland
965 Toronto, Ontario
969 Winnipeg, Manitoba

Sunday and Special Testing Centers

Special Sunday centers will be established on May 6, 1979, for those candidates submitting satisfactory evidence that their religious convictions prevent them from taking an examination on Saturday. Upon ICCP approval, additional centers may also be arranged for the handicapped or those living excessive distances from an established center.

Time of Examination

Candidates taking all five sections of the examination will be allowed 250 minutes to complete all sections of the examination. Candidates taking fewer than five sections will be allowed the following amount of time:

1 section = 50 minutes
2 sections = 100 minutes
3 sections = 150 minutes
4 sections = 200 minutes

A short rest break will be included during the testing for those taking more than two sections.

Admission to Testing

Each candidate must present an Admission Card in order to be admitted to the examination. Candidates scheduled for fewer than five sections will be required to present an Admission Card for each section to be taken. In case Admission Cards are lost, write or call ICCP (see page 2 for address or telephone number) for authorization to take the test.

Testing Center Regulations

The following regulations will be observed at all testing centers in order to insure uniform testing procedure:

1. Candidates should bring several sharpened Number 2 pencils with them to the testing center.
2. Calculators or slide rules may be taken into the examination room, but no other reference materials of any sort are permitted.
3. No test materials, documents, or memoranda of any sort are to be taken from the examination room.
4. Anyone giving or receiving assistance of any kind will have his test materials taken from him and will be asked to leave the room. Any irregularities connected with the administration of the CDP Examination willl be reported to ICCP.
5. The examination will be held only on the day and at the time scheduled.
6. Visitors are not permitted in the examination room.
7. Candidates should use their complete name (e.g. John Thomas Jones, Jr.) on their Application, answer sheets, and any correspondence concerning the CDP Examination.

FEES

General

The entire amount due in United States or equivalent funds must accompany the completed Application. Make check or money order payable to CDP Examination. Do NOT send cash.

Application Fee—$25.00

A nonrefundable fee of $25.00 is required of all candidates who have not previously registered for the CDP Examination or who registered prior to the 1976 Examination. The fee will be waived for those who registered to take the 1976, or later, examination.

Testing Fee—$10.00

A nonrefundable fee of $10.00 is required for each candidate taking one or more sections of the CDP Examination.

Section Fees—$12.00 per section

Candidates may choose to take sections of the CDP Examination in any combination from the minimum of one to the maximum of all five sections. A fee of $12.00 is required for each section specified to be taken, as follows:

One section specified $12.00
Two sections specified $24.00
Three sections specified $36.00
Four sections specified $48.00
Five sections specified $60.00

Refunds

Candidates who are unable to take the examination will receive a refund of their Section Fees *only*, provided a written request for the refund is received within 30 days following the scheduled testing date.

All correspondence and requests for information concerning the ICCP Certificate in Computer Programming Examination should be directed to:

Institute for Certification of Computer Professionals
304 East 45th Street
New York, New York 10017
(212) 888-3208

CCP EXAMINATION INFORMATION

The Certificate in Computer Programming (CCP) Examination program is administered by The Psychological Corporation under the auspices of the Certification Council of the Institute for Certification of Computer Professionals (ICCP). Any qualified person may take the CCP Examinations, which are intended to aid in the establishment of recognized professional standards within the data processing industry. There are three separate examinations oriented toward business, scientific, and systems programming. Candidates *must* choose one of these three examinations when filing their Applications. The examinations are given once each year at established testing centers, usually located at colleges and universities. In order to qualify for the Certificate in Computer Programming, candidates must satisfy the eligibility requirements in effect at the time of their initial application, including satisfactory performance on one of the CCP Examinations.

DEADLINES FOR THE 1978 CCP EXAMINATION

Examination Date:	December 9, 1978
Deadline for Requesting Additional Centers:	October 2, 1978
Deadline for Receiving Applications:	October 15, 1978

APPLICATION PROCEDURE

In order to be scheduled for the December 9, 1978, Certificate in Computer Programming Examination (CCP) an Application must be completed and returned together with the appropriate fee (see page 11) by the deadline indicated on page 3. An application without the correct fee or one that is incomplete or incorrectly filled out will be returned to the candidate.

