

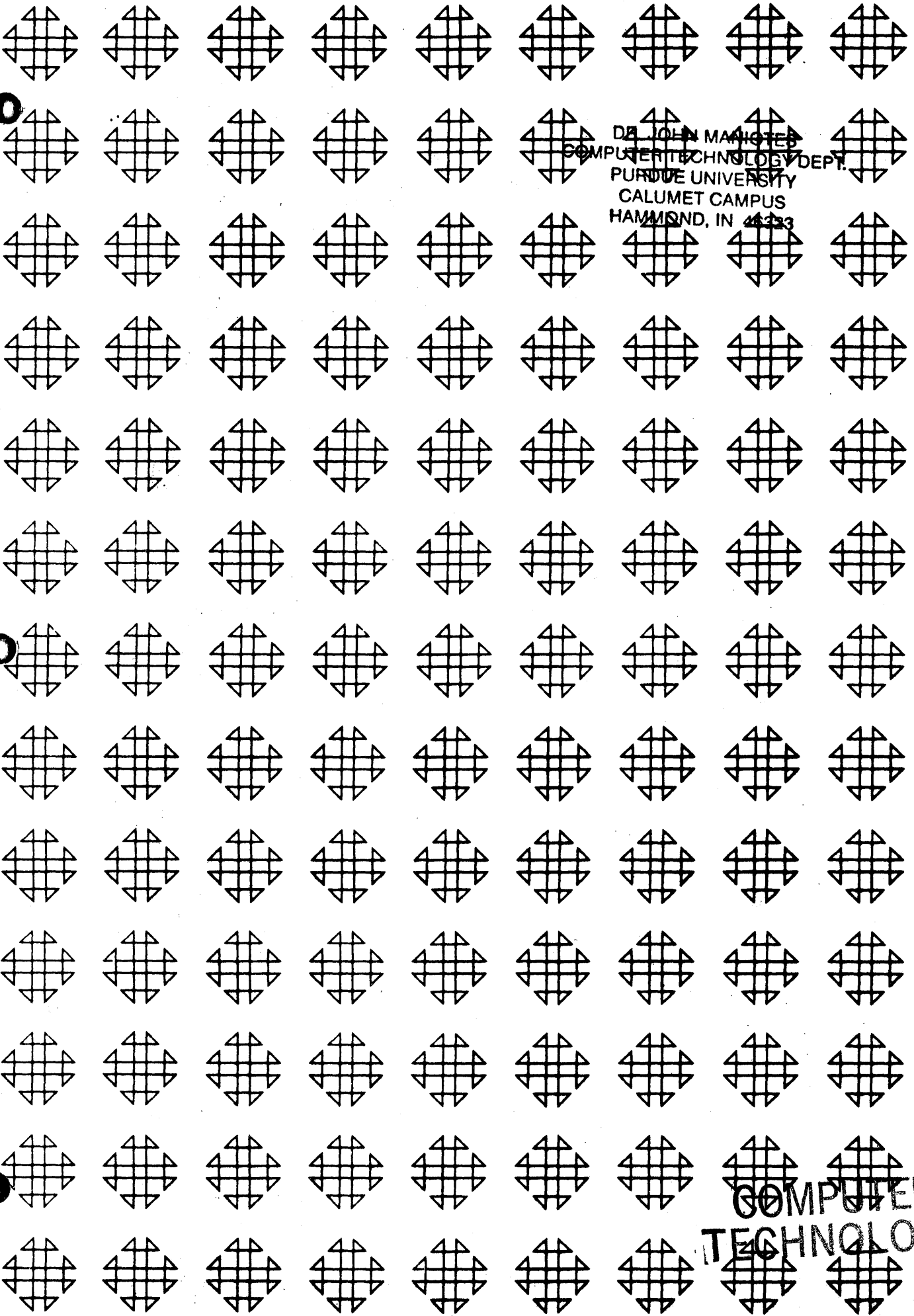
1620 GENERAL PROGRAM LIBRARY

University of Mississippi Test Scoring
Program (UMTS) Version A

13.0.031

**COMPUTER
TECHNOLOGY**

DR. JOHN MANNING
COMPUTER TECHNOLOGY DEPT.
PURDUE UNIVERSITY
CALUMET CAMPUS
HAMMOND, IN 46323



DISCLAIMER

Although each program has been tested by its contributor, no warranty, express or implied, is made by the contributor or any User's Group, as to the accuracy and functioning of the program and related program material, nor shall the fact of distribution constitute any such warranty, and no responsibility is assumed by the contributor or any User's Group, in connection therewith.

COMMON USERS GROUP PROGRAM REVIEW AND EVALUATION
(fill out in typewriter, ink or pencil)

Program No. _____

Date _____

Program Name: _____

1. Does the abstract adequately describe what the program is and what it does? Yes ___ No ___
Comment _____
2. Does the program do what the abstract says? Yes ___ No ___
Comment _____
3. Is the description clear, understandable, and adequate? Yes ___ No ___
Comment _____
4. Are the Operating Instructions understandable and in sufficient detail? Yes ___ No ___
Comment _____
Are the Sense Switch options adequately described (if applicable)? Yes ___ No ___
Are the mnemonic labels identified or sufficiently understandable? Yes ___ No ___
Comment _____
5. Does the source program compile satisfactorily (if applicable)? Yes ___ No ___
Comment _____
6. Does the object program run satisfactorily? Yes ___ No ___
Comment _____
7. Number of test cases run _____. Are any restrictions as to data, size, range, etc. covered adequately in description? Yes ___ No ___
Comment _____
8. Does the Program meet the minimal standards of COMMON? Yes ___ No ___
Comment _____
9. Were all necessary parts of the program received? Yes ___ No ___
Comment _____
10. Please list on the back any suggestions to improve the usefulness of the program. These will be passed onto the author for his consideration.

Please return to:

Mr. Richard L. Pratt
Data Corporation
7500 Old Xenia Pike
Dayton, Ohio 45432

Your Name _____
Company _____
Address _____
Users Group Code _____

THIS REVIEW FORM IS PART OF THE COMMON ORGANIZATION'S PROGRAM REVIEW AND EVALUATION PROCEDURE. NONMEMBERS ARE CORDIALLY INVITED TO PARTICIPATE IN THIS EVALUATION.

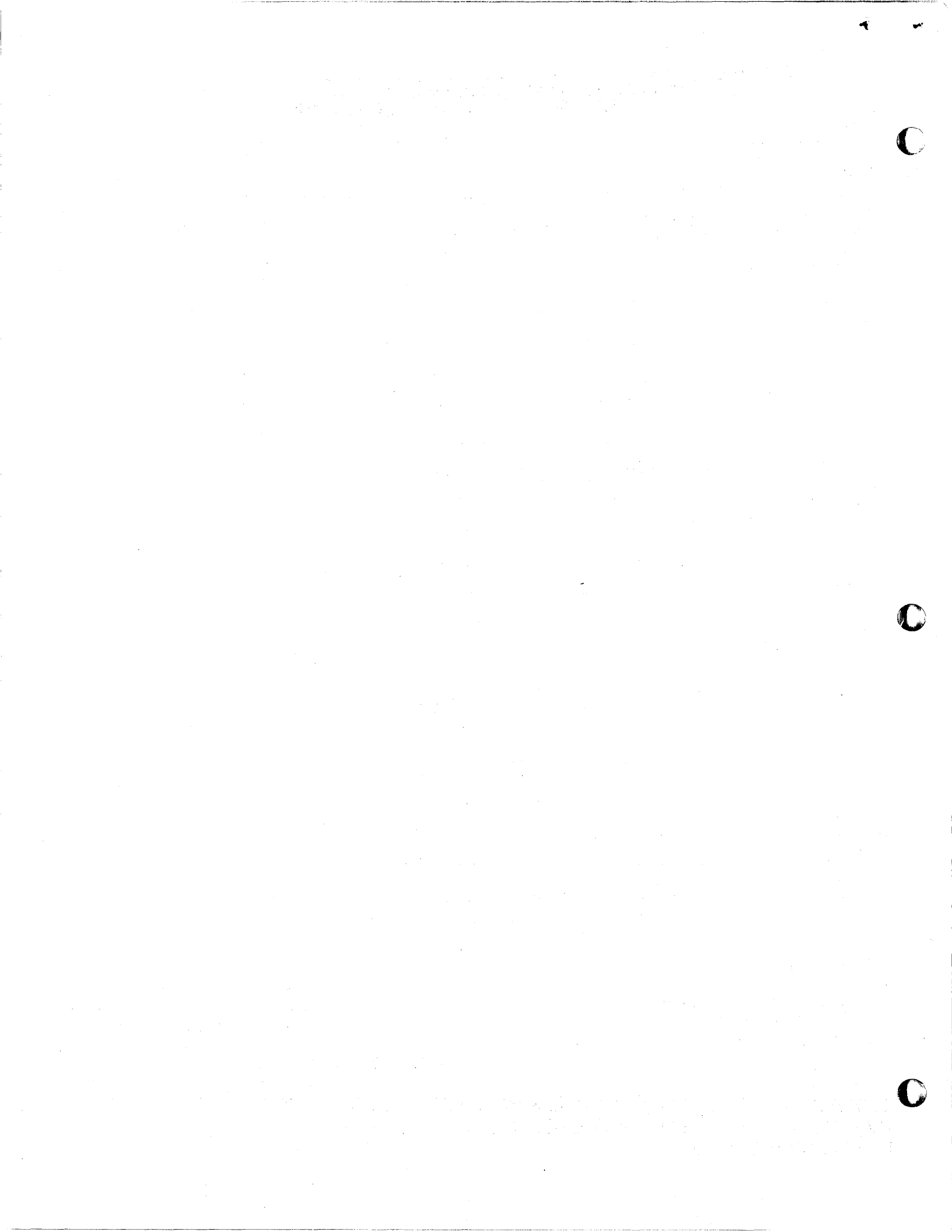


TABLE OF CONTENTS

	<u>Page</u>
Program Abstract	3
Description of Program	4
(a) Results and Methods	4
(b) Special Instructions	5
(c) Change of Object Deck	6
Input	7
(a) Keys for the Exam	9
Output	10
Sample Input	13
Sample Output	14
Program Listing	22
Symbol Table (20K)	41
Symbol Table (40K)	42
Symbol Table (60K)	43

Modifications or revisions to this program, as they occur, will be announced in the appropriate Catalog of Programs for IBM Data Processing Systems. When such an announcement occurs, users should order a complete new program from the Program Information Department.