Use only a number 2 pencil in completing the Application. Since the Application will be optically scanned, do NOT use a ball-point pen, colored lead pencil, or any other type of writing instrument. Read these instructions completely before attempting to complete the Application.

1. Remove the Application from the center of this booklet and turn the Application so that "PAGE 1" appears in the upper left corner. Print your last name, skip a space, and then first name starting in the first box to the right of the arrow. After printing your name, make a single heavy line within the brackets around each letter in the column directly below each letter of your name. Be certain to cover the letter completely.

2. In the row of empty boxes under "NUMBER AND STREET" and "CITY, STATE, and ZIP CODE" print your mailing address and blacken in the corresponding letters or numbers in the columns below each letter or number of your mailing address. Abbreviate where possible, using the appropriate address and state or province abbreviations from the following lists:

Addresses

APARTMENT	APT	NORTH	N
AVENUE	AVE	PARK	PK
BOULEVARD	BLVD	PARKWAY	PKWY
BOX	BX	PIKE	PI
CIRCLE	CIR	PLACE	PL
CITY	CTY	POINT	PT
COLLEGE	COL	POST OFFICE	PO
COMMUNITY	CMTY	PORT	PT
COUNTY	CNTY	ROAD	RD
COURT	CT	ROUTE	RT
DRIVE	DR	SCHOOL	SCH
EAST	E	SOUTH	S
FORT	FT	STATION	STA
GARDEN	GDN	STREET	ST
HEADQUARTERS	HQ	TERRACE	TR
HEIGHTS	HTS	TRAIL	TRL
HIGHWAY	HWY	TRAILER	TRLR
JUNCTION	JCT	TURNPIKE	TPKE
LAKE	LK	UNIVERSITY	UNIV
LANE	LN	WAY	WY
MOUNT	MT	WEST	W
MOUNTAIN	MT		

States and Provinces

ALABAMA	AL	NORTH DAKOTA	ND
ALASKA	AK	OHIO	OH
ARIZONA	AZ	OKLAHOMA	OK
ARKANSAS	AR	OREGON	OR
CALIFORNIA	CA	PENNSYLVANIA	PA
CANAL ZONE	CZ	PUERTO RICO	PR
COLORADO	CO	RHODE ISLAND	RI
CONNECTICUT	CT	SOUTH CAROLINA	SC
DELAWARE	DE	SOUTH DAKOTA	SD
DIST. OF COLUMBIA	DC	TENNESSEE	TN
FLORIDA	FL	TEXAS	TX
GEORGIA	GA	UTAH	UT
HAWAII	HI	VERMONT	VT
IDAHO	ID	VIRGINIA	VA
ILLINOIS	IL	VIRGIN ISLANDS	VI
INDIANA	IN	WASHINGTON	WA
IOWA	IA	WEST VIRGINIA	WV
KANSAS	KS	WISCONSIN	WI
KENTUCKY	KY	WYOMING	WY
LOUISIANA	LA		
MAINE	ME	ALBERTA	AB
MARYLAND	MD	BRITISH COLUMBIA	BC
MASSACHUSETTS	MA	LABRADOR	LB
MICHIGAN	MI	MANITOBA	MB
MINNESOTA	MN	NEW BRUNSWICK	NB
MISSISSIPPI	MS	NEWFOUNDLAND	NF
MISSOURI	MO	NORTHWEST TERRITORIES	NT
MONTANA	MT	NOVA SCOTIA	NS
NEBRASKA	NE	ONTARIO	ON
NEVADA	NV	PRINCE EDWARD IS.	PE
NEW HAMPSHIRE	NH	QUEBEC	PQ
NEW JERSEY	NJ	SASKATCHEWAN	SK
NEW MEXICO	NM	YUKON TERRITORY	YT
NEW YORK	NY		
NORTH CAROLINA	NC	FOREIGN	FR

Canadian candidates should indicate their zip code in the space provided on Page 2. Candidates with foreign mailing addresses should put the name of their country in the space provided for Canadian zip code on Page 2.

3. In the bottom section indicate the CCP Examination (Business Programming, Scientific Programming, or Systems Programming) for which you are applying and whether you have taken any of the three examinations previously.

4. *DANTES (Defense Activity for Non-Traditional Education Support) candidates only:* Indicate your branch of military service in the section under the city and state of your mailing address and record and grid your DANTES testing center number in the section below.