DECK KEY

Basic

Deck 1	Object Deck for 20K
Deck 2	Object Deck for 40K
Deck 3	Object Deck for 60K

*Optional

Deck 1	Source Deck
--------	-------------

* Optional material will be forwarded only when specifically requested

PROGRAM ABSTRACT

TITLE: University of Mississippi Test Scoring Program (UMTS)
Version A

SUBJECT CLASSIFICATION: 13.0

AUTHOR: Richard D. Ross

DIRECT INQUIRIES TO: Richard D. Ross, Director
Computer Center, Carrier 103
University of Mississippi
University, Mississippi
Phone: area code 601-232-8368

DESCRIPTION: UMTS is a flexible means of scoring objective exams taken on mark sense cards. It features a card input and card output patterned after program number 13.0.028 by the same author. A numerical grade for each student is published along with a grade distribution (with mean and standard deviation) and an exam analysis--indicating how many choices per question. UMTS has the following additional features:

- (1) Allows multiplicity of correct answers.
- (2) Allows each answer to be weighted with a weight value from 1 to 5.
- * (3) Allows omitted question numbers to be punched following the student's grade card.
- * (4) Allows weight factor to be punched beside each question number on exam analysis output.
- (5) Allows identification to be punched in columns 76-80 of student's grade card.
- (6) Allows additional identification to be punched in columns 01-30 of first header card.
- * (7) Allows blank cards to be read at any time.
- (8) Allows all key cards, alternate key cards, and weight cards to be read in random order.
- (9) Allows student answer cards to be read in random order.
- (10) Allows batch processing.

* Indicates additions to program number 13.0.028.

The most important feature of UMTS is the speed of grading each student's exam. Given below is the speed of grading:

Number of Questions	Time in Seconds
50	.93
100	1.20
150	1.55
200	1.90
300	2.60
400	3.30
500	4.00

Because of the additions to program number 13.0.028 a maximum of 130 questions can be graded on 20K computers, 485 questions on 40K and 500 questions for 60K computers.

RESTRICTIONS/RANGE: No special instructions are required although TNF and/or Direct Divide can be used on computers that have these capabilities. The maximum number of questions that may be graded is 130 questions for 20K computers, 485 for 40K computers, and 500 questions for 60K computers.

EQUIPMENT SPECIFICATIONS: Memory 20K, 1622. No special instructions are required but indirect addressing is required. Memory 40K and 60K can be used if available.

ADDITIONAL REMARKS: SPS language processed by AFIT SPS (Program Number 01.1.023). Fixed point and non-relocatable. Running time is 1 1/2 seconds for 150 questions and 4 seconds for 500 questions. This program is written to handle 25 mark sense columns and split them in half putting questions 1-25 in the 9 to 5 positions and questions 26-50 in the 4 to 0 positions. However, each answer must be punched in a separate column for the computer so that a half-after-four time pick up was added to the mark sense punch to pick up coselectors and punch each question in a separate column. The most important feature of the program is the speed of calculations.

DESCRIPTION OF PROGRAM

RESULTS AND METHODS

UMTS is designed to grade objective examinations for a maximum of 130 5-choice questions for 20K machines, 485 5-choice questions for 40K machines, and 500 5-choice questions for 60K machines for 9999 students per exam. The program sets up a 10-digit constant for each question to be graded. This 10-digit constant is initialized to flag zeros (0 0 0 0 0 0 0 0 0 0) to represent the answers (EDCBAEDCBA). The only possible answer for any question is a 0,1,2,...8 or 9. Hence, this constant can be set up to grade any question on any test.

To illustrate how this constant can be used, we will assume that we are on question 1 and there is a possibility of two answers that will be correct (A and C) and this question has a weight of 4 on the test. The 10-digit constant for question number 1 will then have the form of 0 0 0 0 0 0 4 0 4. Initially the weight of each question is assumed to be 1 and at any time a weight card is read in the card number determines which questions are to be weighted and if question number 1 was given a weight of 4, the computer would check all positions of the 10-digit constant for question 1 and change all non-flagged digits to the proper weight. If a question is to be left blank, the computer will fill in for the 10-digit constant 10

flagged record marks.

The address of the first position of each 10-digit constant has the address of XXXX0. Hence, by transmitting a digit to the zero position of the address, the computer can readily determine if the answer is correct, incorrect, or to be omitted. This check is determined by a non-flagged digit, flagged digit, and a record mark respectively.

All cards are read alphabetically and the first position of each alphabetic answer is checked for a digit to determine if the student has omitted the question. The program will accept double-punched columns for answers only if they are legal double-punched columns that can be read into the computer. In this case, the computer accepts the second character read as the answer and 95% of the time this will be the correct answer.

As each student's questions are graded, an exam analysis table is up-dated, and as the student's score card is punched, a grade distribution table is up-dated. The output that is obtained from this program is the student's score card, the grade distribution with accumulative frequencies and percentiles along with the number of tests given, mean, and standard deviation. This is followed by the table of choices made for each question which includes an asterisk beside the correct choice or choices for each question. For multiple section exams or multiple-course exams, the above information may be punched for each section, each course, and all courses totalled together.

The answer cards have appropriate header cards included so that they may be printed with an 80-80 407 board. A 9-punch is placed in column 1 of a single card for each group to permit skipping to a new page for each group (wiring first reading column 1 through correct coselectors to carriage skip on a 9, and also to non-print).

SPECIAL INSTRUCTIONS: Storage requirements are 19993 core positions for 130 questions, 39861 core positions for 485 questions and 40673 core positions for 500 questions. There are two labels in the source program (SIZE and NCARD) that give the maximum number of questions and maximum number of cards that will be used on the test. These cards should be altered before processing for your particular machine configuration. The source deck is available as an option. DIVD is a two digit constant that indicates whether or not your computer has Direct Divide and/or

TNF instruction. A zero (0) indicates that these instructions are available and a one (1) indicates that you do not have this instruction.

To change object deck:

- (1) Column 42 of card 39, change to a "1" if direct divide is not available.
- (2) Column 43 of card 39, change to a "1" if TNF is not available.

INPUT			
1. Program Deck		15	"1" if the grade distribution and exam analysis is desired on <u>last card indicator</u> . Otherwise, a "0" or blank.
2. Control Card			
Card Columns	<u>Data</u>	16	"1" if grade distribution on last card indicator is to be deleted. Otherwise, a "0" or blank.
1-2	Number of cards per student.	17	"1" if exam analysis on last card indicator is to be deleted. Otherwise, a "0" or blank.
3-5	Number of questions on the exam.	18	"1" if name is to be omitted from output. Otherwise, a "0" or blank.
6-8	Number of questions not to be graded (this includes only those questions properly left blank).	20-24	Any data in columns 20-24 of header card will be punched in columns 76-80 of each student's output card. This could be used to give the percent of the final grade that this test will be and the test number or any other identification that is needed. Another possible use for this output is to put the instructor's initials or in some cases their last name. If left blank, nothing will be punched.
9	"0" or blank if the grade distribution and exam analysis by section is desired. Otherwise, a "1".		
10	"1" if the grade distribution by section is to be omitted. Otherwise, a "0" or blank.		
11	"1" if the exam analysis by section is to be deleted. Otherwise a "0" or blank.	26	"1" if omitted question numbers are not to be punched following the student's answer card. Otherwise, a "0" or blank.
12	"1" if the grade distribution and exam analysis by course is desired. Otherwise, a "0" or blank.	27	"1" if weight value is not to be punched following the question number on exam analysis cards. Otherwise, a "0" or blank.
13	"1" if the grade distribution by course is to be deleted. Otherwise, a "0" or blank.	31-60	Any information punched in columns 31-60 of the control card will be punched in columns 1-30 of the first header card. This can be used for course identification.
14	"1" if the exam analysis by course is to be deleted. Otherwise, a "0" or blank.		

3. Keys For The Exam

The key cards for the exam are the same as the student answer cards. They are of three types: major keys, secondary keys, and weight cards.

- A. MAJOR KEYS - Required
Contain the instructor's first choice of correct answers. It must contain an answer for each question to be graded. Questions not to be graded must be left blank.
Columns 1-5 have a 99999.
- B. SECONDARY KEYS - Optional
Contain alternate answers to those given on the major keys. If a question on a secondary key card is left blank, no alternate answer is assumed. There can be 4 or less secondary key cards for each major key.
Columns 1-5 have a 99998 for first alternate key, 99997 for second, 99996 for third, and 99995 for the fourth alternate key.
- C. WEIGHT KEYS - Optional
If used, the weight key will have a weight for each question answered on the major key. An answer A on the weight key assigns that question a weight of 1; a B, a weight of 2; a C, a weight of 3; a D, a weight of 4; an E, a weight of 5. If a question is left blank, the weight is assumed to be 1.
Columns 1-5 contain 99994.

Column 30 of ALL the key cards contains:

- 1, if the card pertains to the first 50 questions
- 2, if the card pertains to the second 50 questions
- 3, if the card pertains to the third 50 questions
and so on, until
- 9, if the card pertains to the ninth 50 questions
- 0, if the card pertains to the tenth 50 questions

Only one answer per question is allowed, but by using the alternate key cards, if the student answers any one of the correct answers he will get credit for that question. Let it be stressed that one and only one answer is to be marked per question.

If any of the alternate key cards or weight cards are not marked, they do not have to be read in, but if they are read in they are ignored.

The order by which the key cards are read in after the control card is of no consequence.

4. Student Answer Cards.

<u>Card Columns</u>	<u>Data</u>
1-5	Student number
6-23	Student name
24-25	Section number
26-29	Course number
30	Card number
31-80	Student's answers

The student's answer cards do not have to be in any particular order. The only requirement is that all cards for one student be read in together.

OUTPUT

1. Student's grade card

<u>Card Column</u>	<u>Data</u>
2-3	Section number
6-9	Course number
15-32	Student's name
39-43	Student number
49-51	Number of correct answers
57-59	Number of incorrect answers
65-67	Number of questions omitted
72-74	Score
76-80	Any data in columns 20-24 of the control card

2. Student's omitted question numbers card

<u>Card Columns</u>	<u>Data</u>
18-34	Comment "QUESTIONS OMITTED"
40-42	First question number omitted
44-46	Second question number omitted
.	.
.	.
.	.
76-78	Tenth question number omitted

If more than ten questions were omitted, they will be punched on the following card, etc.

3. Grade distribution cards.

<u>Card Columns</u>	<u>Data</u>
2-3	Section number
6-9	Course number
35-37	Score
48-50	Frequency
61-63	Cumulative frequency
74-76	Percentile

4. Exam Analysis Cards

<u>Card Columns</u>	<u>Data</u>
2-3	Section number
6-9	Course number
14-16	Question number
18	Weight of question
23-26	Number of A answers
32-35	Number of B answers
41-44	Number of C answers
50-53	Number of D answers
59-62	Number of E answers
68-71	Number of omissions
78-80	Percent of correct answers to this question

SAMPLE INPUT DATA

IDENT	NAME	SEC	COURSE	SCORE	IDENT	NAME	SEC	COURSE	SCORE
01050003	1	ROSS	PSYCHOLOGY 201 SEC 01 + 02						
99998	ALTERNATE KEY	01	20119999979 77777	222222					
99997	ALTERNATE KEY	01	20118788						
99994	WEIGHT CARDEY	01	20119999988888777778888899999	33333 1111100000					
99999	MASTER KEY CARD	02	2011787888788887877877 778772233323 3 323232233323232						
56223	WILKINSON CAMILLE 01	201	2011787878888888787777877877223332333232322322323232						
57829	BAILEY PHILLIP JASO1	201	20117878888888878788777787732332322233323223333332						
58377	HABES JOHN D JR 01	201	2011787888888887878887788882233223333232323233222						
60243	SINGLETON WILLIAM 01	201	20117778887778788788777778792233323232323233323332223						
59089	SHADDINGER MARYE JO1	201	20117878888888878777777787823332333232323222233332						
54373	EMBRY JANICE PHILL01	201	20117878887887887877877778223332333232232332323232						
56120	TOWNSEND JOHN HERN01	201	201178788 788788788 877778788223 3232 33 2322 23 3232						
56201	WELLS STEVE C 01	201	201177788887878878778777787722323332232232323332222						
55541	LAFOLLETTE LOIS B 01	201	2011787888788778878878887888223332323231323222333332						
54136	CRAWFORD BUREN R 01	201	20117777888787787778777877787732333323332322323222						
58988	BRAY SUSAN GILBERT 01	201	178 8788 878777 787787723333 333 332 32 3 33332						
58285	FRAZIER BRENDA MAR01	201	20117778888788888878778778773333232323323232332332						
55344	GRIMES F ANITA 01	201	2011787888878888887877877877223323332 233322333332						
55147	CURTIS MARY M 01	201	2011787888878778778777778772333233232233322333232						
54691	PASH JOHN 01	201	2011787888887878778777877877233323332323233322232						
56136	UZZLE ROBERT H 01	201	20117878888887878877778872332223222322332333232						
47551	CHAMPION JOHN POWE01	201	2011777787787787777777787772232322322222322232232						
59123	SLACK CHERYL GAY 01	201	201178788888878878778878888333223323323323332233						
52850	FYFE CHARLES WATKI01	201	2011777888878878887787787787822332232323232333232						
57780	ALEXANDER STACY M 01	201	2011787888888887877877877877233323323232323323332						
55497	JONES SANDRA L 01	201	2011787888878787877877777877223323322322323233232						
60082	BARNES CLAIR CORTL01	201	2011787 88878 8878788788788788732332223223232323232						
59232	TAYLOR DIANNA TEEN01	201	201177788887888878777778772233233232232232333232						
55225	EDWARDS HAROLD M JO1	201	20117778787888787878 78778772332323332323232332332						
55257	FINCH JO CAROL 01	201	201178788887878878778778788822333323333232323332						
57767	ABRAHAM GLADYS K 01	201	20117778788777887888788778778723322332232232333232						
55659	MAGEE ROBERT M 01	201	201177778788887887787777877223332223223223232232						
57140	LITTON PEGGY SCOTT01	201	20117778888788887878887787887787823332333233233232						
54505	WHITTEN MARY ANN 01	201	2011777888878888878878778788723232323232232323232						
47513	CALVIN JOHN HENRY 01	201	2011787888878888787878887877233323332332323323332						
54650	GUNN VIRGINIA C 01	201	20117878888887787887777887223223223232322232332						
54383	REA WILLIAM L 02	201	20117878878788887877878877223323323222333233232						
57047	HARRIS CAROLYN ANN02	201	20117878887888878778777787722332333 3223322323232						
55584	LOGAN FREDERICK M 02	201	2011787888878888878777 87878232333 3 33323 23332 32						
50037	BEAVER SONDR A KATH02	201	2011787888788787877778 778772223322 3 22223 23332232						
55262	FLAGG CAROLYN B 02	201	20117878788788887877877 77878223323 3 323232323232						
56116	TIBBETTS ROBERT N 02	201	2011777888788787878787 77877222332 3 3222322333232						
58867	NECAISE JEANNE KAY02	201	2011787888788887877877 7877223323 3 32322233232						
55064	CARVER CANDACE ANN02	201	201177778878788787778 77878233323 2 32223222333232						
55983	SHARPE SUSAN MANN 02	201	20117777887877877787778 77878223323 2 2232322323232						
53308	PRICE LEO EDWARD 02	201	2011787888788887878877 77877223323 3 3332323233232						
56959	DOUGHERTY PATRICIA02	201	201178788888887888887 77878233233 2 3323222333232						
55311	GEORGE FRED ANTHON02	201	201178788788877877887 78887223323 3 3323223232232						
57123	LAUGHLIN JAMES RIC02	201	201178788878887888787787 7787723323 2 3222322333232						
55128	COX ALVIN C JR 02	201	20117887887787877887878 7788223332 2 3322323232323						
53526	WEBB THOMAS LYTLE 02	201	2011777878888788787787 7787733323 2 323322333232						
58576	JUE TRUMAN 02	201	201178778788788877777 77878322233 3 3323222323232						
58248	FELLOWS DONALD K JO2	201	201178788878788787777877 77877222323 3 32223223 32222						
58265	FOOSE JONATHAN EDW02	201	201178788887877787887777 7787823332323232332333232						
50208	CHURCH CLARENCE H 02	201	20117778888788788787787 87887223333 2 3222323232322						

SAMPLE OUTPUT DATA

PSYCHOLOGY 201 SEC 01 + 02	SEC COURSE	NAME	I. D. NUMBER	NUMBER RIGHT	NUMBER WRONG	NUMBER OMITTED	SCORE	IDENT
01	201	WILKINSON CAMILLE	56223	38	9		73	ROSS
01	201	BAILEY PHILLIP JAS	57829	40	7		84	ROSS
01	201	HABES JOHN D JR	58377	36	11		72	ROSS
01	201	SINGLETON WILLIAM	60243	35	12		66	ROSS
01	201	SHADDINGER MARYE J	59089	41	6		86	ROSS
01	201	EMBRY JANICE PHILL	54373	41	6		88	ROSS
01	201	TOWNSEND JOHN HERN	56120	33	8	6	65	ROSS
		QUESTIONS OMITTED	6	16	29	38 43 46		
01	201	WELLS STEVE C	56201	38	9		75	ROSS
01	201	LAFOLLETTE LOIS B	55541	37	10		77	ROSS
01	201	CRAWFORD BUREN R	54136	39	8		83	ROSS
01	201	RAY SUSAN GILBERT	58988	30	6	11	63	ROSS
		QUESTIONS OMITTED	3	4	5	10 11 18 31 39 42 44		
		QUESTIONS OMITTED	45					
01	201	FRAZIER BRENDA MAR	58285	38	9		79	ROSS
01	201	GRIMES F ANITA	55344	37	9	1	79	ROSS
		QUESTIONS OMITTED	36					
01	201	CURTIS MARY M	55147	39	8		75	ROSS
01	201	PASH JOHN	54691	37	10		74	ROSS
01	201	UZZLE ROBERT H	56136	33	14		63	ROSS
01	201	CHAMPION JOHN POWE	47551	35	12		73	ROSS
01	201	SLACK CHERYL GAY	59123	30	17		65	ROSS
01	201	FYFE CHARLES WATKI	52850	39	8		76	ROSS
01	201	ALEXANDER STACY M	57780	42	5		88	ROSS
01	201	JONES SANDRA L	55497	42	5		86	ROSS
01	201	BARNES CLAIR CORTL	60082	39	6	2	88	ROSS
		QUESTIONS OMITTED	4	10				
01	201	TAYLOR DIANNA TEEN	59232	42	5		83	ROSS
01	201	EDWARDS HAROLD M J	55225	34	12	1	70	ROSS
		QUESTIONS OMITTED	17					
01	201	FINCH JO CAROL	55257	36	11		74	ROSS
01	201	ABRAHAM GLADYS K	57767	32	15		67	ROSS
01	201	MAGEE ROBERT M	55659	37	10		75	ROSS
01	201	LITTON PEGGY SCOTT	57140	40	7		88	ROSS
01	201	WHITTEN MARY ANN	54505	39	8		85	ROSS
01	201	CALVIN JOHN HENRY	47513	37	10		74	ROSS
01	201	GUNN VIRGINIA C	54650	40	7		84	ROSS

SEC	COURSE	SCORE	FREQUENCY	CUM. FREQ.	PERCENTILE
01	201	63	2	2	6
01	201	65	2	4	13
01	201	66	1	5	16
01	201	67	1	6	19
01	201	70	1	7	23
01	201	72	1	8	26
01	201	73	2	10	32
01	201	74	3	13	42
01	201	75	3	16	52
01	201	76	1	17	55
01	201	77	1	18	58
01	201	79	2	20	65
01	201	83	2	22	71
01	201	84	2	24	77
01	201	85	1	25	81
01	201	86	2	27	87
01	201	88	4	31	100

NUMBER OF TEST = 31 MEAN = 77 STANDARD DEVIATION = 7

SEC	COURSE	QUESTION NUMBER	A	B	C	D	E	OMIT	PERCENT CORRECT		
01	201	1	*	*	31*				100		
01	201	2	*	19*	12*				100		
01	201	3	*	*	30*			1	97		
01	201	4	*	19*	10*			2	94		
01	201	5	*	23*	7			1	74		
01	201	6 B		30*	*			1	97		
01	201	7 B	*	23*	8				74		
01	201	8 B		13	18*				58		
01	201	9 B		27*	4				87		
01	201	10 B		20*	9			2	65		
01	201	11 C		21*	9*			1	97		
01	201	12 C		25*	6*				100		
01	201	13 C		6	25*				81		
01	201	14 C		30*	1*				100		
01	201	15 C		3	28*				90		
01	201	16 B		12	18*			1	58		
01	201	17 B		20*	10			1	65		
01	201	18 B		3	27*			1	87		
01	201	19 B		7	24*				77		
01	201	20 B	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR								
01	201	21		5	26*				84		
01	201	22		3	28*				90		
01	201	23		28*	3				90		
01	201	24		9	22*				71		
01	201	25	1	9	21*				68		
01	201	26		5	26*				84		
01	201	27		14	17*				55		
01	201	28		28*	3				90		
01	201	29		27*	3			1	87		
01	201	30		25*	6				81		
01	201	31 B		5	25*			1	81		
01	201	32 B		28*	3				90		
01	201	33 B	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR								
01	201	34 B		21*	10				68		
01	201	35	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR								
01	201	36		26*	4*			1	97		
01	201	37		18	12*				39		
01	201	38		13*	17*	1		1	97		
01	201	39		7	23*			1	74		
01	201	40		31*	*				100		
01	201	41 D		11	20*				65		
01	201	42 D		9	21*			1	68		
01	201	43 D		20*	10			1	65		
01	201	44 D		16	14*			1	45		
01	201	45 D		28*	2			1	90		
01	201	46 E		28*	2			1	90		
01	201	47 E		19	12*				39		
01	201	48 E		16*	15				52		
01	201	49 E		25*	6				81		
01	201	50 E		3	28*				90		