5. *Turn to Page 2 of the Application.* In the upper left corner, indicate any professional affiliations you have by blackening in the space under the initials of the appropriate organization. If you have no professional affiliations, blacken in the space under NONE.

6. Choose the most convenient testing center from the list on page 9 and indicate the testing center number, city, state, and date of Examination in the space provided. Blacken in the corresponding numbers in the column under "TESTING CENTER NUMBER".

7. In the section under "Which of the following options do you choose with regard to ICCP's use of your name and address?", indicate your choice by blackening in the space next to the appropriate option.

8. Enter and grid the last two numbers of your "YEAR OF BIRTH".

9. Enter and grid the total number of years you have worked in computer programming in the section labeled "YEARS OF EXPERIENCE".

10. In the section under "PRESENT EMPLOYMENT" enter and grid the appropriate codes from the following lists for type of organization in which you are presently employed and your current position.

Type of Organization

01 Insurance
02 EDP Services
03 Education
04 Government
05 Public Utilities
06 Mining/Construction
07 Transportation
08 Consulting/Services
09 Financial
10 Retail/Marketing
11 Distribution
12 Research/Engineering
13 Other Non-Manufacturing
50 Equipment (including Computers)
51 Instruments/Electrical
52 Chemicals/Allied Products
53 Printing/Publishing
54 Food/Tobacco
55 Primary/Fabricated Metal
56 Transportation Equipment
57 Petroleum/Rubber
58 Paper/Paper Products
59 Textiles/Apparel
60 Other Manufacturing

Position

12 Officer of Organization
13 Military
14 Research
21 Director/Manager Operations, Planning, Administrative Services
22 Director/Manager/ Supervisor Data Processing
23 Systems Manager
24 Manager/Supervisor of Programming
25 Education Administration
26 Educator/Teacher
27 Consultant
28 Applications Engineer
29 Manufacturer's Sales Representative
31 Systems Analyst
33 Operations Research
34 Accounting
35 Programming (Business Applications)
36 Programming (Scientific Applications)
37 Programming (Software Systems)
38 Programmer Analyst
41 Engineering
99 Other

11. Under "HIGHEST EDUCATIONAL LEVEL" blacken in the appropriate box to the right of the highest educational level you have attained to date. Do NOT blacken more than one box.

12. If you have a college degree, indicate your major in the section under "DEGREE MAJOR".

13. Blacken the appropriate box in the section under "Where did you learn most of your computer programming skills?"

14. In the middle of your Application indicate if you hold a Certificate in Data Processing (CDP).

15. Date and **sign** the Application. NOTE: If you are applying for the first time, a CDP holder or your supervisor must complete the section below your signature. *This is required of* ***all*** *first-time candidates.*

16. Mail completed Application with fee of $75.00 (see page 11) in the envelope provided by regular first-class mail to:

Institute for Certification of Computer Professionals
Post Office Box 2497
Grand Central Station
New York, New York 10017

(Note: Do NOT use Special Delivery, Certified, or Registered mail for return of Applications.)

An Admission Card showing the exact place of the examination will be sent approximately three weeks before the scheduled testing date. The Admission Card must be presented at the testing center in order to gain admission to the examination. If you have not received your Admission Card by November 27, contact ICCP at (212) 888-3208. BE CERTAIN TO NOTIFY ICCP OF ANY CHANGE IN MAILING ADDRESS.

DANTES candidates only: Military candidates who are connected with the Defense Activity for Non-Traditional Education Support (DANTES) program should apply to take the CCP examination through the regular channels within their respective branch of the service.

CCP ELIGIBILITY REQUIREMENTS

Although any interested individual may take the examination, a candidate must complete the following requirements in order to receive the Certificate in Computer Programming of the Institute for Certification of Computer Professionals:

1. *Professional Qualifications:*
Each candidate is required to obtain the signature of a responsible person who can verify the candidate's professional qualifications through personal knowledge or through access to the necessary information. A CDP holder is to make this verification whenever possible. The candidate's immediate supervisor may be accepted as an alternative when a CDP holder is not in a position to provide the required verification.