ASTERISK (*) INDICATES CORRECT ANSWER

PSYCHOLOGY 201 SEC 01 + 02		I. D.	NUMBER	NUMBER	NUMBER	SCORE	IDEN	SEC	COURSE	SCORE	FREQUENCY	CUM. FREQ.	PERCENTILE
SEC	COURSE	NUMBER	RIGHT	WRONG	OMITTED								
02	201	54383	42	5		82	ROSS	02	201	54	1	1	5
02	201	57047	45	2		94	ROSS	02	201	66	1	2	11
02	201	55584	37	8	2	78	ROSS	02	201	69	1	3	16
		41	48					02	201	72	1	4	21
		QUESTIONS OMITTED						02	201	73	1	5	26
02	201	50037	40	6	1	81	ROSS	02	201	76	2	7	37
		41						02	201	78	1	8	42
		QUESTIONS OMITTED						02	201	81	3	11	58
02	201	55262	44	3		93	ROSS	02	201	82	2	13	68
02	201	56116	38	9		76	ROSS	02	201	84	2	15	79
02	201	58867	44	3		88	ROSS	02	201	86	1	16	84
02	201	55064	36	11		72	ROSS	02	201	88	1	17	89
02	201	55983	38	9		76	ROSS	02	201	93	1	18	95
02	201	53308	42	5		84	ROSS	02	201	94	1	19	100
02	201	56959	33	14		66	ROSS						
02	201	55311	39	8		82	ROSS						
02	201	57123	41	6		86	ROSS						
02	201	55128	30	17		54	ROSS						
02	201	53526	35	12		73	ROSS						
02	201	58576	35	12		81	ROSS						
02	201	58248	42	4	1	84	ROSS						
		44											
		QUESTIONS OMITTED											
02	201	58265	39	8		81	ROSS						
02	201	50208	36	11		69	ROSS						

NUMBER OF TEST = 19 MEAN = 79 STANDARD DEVIATION = 9

SEC	COURSE	QUESTION NUMBER	EXAM ANALYSIS					PERCENT CORRECT	TOTAL FOR ALL SECTIONS						
			A	B	C	D	E		OMIT	COURSE	SCORE	FREQUENCY	CUM. FREQ.	PERCENTILE	
02	201	1	*	*	19*			100	201	54	1	1	2		
02	201	2	*	14*	5*			100	201	63	2	3	6		
02	201	3	*	1*	18*			100	201	65	2	5	10		
02	201	4	*	6*	13*			100	201	66	2	7	14		
02	201	5	*	14*	5			74	201	67	1	8	16		
02	201	6 B		18*	1*			100	201	69	1	9	18		
02	201	7 B	*	16*	3			84	201	70	1	10	20		
02	201	8 B		4	15*			79	201	72	2	12	24		
02	201	9 B		16*	3			84	201	73	3	15	30		
02	201	10 B		14*	5			74	201	74	3	18	36		
02	201	11 C		13*	6*			100	201	75	3	21	42		
02	201	12 C		14*	5*			100	201	76	3	24	48		
02	201	13 C		3	16*			84	201	77	1	25	50		
02	201	14 C		19*	*			100	201	78	1	26	52		
02	201	15 C		2	17*			89	201	79	2	28	56		
02	201	16 B		4	15*			79	201	81	3	31	62		
02	201	17 B		13*	6			68	201	82	2	33	66		
02	201	18 B		4	15*			79	201	83	2	35	70		
02	201	19 B		4	15*			79	201	84	4	39	78		
02	201	20	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR								201	85	1	40	80
02	201	21		3	16*			84	201	86	3	43	86		
02	201	22		1	18*			95	201	88	5	48	96		
02	201	23		18*	1			95	201	93	1	49	98		
02	201	24		3	16*			84	201	94	1	50	100		
02	201	25		8	11*			58							
02	201	26		2	17*			89							
02	201	27		6	13*			68							
02	201	28		15*	4			79							
02	201	29		17*	2			89							
02	201	30		18*	1			95							
02	201	31 B		6	13*			68							
02	201	32 B		17*	2			89							
02	201	33	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR												
02	201	34 B		12*	7			63							
02	201	35	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR												
02	201	36		17*	2*			100							
02	201	37		7	12*			63							
02	201	38		8*	11*			100							
02	201	39		4	15*			79							
02	201	40		19*	*			100							
02	201	41 D		3	14*			74							
02	201	42 D		3	16*			84							
02	201	43 D		14*	5			74							
02	201	44 D		10	8*			42							
02	201	45 D		18*	1			95							
02	201	46 E		17*	2			89							
02	201	47 E		10	9*			47							
02	201	48 E		2*	16			11							
02	201	49 E		17*	2			89							
02	201	50 E		1	18*			95							

ASTERISK (*) INDICATES CORRECT ANSWER

NUMBER OF TEST = 50 MEAN = 78 STANDARD DEVIATION = 8

TOTAL FOR ALL SECTIONS
QUESTION

COURSE	QUESTION NUMBER	A	B	EXAM ANALYSIS C	D	E	OMIT	PERCENT CORRECT	
201	1	*	*	50*				100	
201	2	*	33*	17*				100	
201	3	*	1*	48*			1	98	
201	4	*	25*	23*			2	96	
201	5	*	37*	12			1	74	
201	6 B		48*	1*			1	98	
201	7 B	*	39*	11				78	
201	8 B		17	33*				66	
201	9 B		43*	7			2	86	
201	10 B		34*	14			1	68	
201	11 C		34*	15*				98	
201	12 C		39*	11*				100	
201	13 C		9	41*				82	
201	14 C		49*	1*				100	
201	15 C		5	45*			1	90	
201	16 B		16	33*			1	66	
201	17 B		33*	16			1	66	
201	18 B		7	42*			1	84	
201	19 B		11	39*				78	
201	20	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR							84
201	21		8	42*				92	
201	22		4	46*				92	
201	23		46*	4				76	
201	24		12	38*				64	
201	25	1	17	32*				86	
201	26		7	43*				60	
201	27		20	30*				86	
201	28		43*	7			1	88	
201	29		44*	5				86	
201	30		43*	7			1	76	
201	31 B		11	38*				90	
201	32 B		45*	5				66	
201	33	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR							66
201	34 B		33*	17				98	
201	35	THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR							98
201	36		43*	6*			1	48	
201	37		25	24*		1		98	
201	38		21*	28*			1	76	
201	39		11	38*				100	
201	40		50*	*			2	68	
201	41 D		14	34*			1	74	
201	42 D		12	37*			1	68	
201	43 D		34*	15			2	44	
201	44 D		26	22*			1	92	
201	45 D		46*	3			1	90	
201	46 E		45*	4				42	
201	47 E		29	21*			1	36	
201	48 E		18*	31				84	
201	49 E		42*	8				92	
201	50 E		4	46*					

ASTERISK (*) INDICATES CORRECT ANSWER

SIZE	NCARD	HEADZ	MAXIMUM NUMBER OF QUESTIONS	MAXIMUM NUMBER OF CARDS				
*	UNIV. OF MISS. TEST SCORING PROGRAM (UMTS)		PAGE 01	Z 10010				
*	VERSION - A			Z 10020				
*	BY RICHARD D ROSS			Z 10030				
*	FEBRUARY 28, 1966			Z 10040				
*				10050				
*				10060				
*				10070				
*	DORG 400			10080				
SIZE	DS ,500,***			10090				
NCARD	DS ,10,***			10100				
*				10110				
*	SET UP HEADER CARDS FOR OUTPUT			10120				
*				10130				
*	DS 100			10140				
	DS 9			10150				
	DS 2			10160				
	DS 4			10170				
X	DAS 80			10180				
	DS 4			10190				
ZERO	DC 160,0			10200				
	DS 2			10210				
NMM	DAC 5,NAME-			10220				
HA	DAS 80			10230				
	DS 2			10240				
HB	DAS 80			10250				
	DS 2			10260				
HC	DAS 80			10270				
	DS 2			10280				
HD	DAS 80			10290				
	DS 2			10300				
HE	DAS 80			10310				
	DS 2			10320				
ROSS	DAC 48,SCORE	FREQUENCY	CUM. FREQ.	PERCENTILE-				
H4	DAC 9,QUESTION-			10330				
H5	DAC 8,PERCENT-			10340				
H6	DAC 56,A	B	C	D	E	OMIT	CORRECT-	10350
HDHD	DAC 14,EXAM ANALYSIS-							10360
H1	DAC 32,I. D.	NUMBER	NUMBER	NUMBER-				10370
H2	DAC 40,NUMBER	RIGHT	WRONG	OMITTED	SCORE -			10380
H44	DAC 5,IDEN-							10390
H22	DAC 11,SEC COURSE-							10400
START	TF HA+80*2-2,ZERO							10410
	TF HB+80*2-2,ZERO							10420
	TF HC+80*2-2,ZERO							10430
	TF HD+80*2-2,ZERO							10440
	TF HE+80*2-2,ZERO							10450
	TF HA+69*2-2,H1+31*2-2							10460
	TF HB+10*2-2,H22+10*2-2							10470
	TF HB+76*2-2,H2+39*2-2							10480
	TF HB+80*2-2,H44+4*2-2							10490
	TF HC+10*2-2,H22+10*2-2							10500
	TF HC+80*2-2,ROSS+47*2-2							10510
	TF HD+19*2-2,H4+8*2-2							10520
	TF HD+80*2-2,H5+7*2-2							10530
	TF HD+55*2-2,HDHD+13*2-2							10540
	TF HE+18*2-2,H2+6*2-2							10550
	TF HE+10*2-2,H22+10*2-2							10560
	TF HE+80*2-2,H6+55*2-2							10570
TRA								10580
TCD	START							10590
								10600

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 02 Z 10610
* VERSION - A Z 10620
* BY RICHARD D ROSS Z 10630
* Z 10640
* 10650
* BEGINNING OF PROGRAM TO GRADE TEST 10660
*
DORG 400 10670
HEAD 10680
J DS 8 10690
TBC DS ,J+2 10700
DC 2,16,, ZERO (0) ANSWER = E (16) 10710
K DS 8 10720
DC 2,12,, ONE (1) ANSWER = D (12) 10730
L DS 8 10740
DC 2,08,, TWO (2) ANSWER = C (08) 10750
M DS 8 10760
DC 2,04,, THREE (3) ANSWER = B (04) 10770
N DS 8 10780
DC 2,00,, FOUR (4) ANSWER = A (00) 10790
MM DS 8 10800
DC 2,16,, FIVE (5) ANSWER = E (16) 10810
NN DS 8 10820
DC 2,12,, SIX (6) ANSWER = D (12) 10830
GRA DC 8,0,, SUM OF GRADES PER SECTION 10840
DC 2,08,, SEVEN (7) ANSWER = C (08) 10850
GRB DC 8,0,, SUM OF GRADES PER COURSE 10860
DC 2,04,, EIGHT (8) ANSWER = B (04) 10870
SDC DC 8,0,, STANDARD DEVIATION ACCUMULATOR 10880
DC 2,00,, NINE (9) ANSWER = A (00) 10890
RTZ DC 5,9 10900
RT1 DC 2,5 10910
RT2 DC 2,-01 10920
DIVD DSC 2,00,, DIGIT IN LOCATION DIVD INDICATES 10930
* NO DIRECT DIVIDE, OTHERWISE A -0- 10940
TNF DS ,DIVD+1,,, DIGIT IN TNF INDICATES TNF INST., 10950
QQ DS 2 10960
WW DS 2 10970
* OTHERWISE A -0- 10980
X DAS 80 10990
DC 2,0- 11000
NINE DC 2,79 11010
BLANK DS ,NINE+2 11020
ZERO DC 160,0 11030
DC 2,0- 11040
Z7 DS ,ZERO-160+7 11050
Z8 DS ,ZERO-160+8 11060
Z10 DS ,ZERO-160+10 11070
Z13 DS ,ZERO-160+13 11080
Z18 DS ,ZERO-160+18 11090
NMM DAC 5,NAME- 11100
HA DAS 80 11110
DC 2,0- 11120
HB DAS 80 11130
DC 2,0- 11140
HC DAS 80 11150
DC 2,0- 11160
HD DAS 80 11170
DC 2,0- 11180
HE DAS 80 11190
DC 2,0- 11200

```

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 03 Z 11210
* VERSION - A Z 11220
* BY RICHARD D ROSS Z 11230
* Z 11240
* 11250
H44 DC 2,0- 11260
START DAC 5,IDEN- 11270
READ SF READ 11280
TF X+80*2-2,ZERO 11290
RACD X 11300
STAT SF X+30*2-3 11310
CF X+24*2-3 11320
CM X+5*2-2,0,10 11330
BE READ,,, 11340
* IF BLANK CARD IS READ,
* SKIP THE CARD 11350
CM X+30*2-2,70,10 11360
BNN ARNI 11370
* HEADER CARD 11380
CF READ 11390
CF RTTT 11400
SF X+26*2-3 11410
TF WW,X+27*2-2 11420
SF X+31*2-3 11430
TF HA+30*2-2,X+60*2-2 11440
TD CARD,X+2*2-2 11450
TD CARD-1,X+1*2-2 11460
SF CARD-1 11470
TD QUES,X+5*2-2 11480
TD QUES-1,X+4*2-2 11490
TD QUES-2,X+3*2-2 11500
SF QUES-2 11510
MM CARD,50,10 11520
BZ ZRZ-12 11530
SM 99,50,10 11540
C 99,QUES 11550
BNN ZRZ-12,,, NUMBER OF CARDS AND QUESTIONS
* DO NO AGREE 11560
MM CARD,50,10 11570
C 99,QUES 11580
BN ZRZ-12 11590
TD BL,X+8*2-2 11600
TD BL-1,X+7*2-2 11610
TD BL-2,X+6*2-2 11620
SF BL-2 11630
SF X+9*2-3 11640
TF XTOT+4,X+17*2-2 11650
SF XCOUR-1 11660
SF XTOT-1 11670
BD **36,XCOUR 11680
TFM XCOUR,71,10 11690
B **24 11700
TFM XCOUR,0,10 11710
BD **36,XTOT 11720
TFM XTOT,71,10 11730
B **24 11740
TFM XTOT,0,10 11750
TF XSAVE,XSECB 11760
TD XNAME,X+18*2-2 11770
TF HB+18*2-2,Z10 11780
BD **24,XNAME 11790
TF HB+18*2-2,NMM+4*2-2 11800

```


* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 04 Z 11810
 * VERSION - A Z 11820
 * BY RICHARD D ROSS Z 11830
 * Z 11840

SF X+20*2-3 11850
 TF HG2,X+24*2-2 11860
 TF HB+80*2-2,H44+4*2-2 11870
 CM HG2,0,10 11880
 BNE *+24 11890
 TF HB+80*2-2,Z10-2 11900
 CM CARD,NCARD,10 11910
 BP ZRZ-12 11920
 CM QUES,SIZE,9 11930
 BNP ZRZ 11940
 BTM ERRF,ERR5 11950
 ZRZ BTM ZRO,,, ZERO TAB1, TAB2, FREQ, AND FREQT 11960
 TR TAB2-3,TAB1-3 11970
 TR FREQT-3,FREQ-3 11980
 * ZERO ANSWER TABLE 11990
 S ADN,ADN 12000
 AM ADR,ANS-9+1 12010
 S ADN,QUES 12020
 ZRB TR ADR,ANSZ-1,6 12030
 AM ADN,10001 12040
 BD ZRB,ADN-2 12050
 * SET UP CHECK CONSTANTS 12060
 TF CKA,Z10 12070
 TF CKB,Z10 12080
 TFM J,1,10 12090
 ZRD TD ZRE+6,J 12100
 ZRE TDM CKA,1 12110
 AM J,1,10 12120
 C J,CARD 12130
 BNP ZRD 12140
 SF CKA-9 12150
 * ZERO CARD/QUESTION CONSTANT AND INITILIZE 12160
 TR CQN+6*2-2-1,ANSZ 12170
 TR CQN-1,ANSZ-1 12180
 TFM 97,0,9 12190
 TF J,QUES 12200
 APNX SM J,50,10 12210
 BNP HP36 12220
 AM 97,1,10 12230
 B APNX 12240
 HP36 AM J,50,10 12250
 SF J-1 12260
 TF 99,J 12270
 CM CARD,10,10 12280
 BNE ARN4 12290
 CM 97,10,10 12300
 BNE ARN3 12310
 TFM CQN,50,10 12320
 SM 97,1,10 12330
 B ARN4 12340
 DORG *-4 12350
 ARN3 TF CQN,99 12360
 ARN4 S ADN,ADN 12370
 AM ADR,CQN+2 12380
 CM 97,0,10 12390
 BE ZRG 12400

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 05 Z 12410
 * VERSION - A Z 12420
 * BY RICHARD D ROSS Z 12430
 * Z 12440

AM ADR,1,10 12450
 S ADN,97 12460
 ZRF TFM ADR,50,610 12470
 AM ADN,2001,8 12480
 BD ZRF,ADN-2 12490
 SM ADR,1,10 12500
 ZRG TF ADR,99,6 12510
 * ZERO BLANK COLUMN COUNT 12520
 TFM BLC,0,9 12530
 * INITILIZE WEIGHT CONSTANT 12540
 S ADN,ADN 12550
 AM ADR,WT+1 12560
 S ADN,QUES 12570
 ZRP TDM ADR,1,6 12580
 AM ADN,1001,8 12590
 BD ZRP,ADN-2 12600
 B READ 12610
 * CONATANTS USED 12620
 TAB1 DSB 4,5*SIZE,,, TABLE 1, USED FOR EACH SECTION 12630
 DS 1 12640
 TAB2 DSB 4,5*SIZE,,, TABLE 2, USED FOR TOTAL OF ALL SECT 12650
 DS 1 12660
 TABZ DC 4,0,,, USED TO ZERO TAB1 AND TAB2 12670
 DC 4,0 12680
 DC 4,0 12690
 DC 4,0 12700
 DC 4,0 12710
 RM DC 1,-- 12720
 Y DAS 80 12730
 DC 2,0- 12740
 CARD DC 2,0,,, NUMBER OF CARDS PER STUDENT 12750
 QUES DC 3,0,,, NUMBER OF QUESTIONS ON TEST 12760
 BL DC 3,0,,, NUMBER OF QUESTIONS LEFT BLANK 12770
 BLC DC 3,0,,, CONSTANT USED TO CHECK TO SEE IF 12780
 * THE CORRECT NUMBER OF QUESTIONS WER 12790
 * LEFT BLANK 12800
 MORG 10 12810
 ANS DSB 10,SIZE,,, FOR EACH QUESTION THIS CONSTANT WIL 12820
 * HAVE THE CORRECT WEIGHT FOR THE COR 12830
 * ANSWERS FOR EACH QUESTION 12840
 DS 1 12850
 ADN DC 8,0 12860
 ADR DS ,ADN-3 12870
 ANSZ DC 2,-0,,, USED TO ZERO ANS 12880
 DC 2,-0 12890
 DC 2,-0 12900
 DC 2,-0 12910
 DC 2,-0 12920
 DC 1,- 12930
 FREQ DSB 4,101,,, TABLE OF THE FREQUENCY OF SCORES 12940
 DS 17 12950
 FREQT DSB 4,101,,, FREQUENCY OF SCORES FOR ALL SECTION 12960
 DS 17 12970
 * 12980
 * 12990
 * 13000