2. *Examination:*
Only one CCP Examination may be taken during an annual testing session. The entire CCP Examination must be passed in a single testing session in order for the candidate to be awarded the CCP designation.

A candidate may seek additional CCP designations in succeeding years.

3. *ICCP Codes:*
The candidate must subscribe to the ICCP Codes of Ethics, Conduct and Good Practice.

Having met the above requirements, holders of the Certificate in Computer Programming are entitled to use the designation "CCP" after their names. ICCP endorses the use of the term "CCP" as meaning that the individual has achieved the credential "Certificate in Computer Programming", having met all of the requirements pertaining to this designation.

IMPORTANT: This examination is intended for senior-level programmers. While no specific educational or experience requirements must be met in order to take the examination, a candidate who does not have broad experience will find the examination extremely difficult.

TESTING CENTER INFORMATION

The Certificate in Computer Programming Examinations will be given on Saturday, December 9, 1978, at the following established centers. Each candidate must indicate choice of testing center in the appropriate space on the Application, including center number, city, state, and date of test. An Admission Card with exact address will be mailed to each candidate.

Established Testing Centers

ALABAMA
501 Birmingham
303 Montgomery

ALASKA
506 Anchorage

ARIZONA
510 Tempe

ARKANSAS
513 Little Rock

CALIFORNIA
313 Long Beach
522 Los Angeles
772 Sacramento
524 San Diego
525 San Francisco

COLORADO
527 Denver

CONNECTICUT
531 Hartford

DISTRICT OF COLUMBIA
536 Washington

FLORIDA
543 Jacksonville
538 Miami
544 Tampa

GEORGIA
548 Atlanta

HAWAII
551 Honolulu

IDAHO
552 Boise

ILLINOIS
555 Chicago
343 Normal

INDIANA
563 Indianapolis

IOWA
565 Des Moines

KANSAS
571 Wichita

KENTUCKY
574 Louisville

LOUISIANA
577 New Orleans
815 Shreveport

MAINE
582 Portland

MARYLAND
583 Baltimore

MASSACHUSETTS
587 Boston

MICHIGAN
592 Detroit
373 Flint

MINNESOTA
597 Minneapolis

MISSISSIPPI
603 Jackson

MISSOURI
607 Kansas City
609 St. Louis

NEBRASKA
615 Omaha

NEVADA
618 Las Vegas

NEW JERSEY
394 South Orange

NEW MEXICO
626 Albuquerque

NEW YORK
630 Albany
631 Buffalo
634 New York
640 Rochester
641 Syracuse

NORTH CAROLINA
853 Charlotte
408 Raleigh

OHIO
413 Akron
646 Cincinnati
647 Cleveland
649 Columbus
650 Dayton

OKLAHOMA
660 Oklahoma City
661 Tulsa

OREGON
666 Portland

PENNSYLVANIA
424 Middletown
670 Philadelphia
674 Pittsburgh
679 Wilkes-Barre

PUERTO RICO
746 Rio Piedras

RHODE ISLAND
681 Providence

SOUTH CAROLINA
684 Columbia

TENNESSEE
436 Chattanooga
688 Knoxville
689 Memphis
692 Nashville

TEXAS
694 Amarillo
865 Austin
696 Dallas
700 Houston
701 Lubbock
703 San Antonio

UTAH
707 Salt Lake City

VIRGINIA
714 Norfolk
712 Richmond

WASHINGTON
718 Seattle
719 Spokane

WEST VIRGINIA
721 Huntington

WISCONSIN
888 Eau Claire
886 Madison
724 Milwaukee

CANADA
952 Calgary, Alberta
954 Edmonton, Alberta
956 Halifax, Nova Scotia
960 Montreal, Quebec
963 St. John's, Newfoundland
965 Toronto, Ontario
969 Winnipeg, Manitoba
966 Vancouver, B.C.

Additional Centers

Special Sunday testing centers will be established on Sunday, December 10, 1978, for those candidates providing satisfactory evidence that their religious convictions prevent them from taking the examination on Saturday. Additional centers may also be arranged for the handicapped or those living excessive distances from an established center. In either case, a letter requesting special arrangements must be submitted with the Application. Do NOT staple or otherwise attach the letter to the Application.

Change of Testing Center

Requests for changes of testing center location received after November 20 cannot be honored.