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 06

* VERSION - A Z 13010

* BY RICHARD D ROSS Z 13020

* Z 13030

* Z 13040

ARN1 BNF ARN1,READ 13050

BTM ERRF,ERR4 13060

ARN11 C X+4*2-2,CONA-2 13070

BNE STUD,,, BRANCH TO READ STUDENTS CARDS 13080

CF WET,,, USED TO CHECK FOR WEIGHT CARD 13090

C X+5*2-2,CONB 13100

BNE WET,,, NO WEIGHT CARD 13110

SF WET,,, THERE IS A WEIGHT CARD 13120

* 13130

* SET UP ANSWER CARDS AND WEIGHT CARDS 13140

* 13150

WET CF ZRJ,,, USED TO CHECK FOR MASTER KEY CARD 13160

C X+5*2-2,CONA 13170

BNE ARN6 13180

SF ZRJ,,, THIS IS A MASTER KEY CARD 13190

TD ZRJ+6,X+30*2-2 13200

ZRJ TDM CKB,1 13210

ARN6 TD CN,X+30*2-2,,, GET CARD NUMBER 13220

MM CN,2,9 13230

AM 99,CQN 13240

TF CT,99,11,,, GET QUESTIONS TO BE GRADED FOR THIS 13250

MM CN,50,10 13260

SM 99,49,10 13270

BNN *+24 13280

AM 99,500,9,,, THIS IS A NUMBER 10-CARD 13290

SF 97 13300

TF QC,99,,, GET QUESTION NUMBER FOR THIS CARD 13310

TF RR,Z18 13320

TFM RR-3-5-5,WT-1 13330

A RR-3-5-5,QC 13340

AM RR-3-5,X+31*2-2 13350

AM RR-3,ANS-10+1 13360

A RR-4,QC 13370

S RR,CT 13380

STT TD RR-3,RR-3-5,11 13390

* PUT WEIGHT VALUE INTO CORRECT TABLES 13400

BNF ARN7,WET,,, THIS IS NOT A WEIGHT CARD 13410

TD BNF+11,RR-3-5,11 13420

SM RR-3-5,1,10,,, THIS IS A WEIGHT CARD 13430

BNR *+24,RR-3,11 13440

B ZRRX 13450

BD BNF,RR-3-5,11 13460

B ZRRX 13470

DORG *-4 13480

BNF TD RR-3-5-5,WTT,6 13490

TFM J,10,10 13500

TDM RR-3,0 13510

BNFF BNF BFF,RR-3,11 13520

B BFF+12 13530

DORG *-4 13540

BFF TD RR-3,RR-3-5-5,611 13550

AM RR-3,1,10 13560

SM J,1,10 13570

BNZ BNFF 13580

SM RR-3,1,10 13590

B ZRRX 13600

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 07

* VERSION - A Z 13610

* BY RICHARD D ROSS Z 13620

* Z 13630

* Z 13640

* 13650

ARN7 DORG *-4 13660

SM RR-3-5,1,10 13670

BD ZRR,RR-3-5,11 13680

BNF ZRRX,ZRJ,,, THIS IS NOT A MASTER KEY CARD 13690

AM BLC,1,10,,, THIS IS A MASTER KEY CARD 13700

TFM J,10,10 13710

TDM RR-3,0 13720

ZSS TD RR-3,RM,6 13730

AM RR-3,1,10 13740

SM J,1,10 13750

BNZ ZSS 13760

SM RR-3,1,10 13770

TDM RR-3-5-5,0,6 13780

TD *+18,X+30*2-2 13790

TDM CKB,1,,, USED TO CHECK FOR ALL MASTER KEY CA 13800

B ZRRX 13810

DORG *-4 13820

ZRR BNR *+24,RR-3,11 13830

B *+24 13840

TD RR-3,RR-3-5-5,611,,, PUT CORRECT WEIGHT IN TABLE 13850

ZRRX A RR,RRCP 13860

BD STT,RR-2 13870

BD ZRR,RR-2 13880

B READ 13890

DORG *-4 13900

* CONSTANTS USED FOR THIS PORTION OF THE PROGRAM 13910

CONA DC 10,7979797979 13920

CONB DC 10,7979797974 13930

MORG 10 13940

CKA DC 10,0,,, CHECK CONSTANT TO SEE IF ALL CARDS 13950

WTT DSC 10,5432154321,,, WEIGHT GIVEN FOR ANY PUNCH ON CARD 13960

* BEEN READ IN FOR ONE SET OF CARDS 13970

CKB DC 10,0,,, SAME AS CKA 13980

CQN DSB 2,10,,, NUMBER OF QUESTIONS PER EACH CARD 13990

DS 3 14000

CN DC 2,0,,, CARD NUMBER 14010

CT DC 2,0,,, TOTAL QUESTIONS TO GRADE PER CARD 14020

QC DC 3,0,,, QUESTION NUMBER FOR ANY CARD 14030

DC 1,- 14040

RR DC 28,0 14050

DS 5 14060

RRCP DC 14,10000300010001 14070

RRC DC 18,200020000020001001 14080

RTR DC 5,0 14090

WT DSB 1,SIZE,,, WEIGHT TO BE GIVEN TO EACH QUESTION 14100

* DETERMINE MAXIMUM SCORE (MAXS) 14110

STUD SF CKB-9 14120

C CKA,CKB 14130

BE BN2 14140

BTM ERRF,ERR2,,, MISSING MASTER DEY CARDS, START OVE 14150

C BL,BLC 14160

BE BN3 14170

BTM ERRF,ERR3,,, COUNT OF BLANK QUES. INCORRECT 14180

BN3 TFM MAXS,0,8 14190

BNLC *+12 14200

TF ADN,27

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 08 Z 14210
* VERSION - A Z 14220
* BY RICHARD D ROSS Z 14230
* Z 14240
TFM ADR,WT+1 14250
S ADN,QUES 14260
ZRN TD ZRM+11,ADR,11 14270
ZRM AM MAXS,0,10 14280
AM ADN,1001,8 14290
BD ZRN,ADN-2 14300
SF X+24*2-3 14310
SF X+26*2-3 14320
TF SEC,X+25*2-2 14330
TF COUR,X+29*2-2 14340
TF CIDC,X+5*2-2 14350
TF COURR,COUR 14360
TFM TESTB,0,8 14370
TF GRB,Z8 14380
CF BN6 14390
WACD HA 14400
WACD HB 14410
WACD BLANK 14420
BN6 TFM TESTA,0,8 14430
TF GRA,Z8 14440
BNF BN66,BN6 14450
WACD HA 14460
WACD HB 14470
WACD BLANK 14480
BN66 SF BN6 14490
* ZERO TOTALS FOR EACH STUDENT 14500
BA TF RIGHT,Z7 14510
TFM WRONG,0,9 14520
TFM OMIT,0,9 14530
TF CKB,Z10 14540
TFM NOMZ+6,NOMIT 14550
TF K,CARD 14560
TF SECC,X+25*2-2 14570
TF COURC,X+29*2-2 14580
TF CIDC,X+5*2-2 14590
C SEC,SECC 14600
BE HP24 14610
BD HP24,XSEC 14620
B PSEC 14630
DORG *-4 14640
HP24 C COUR,COURC 14650
BE RAD 14660
BD RAD,XCOUR 14670
B PSEC 14680
DORG *-4 14690
RAD B RAD24 14700
RED BLC ERRA,,, 14710
RACD X,,, 14720
CF X+6*2-3 14730
CM X+23*2-2,0,10 14740
BE RED,,, 14750
RAD24 SF X+30*2-3 14760
CM X+30*2-2,70,10 14770
BN PSEC 14780
TF CID,X+5*2-2 14790
C CID,CIDC 14800

```

STUDENT HAS MISSING CARDS
READ STUDENTS CARDS

IF NAME AND I D NO. ARE BLANK SKIP

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 09 Z 14810
* VERSION - A Z 14820
* BY RICHARD D ROSS Z 14830
* Z 14840
BE BN1 14850
ERRA TF ERR1+13*2-2,CIDC,,, STUDENT HAS MISSING CARDS 14860
RCTY 14870
WATY ERR1 14880
ERRAA BNLC *+12 14890
TFM JA,0,10 14900
TFM HCA+11,CKB-9 14910
HCA BD HCT,CKB-9 14920
HCAA AM HCA+11,1,10 14930
AM JA,1,10 14940
CM JA,10,10 14950
BNE HCA 14960
H 14970
B H488 14980
DORG *-4 14990
HCT BTM SETUP,JA 15000
MM CN,100,9 15010
AM 99,HOLD-1-100+NCARD/10*100 15020
TF RR-3-5-5-5,99 15030
SM 99,X+31*2-2-1 15040
A RR-3-5,99 15050
LOOPA TD RR-3,RR-3-5,11 15060
BD CHECKA,RR-3-5-5-5,11 15070
B THRUUA 15080
DORG *-4 15090
CHECKABNR *+24,RR-3,11 15100
B THRUUA 15110
THRUUA TD THRA+10,RR-3 15120
THRA A RR-3-5-5,TBC 15130
SM RR-3-5-5,1,610 15140
S RR-3-5-5,THRA+11,11 15150
THRUUAA RR-1,RRC 15160
BD LOOPA,RR-2 15170
B HCAA 15180
DORG *-4 15190
HOLD DAS 50*NCARD,,, HOLD AREA FOR CARDS 15200
JA DS 5 15210
* SUBROUTINE TO SET UP CONSTANTS 15220
DS 5 15230
SETUP TD CN,SETUP-1,11,,, GET CARD NUMBER 15240
MM CN,2,9 15250
AM 99,CON 15260
TF CT,99,11,,, GET QUESTIONS TO BE GRADED FOR THIS 15270
MM CN,50,10 15280
SM 99,49,10 15290
BNN *+24 15300
AM 99,500,9 15310
SF 97 15320
TF QC,99,,, GET QUESTION NUMBER FOR THIS CARD 15330
TF RR,Z18+5 15340
AM RR-3,ANS-10+1 15350
A RR-4,QC 15360
S RR-1,CT 15370
AM RR-3-5-5-5,X+31*2-3 15380
AM RR-3-5,X+31*2-2 15390
AM RR-3-5-5,TAB1 15400

```

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 10 Z 15410
* VERSION - A Z 15420
* BY RICHARD D ROSS Z 15430
* Z 15440
*
CM SETUP-1,JA 15450
BE **24 15460
SF RR-3-5-5-5-2 15470
MM QC,20,10 15480
SM 99,20,10 15490
A RR-3-5-5,99 15500
BB 15510
DORG *-9 15520
* END OF SETUP ROUTINE 15530
BN1 SF X+31*2-3 15540
* CHECK TO SEE IF CARD NO. IS INCORRECT 15550
TD **23,X+30*2-2 15560
BD HP20,CKA 15570
RCTY 15580
WATY ERR7 15590
B ERRAA 15600
DORG *-4 15610
ERR7 DAC 19,CARD NO. INCORRECT- 15620
HP20 BTM SETUP,X+30*2-2,,, BRANCH TO SETUP ROUTINE 15630
MM CN,100,9 15640
AM 99,HOLD-2+NCARD/10*100 15650
TF 99,X+80*2-2,6 15660
TD **23,X+30*2-2 15670
BD NOCK,CKB,,, BRANCH TO NO-CHECK IF CARD HAS 15680
* ALREADY BEEN GRADED 15690
TD **18,X+30*2-2 15700
TDM CKB,1 15710
* GRADE STUDENTS CARD 15720
TFM RTR,0 15730
* 15740
* LOOP TO GRADE A STUDENTS CARD 15750
* 15760
LOOP TD RR-3,RR-3-5,11 15770
BD CHECK,RR-3-5-5-5,11 15780
* QUESTION WAS OMITTED BY STUDENT 15790
BNR **24,RR-3,11 15800
B THRUU 15810
TF 99,RR-3 15820
SF 95 15830
SM 99,ANS-20+1 15840
SF 96 15850
NOMZ TF NOMIT,98 15860
AM NOMZ+6,3,10 15870
AM OMIT,1,10 15880
B THRUU 15890
CHECK BNF RIGHT,RR-3,11,,, BRANCH IF STUDENT ANSWERED QUESTION 15900
* CORRECTLY 15910
BNR THRU,RR-3,11,,, BRANCH IF QUESTION WAS WRONG 15920
B THRUU,,, QUESTION WAS OMITTED ON MASTER KEY 15930
RIGHTTD **23,RR-3,11 15940
AM RTR,1000,8 15950
THRU TD THR+10,RR-3 15960
THR A RR-3-5-5,TBC 15970
AM RR-3-5-5,1,610 15980
S RR-3-5-5,THR+11,11 15990
THRUU A RR-1,RRC 16000

```

-31-

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 11 Z 16010
* VERSION - A Z 16020
* BY RICHARD D ROSS Z 16030
* Z 16040
*
BD LOOP,RR-2 16050
NOCK SF RTR-2 16060
A RIGHT,RTR 16070
A RIGHT-4,RTR-3 16080
SM K,1,10 16090
BNZ RED 16100
* 16110
* END OF LOOP TO GRADE A STUDENTS CARD 16120
* 16130
SF CKB-9 16140
C CKB,CKA 16150
BNE ERRA,,, MISSING STUDENT CARDS 16160
AM TESTA,1,10,,, KEEP TOTAL OF TEST GRADED 16170
A WRONG,QUES 16180
S WRONG,BL 16190
S WRONG,RIGHT-4 16200
S WRONG,OMIT 16210
SF RIGHT-3 16220
BTM DIV,**12+2 16230
LD 99-3,RIGHT,27 16240
D 100-4-3,MAXS,27 16250
AM 95,5,10 16260
SF 92 16270
TF SC,94,,, PICK UP SCORE 16280
MM SC,4,10 16290
AM 99,FREQ 16300
AM 99,1,610 16310
AM 99,FREQT-FREQ 16320
AM 99,1,610 16330
A GRA,SC,,, SUM THE SCORES 16340
TFM DECL,3,10 16350
BTM DECS,SC,,, OUTPUT SCORE 16360
TF Y+80*2-2,ZERO 16370
TF Y+74*2-2,DECA 16380
BTM DECS,RIGHT-4 16390
TF Y+51*2-2,DECA,,, OUTPUT NUMBER RIGHT 16400
BTM DECS,WRONG 16410
TF Y+59*2-2,DECA,,, OUTPUT NUMBER WRONG 16420
BTM DECS,OMIT 16430
TF Y+67*2-2,DECA,,, OUTPUT NUMBER OMITTED 16440
TF Y+43*2-2,CIDC,,, OUTPUT I. D. NUMBER 16450
BD **24,XNAME 16460
SF X+6*2-3 16470
TF Y+32*2-2,NAME,,, OUTPUT NAME 16480
TF Y+3*2-2,SECC 16490
TF Y+9*2-2,COURC 16500
TF Y+80*2-2,HG2 16510
WACD Y 16520
H588 BD H488,QQ,,, IF DIGIT IN --QQ-- OMIT OMITTED 16530
* QUESTION OUTPUT 16540
TF Y+80*2-2,ZERO 16550
TF Y+34*2-2,ERR6+17*2-2 16560
TFM H322+11,NOMIT 16570
H822 TF Y+80*2-2,ZERO-34*2 16580
TFM H522+6,Y+42*2-2 16590
C H322+11,NOMZ+6 16600

```

-32-

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 12 Z 16610
* VERSION - A Z 16620
* BY RICHARD D ROSS Z 16630
* Z 16640
H322 BE H488 16650
BTM DECS,NOMIT 16660
AM H322+11,3,10 16670
H522 TF Y+42*2-2,DECA 16680
AM H522+6,4*2 16690
C H322+11,NOMZ+6 16700
BE H722 16710
CM H522+6,Y+82*2-2 16720
BNE H322 16730
H722 WACD Y 16740
B H822 16750
H488 CF LCARD 16760
BLC PSECS 16770
RACD X 16780
CF X+6*2-3 16790
CM X+23*2-2,0,10 16800
BE H488,,, IF NAME AND I D NO. ARE BLANK SKIP 16810
B BA 16820
DORG *-4 16830
PSECS SF LCARD 16840
BD PSEA,XSEC 16850
BD PSEA,XCOUR 16860
B PSEC 16870
DORG *-4 16880
PSEA BD *+24,XCOUR 16890
B PSEC 16900
TF XCOUR+4,XTOT+4 16910
* TAB2=TAB2 + TAB1 16920
PSEC TF XSECB,XSAVE 16930
SF PSEC 16940
A GRB,GRA 16950
A TESTB,TESTA 16960
TF RR+1,Z13+1 16970
AM RR-3-5,TAB1 16980
AM RR-3,TAB2+1 16990
MM QUES,5,10 17000
SF 96 17010
S RR+1,99 17020
PSX A RR-3,RR-3-5,611 17030
A RR+1,A14 17040
BD PSX,RR-2 17050
WACD NINE 17060
BD ROUTT,XSEC 17070
PSSS BD PCOUR,XSECA 17080
TF HC+10*2-2,H22+10*2-2 17090
BNF *+24,RTTT 17100
TF HC+3*2-2,Z10-4 17110
WACD HC 17120
WACD BLANK 17130
TFM DECL,4,10 17140
BTM DIV,**+12+2 17150
LD 99-3,GRA,27 17160
D 100-3-8,TESTA,27 17170
AM 93,5,10 17180
SF 89 17190
TF MEAN,92 17200

```

-33-

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 13 Z 17210
* VERSION - A Z 17220
* BY RICHARD D ROSS Z 17230
* Z 17240
TF SDC,Z8 17250
TFM L,0,8 17260
TFM J,0,8 17270
TFM PSB+11,FREQ 17280
PSA TF Y+80*2-2,ZERO 17290
CM PSB+11,0,610 17300
BE POUT 17310
BNF *+24,RTTT 17320
B *+24 17330
TF Y+3*2-2,SEC 17340
TF Y+9*2-2,COUR 17350
BTM DECS,J 17360
CM J,0,10 17370
BNE *+24 17380
TFM DECA,56,10 17390
TF Y+37*2-2,DECA,,, OUTPUT SCORE 17400
PSB BTM DECS,FREQ 17410
TF Y+50*2-2,DECA,,, OUTPUT FREQUENCY 17420
A L,PSB+11,11, SUM OF FREQUENCIES 17430
BTM DECS,L 17440
TF Y+63*2-2,DECA,,, OUTPUT CUMULATIVE FREQUENCY 17450
BTM DIV,**+12+2 17460
LD 99-3,L,27 17470
D 100-3-4,TESTA,27 17480
AM 95,5,10 17490
SF 91 17500
BTM DECS,94,,, OUTPUT PERCENTILE 17510
TF Y+76*2-2,DECA,,, OUTPUT PERCENTILE 17520
TF K,J 17530
S K,MEAN,, X - M 17540
M K,K,, (X - M)**2 17550
TF A8,99 17560
M A8,PSB+11,11,, (X - M)**2*FREQ 17570
SF 99-7 17580
A SDC,99,, SDC = SDC+(X-M)**2 17590
POUT WACD Y 17600
AM PSB+11,4,10 17610
AM J,1,10 17620
CM J,100,9 17630
BNP PSA 17640
TF Y+80*2-2,ZERO 17650
WACD BLANK 17660
BTM DECS,TESTA 17670
TF Y+29*2-2,NUMT+16*2-2 17680
TF Y+34*2-2,DECA,,, OUTPUT NUMBER OF TEST 17690
TF Y+45*2-2,MEN+6*2-2 17700
BTM DECS,MEAN 17710
TF Y+50*2-2,DECA,,, OUTPUT MEAN 17720
TF Y+75*2-2,ATDE+20*2-2 17730
BTM DIV,**+12+2 17740
LD 99-1,SDC,27 17750
D 100-1-8,TESTA,27 17760
AM 95,5,10 17770
TF SDC,94 17780
BT SQRSUB,SDC 17790
SF SDC-3 17800

```

-34-

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 14 Z 17810
 * VERSION - A Z 17820
 * BY RICHARD D ROSS Z 17830
 * Z 17840
 CM SDC,0,10 17850
 BTM DECS,SDC 17860
 BNE **24 17870
 TFM DECA,56,10 17880
 TF Y+80*2-2,DECA 17890
 WACD Y 17900
 WACD NINE 17910
 * OUTPUT QUESTION ANALYSES 17920
 * 17930
 PCOUR BD ROSP,XSECB 17940
 TF HE+10*2-2,H22+10*2-2 17950
 BNF **24,RTTT 17960
 TF HE+3*2-2,Z7-1 17970
 BNF **48,RTTT 17980
 TF Y+80*2-2,ZERO 17990
 TF Y+22*2-2,TAS+22*2-2 18000
 WACD Y 18010
 WACD HD 18020
 WACD HE 18030
 WACD BLANK 18040
 TFM APCC+11,ANS 18050
 TFM RCNN+11,WT 18060
 TF TCNT,RTZ 18070
 TFM J-5,0,10 18080
 TFM N,1,8 18090
 TFM APA+11,TAB1 18100
 TTN TF NN,Z8 18110
 TF M,Z8 18120
 TF K,Z8 18130
 APCC TFM APC+11,ANS 18140
 TF Y+80*2-2,ZERO 18150
 AM J-5,1,10 18160
 CM J-5,26,10 18170
 BNE **36 18180
 A TCNT,RT1 18190
 TFM J-5,1,10 18200
 TD APC+11,TCNT 18210
 TFM J,5,10 18220
 BNF **24,RTTT 18230
 B **24 18240
 TF Y+3*2-2,SEC 18250
 TF Y+9*2-2,COUR 18260
 BTM DECS,N 18270
 TF Y+16*2-2,DECA 18280
 RCNN TD RCONX,WT 18290
 MM RCONX,2,9 18300
 AM 99,RCON 18310
 BD **24,NW,,, IF DIGIT IN -WW- OMIT WEIGHT FACTOR 18320
 TF Y+18*2-2,99,11 18330
 AM RCNN+11,1,10 18340
 TFM APB+6,Y+26*2-2 18350
 BNR APA,APC+11,11 18360
 TF Y+20*2-2+53*2,NG+54*2-2 18370
 AM APA+11,20,10 18380
 TFM Y+18*2-2,0,10,,, IF QUESTION IS BLANK, NO WEIGHT FAC 18390
 B TOUT,,, THIS QUESTION OMITTED BY INSTRUCTOR 18400