Time of Examination

The following schedule (in local time) will be observed at all testing centers:

8:15 A.M. All candidates report to testing center
8:30 A.M. Examination begins
12:45 P.M. Approximate close of testing period

Candidates taking the examination will be allowed up to four hours to complete the examination.

A short rest break will be included during the testing period.

Admission to Testing

Candidates must present their Admission Cards in order to be admitted to the examination. If you have not received your Admission Card by November 27 or if your Admission Card is lost, contact ICCP (see page 2 for address or telephone number) for authorization to take the test. *Be certain to notify ICCP of any change in mailing address.*

Testing Center Regulations

The following regulations will be observed at all testing centers in order to insure uniform testing procedure:

1. Candidates should bring several sharpened Number 2 pencils with them to the testing center.
2. Calculators or slide rules may be taken into the examination room, but no other reference materials of any sort are permitted.
3. No test materials, documents, or memoranda of any sort are to be taken from the examination room.
4. Anyone giving or receiving assistance of any kind will have his test materials taken from him and will be asked to leave the room. Any irregularities connected with the administration of the CCP Examination will be reported to ICCP.
5. The examination will be held only on the day and at the time scheduled, with the exception of the special Sunday testing arrangements.
6. Visitors are not permitted in the examination room.
7. Candidates should use their complete name (e.g. John Thomas Jones, Jr.) on their Application, answer sheets, and any correspondence concerning the CCP Examination.

FEES

Examination Fee—$75.00

The entire examination fee of $75.00 in United States or equivalent funds must accompany the completed Application. Make check or money order payable to CCP Examination. Do NOT send cash. Note: Canadian fees must be made payable in U.S. funds. Applications accompanied by incorrect fees will be returned.

Refunds

Candidates unable to take the CCP Examination will receive a refund of $40.00 provided a written request for refund is received no later than 30 days following the scheduled testing date. Refund requests will be processed after January 26, 1979. Candidates wishing to take the next CCP Examination will be required to file a new Application and Examination Fee whether or not they have requested a refund.

PAGE 1

APPLICATION FOR CERTIFICATE IN DATA PROCESSING EXAMINATION

NCS/NDF - 270-54321

THE PSYCHOLOGICAL CORPORATION

DC 36-159 PRINTED IN U.S.A.

LAST NAME THEN FIRST NAME

NUMBER AND STREET

CITY

STATE

ALPHABETICAL

NUMERICAL

ZIP CODE

CANDIDATES WITH U.S. MAILING ADDRESS ENTER YOUR ZIP CODE BELOW. CANDIDATES WITH CANADIAN MAILING ADDRESS ENTER YOUR ZIP CODE WHERE INDICATED ON PAGE 2.

IF YOU HAVE PREVIOUSLY FILED AN APPLICATION UNDER A NAME OR AN ADDRESS OTHER THAN THE ONE GIVEN ABOVE, PLEASE ENTER THE NAME AND/OR ADDRESS BELOW:

NAME _____
LAST FIRST M.I.

ADDRESS _____
NUMBER AND STREET

_____
CITY STATE ZIP

IF YOU ARE APPLYING THROUGH DANTES, INDICATE YOUR BRANCH OF SERVICE:

Army Air Force Coast Guard
Navy Marine Corps

ALSO ENTER THE NAME OF THE TESTING CENTER BELOW AND CODE NUMBER OF THE TESTING CENTER ON PAGE 2.

TESTING CENTER _____
CITY STATE

INSTITUTE FOR CERTIFICATION OF COMPUTER PROFESSIONALS
P.O. BOX 2497
GRAND CENTRAL STATION
NEW YORK, NEW YORK 10017

Have you ever previously filed an application for the CDP Examination?

IF YES, WHEN:

No

Yes _____
MO. YR.

FEES (BLACKEN APPROPRIATE BOX):

Application Fee (new candidates only) .....
Testing Fee (all candidates) 10

Section Fees

1. Data Processing Equipment .....
2. Computer Programming and Software ...
3. Principles of Management .....
4. Quantitative Methods .....
5. Systems Analysis and Design .....

TOTAL AMOUNT DUE .....

TOTAL AMOUNT ENCLOSED

FOR OFFICE USE ONLY

APPLICATION NUMBER

020585

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