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 15 Z 18410
 * VERSION - A Z 18420
 * BY RICHARD D ROSS Z 18430
 * Z 18440
 * 18450
 DORG *-4 18460
 APA BTM DECS,TAB1 18470
 APB TF Y+20*2-2,DECA 18480
 A K,APA+11,11 18490
 APC BNF APD,ANS 18500
 A M,APA+11,11 18510
 B APDD 18520
 DORG *-4 18530
 APD A NN,APA+11,11 18540
 AM APB+6,2,10 18550
 TFM APB+6,14,610 18560
 SM APB+6,2,10 18570
 APDD AM APA+11,4,10 18580
 AM APB+6,9*2 18590
 A APC+11,RT2 18600
 SM J,1,10 18610
 BNZ APA 18620
 TF MM,Z8 18630
 A MM,TESTA 18640
 S MM,M 18650
 S MM,NN 18660
 SF MM-3 18670
 BTM DECS,MM 18680
 TF APB+6,DECA,6,, OUTPUT OMITTED 18690
 BTM DIV,**+12+2 18700
 LD 99-3,NN,27 18710
 D 100-3-8,TESTA,27 18720
 AM 95,5,10 18730
 SF 91 18740
 BTM DECS,94 18750
 AM APB+6,9*2 18760
 TF APB+6,DECA,6 18770
 TOUT WACD Y 18780
 AM APCC+11,10,10 18790
 AM N,1,10 18800
 C N,QUES 18810
 BNP TTN 18820
 TF Y+80*2-2,ZERO 18830
 TF Y+49*2-2,AST+39*2-2 18840
 WACD Y 18850
 WACD NINE 18860
 ROSP CF RTTT 18870
 CF ROUT 18880
 ROUTT BNF ROUT,LCARD 18890
 B RTTT 18900
 DORG *-4 18910
 ROUT C COURR,COURC 18920
 BE RPUN 18930
 RTTT BD RPUN,XCOUR 18940
 BNF RPUN,PSEC 18950
 CF PSEC 18960
 TF COURR,COURC 18970
 SF ROUT 18980
 SF RTTT 18990
 TF XSECB,XCOUR+4 19000
 TF TESTA,TESTB

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 16 Z 19010
* VERSION - A Z 19020
* BY RICHARD D ROSS Z 19030
* Z 19040
TF GRA,GRB 19050
TR TAB1-3,TAB2-3 19060
TR FREQ-3,FREQT-3 19070
TF Y+80*2-2,ZERO 19080
TF Y+22*2-2,TAS+22*2-2 19090
BD PCOUR,XSECA 19100
WACD Y 19110
B PSSS,,, BRANCH TO PUNCH COURSE TOTALS 19120
DORG *-4 19130
RPUN TF SEC,SECC 19140
BTM ZRO 19150
C COUR,COURC 19160
BE LCARD 19170
TF COUR,COURC 19180
TF COURR,COUR 19190
TFM TESTB,0,8 19200
TF GRB,ZB 19210
TR TAB2-3,TAB1-3 19220
TR FREQT-3,FREQ-3 19230
LCARD BNF H24,LCARD 19240
B START 19250
DORG *-4 19260
H24 CM X+30*2-2,70,10 19270
BN STAT 19280
B BN6 19290
DORG *-4 19300
XSAVE DS 6 19310
XSEC DS 2 19320
XSECA DS 2 19330
XSECB DS 2 19340
XCOUR DS 2 19350
DS 2 19360
DS 2 19370
XTOT DS 2 19380
DS 2 19390
DS 2 19400
DS 5 19410
ERRF RCTY,,, SOME ERROR IN CONTROL CARD 19420
WATY ERRF-1,,6 19430
H 19440
B START 19450
DORG *-4 19460
* CONSTANTS USED IN THIS PORTION OF THE PROGRAM 19470
AST DAC 40,ASTERISK ( * ) INDICATES CORRECT ANSWER- 19480
NUMT DAC 17,NUMBER OF TEST == 19490
MEN DAC 7,MEAN == 19500
ATDE DAC 21,STANDARD DEVIATION == 19510
NG DAC 55,THIS QUESTION OMITTED AT THE REQUEST OF THE INSTRUCTOR- 19520
ERR1 DAC 32,STUDENT XXXXX HAS MISSING CARDS- 19530
ERR2 DAC 37,MISSING MASTER KEY CARDS, START OVER- 19540
ERR3 DAC 47,COUNT OF BLANK QUESTIONS INCORRECT, START OVER- 19550
ERR4 DAC 28,NO CONTROL CARD, START OVER- 19560
ERR5 DAC 55,NO. OF CARDS OR NO. OF QUESTIONS INCORRECT, START OVER- 19570
TAS DAC 23,TOTAL FOR ALL SECTIONS- 19580
H22 DAC 11,SEC COURSE- 19590
TESTA DC 4,0,,, -37_TOTAL TEST PER SECTION 19600

```

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 17 Z 19610
* VERSION - A Z 19620
* BY RICHARD D ROSS Z 19630
* Z 19640
TESTB DC 4,0,,, TOTAL TEST PER COURSE 19650
SC DC 3,0,,, STUDENTS SCORE 19660
MEAN DC 4,0,,, MEAN FOR EACH GROUP 19670
A8 DC 8,0 19680
MAXS DS 5,,, CONTAINS THE MAXIMUM SCORE 19690
RIGHT DS 7,,, NUMBER RIGHT*10000 + SCORE 19700
WRONG DS 3,,, NUMBER OF QUESTION ANSWERED INCORRE 19710
OMIT DS 3,,, NUMBER OF QUESTION OMITTED 19720
DC 1,- 19730
RRCC DC 15,200000300010001 19740
CID DC 10,0 19750
CIDC DC 10,0 19760
NAME DS ,X+23*2-2 19770
SEC DC 4,0 19780
SECC DC 4,0 19790
COUR DC 8,0 19800
COURC DC 8,0 19810
COURR DC 8,0 19820
A14 DC 10,4000040001 19830
XNAME DS 1 19840
HG2 DS 10 19850
25X DC 2,25 19860
TCNT DS 5 19870
DS 5 19880
DECS BD DECSR,TNF 19890
TNF DECA,DECS-1,11 19900
B DECSRR 19910
DECSR TF DECA,CONA 19920
TF DECA,DECL 19930
TFM RDEC+6,DECA 19940
RDEC TD DECA,DECS-1,11 19950
SM DECS-1,1,10 19960
SM RDEC+6,2,10 19970
SM DECA,1,10 19980
BNZ RDEC 19990
AM RDEC+6,2,10 20000
CF RDEC+6,,6 20010
CF DECA 20020
A DECS-1,DECL 20030
DECSRRTFM DECX,DECA 20040
S DECX,DECL 20050
S DECX,DECL 20060
TDM DEC1+10,0,11 20070
BNF **36,DECS-1,11 20080
TDM DECA-1,7 20090
TDM DEC1+10,2,11 20100
TF DECX,DEC1+11,6 20110
AM DECX,2,10 20120
BD DOUT,DECX,11 20130
DEC1 TFM DECX,0,610 20140
AM DECX,2,10 20150
BNR DEC1-12,DECX,11 20160
DOUT BB 20170
DORG *-8 20180
DS 12 20190
DECA DAS 1 20200

```

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 18 Z 20210
* VERSION - A Z 20220
* BY RICHARD D ROSS Z 20230
* Z 20240
DC 2,0- 20250
DECA DC 2,0 20260
DECL DS 5 20270
DC 2,0,DECL+9 20280
* SQUARE ROOT SUBROUTINE 20290
DS 10 20300
SQRSUBTF HX,AAA 20310
AAA DS ,SQRSUB-1 20320
TFM XA,1 20330
S AAA,AAA 20340
SQRS S HX,XA 20350
BNP SQRT 20360
AM AAA,1,10 20370
AM XA,2,10 20380
B SQRS 20390
DORG *-4 20400
SQRT CM HX,0,10 20410
BNE **24 20420
AM AAA,1,10 20430
TF SDC,AAA 20440
BB 20450
DORG *-9 20460
HX DC 8,0 20470
XA DC 5,0 20480
* END OF SUBROUTINE 20490
* SUBROUTINE TO ZERO TAB1, TAB2,FREQ, AND FREQT 20500
* ZERO TABLES OF TOTAL QUESTIONS ANSWERED CORRECTLY 20510
DS 5 20520
ZRO S ADN,ADN 20530
AM ADR,TAB1-3+1 20540
S ADN,QUES 20550
ZRA TR ADR,TABZ-3,6 20560
AM ADN,20001 20570
BD ZRA,ADN-2 20580
* ZERO FREQUENCY TABLE 20590
S ADN,ADN 20600
AM ADR,FREQ-3+1 20610
SM ADN,21,10 20620
ZRC TR ADR,TABZ-3,6 20630
AM ADN,20001 20640
BD ZRC,ADN-2 20650
BB 20660
DORG *-9 20670
* END OF SUBROUTINE 20680
ERR6 DAC 18,QUESTIONS OMITTED- 20690
RCON DC 2,00 20700
DC 2,00 20710
DC 2,42 20720
DC 2,43 20730
DC 2,44 20740
DC 2,45 20750
RCONX DC 2,00 20760
NOMIT DSB 3,SIZE,,, QUESTIONS OMITTED 20770
* DIVIDE SUBROUTINE 20780
DS 5 20790
DIV BD DIVK,DIVD 20800

```

```

* UNIV. OF MISS. TEST SCORING PROGRAM (UMTS) PAGE 19 Z 20810
* VERSION - A Z 20820
* BY RICHARD D ROSS Z 20830
* Z 20840
BB 20850
DORG *-9 20860
DIVK TF DIVJ+11,DIV-1 20870
AM DIV-1,22,10 20880
TD 80,DIV-1,11 20890
TD DIV-1,RM,6 20900
DIVJ TR DIX-4,* 20910
TD DIV-1,80,6 20920
TF DIVA,Z10+2 20930
AM DIX,DIVA-99 20940
TF DIX,D2X,611 20950
TF DIVB,D4X,11 20960
SM DIX,DIVA+1 20970
TF DIVC,DIX 20980
CF DIVC 20990
TF D3N+11,DIVC 21000
TF D3N+6+12,D3X 21010
AM DIX,DIVA+1 21020
SM D3X,1,10 21030
TF 99,Z10+10 21040
CM D3X,90,10 21050
BP DIVV 21060
AM DIVC,4,10 21070
SM DIX,4,10 21080
DIVV S DIX,DIVB,6 21090
BN DBN 21100
AM D3X,1,610 21110
B DIVV 21120
DBN A DIX,DIVB,6 21130
CF DIX,6 21140
AM D3X,1,10 21150
AM DIX,1,10 21160
SM DIVC,1,10 21170
BNZ DIVV 21180
D3N SM D3N+12+6,* 21190
SF 100-3-4 21200
B DIV-1,6 21210
DORG *-4 21220
DIX DSA 99 21230
D2X DSA 0 21240
DS 2 21250
D3X DSA 100-3 21260
D4X DSA 0 21270
DS 1 21280
DIVA DS 12 21290
DIVB DS 10 21300
DIVC DC 5,0 21310
ZZZZZDS 1 21320
DEND START 21330

```


SYMBOL TABLE (20K)
130 QUESTIONS

ZZZZZ	19993	THRUUA	12870	SQRSUB	18762	RIGHTT	13884	DECSRR	18568
CHECKA	12798	AAA	18761	ADN	09798	ADR	09795	ANS	08499
ANSZ	09800	APA	16536	APB	16548	APC	16572	APCC	16216
APD	16604	APDD	16652	APNX	02680	ARN1	10652	ARN11	10676
ARN3	02844	ARN4	02856	ARN6	10820	ARN7	11240	AST	17501
ATDE	17629	A14	18364	A8	18268	BA	12202	BFF	11172
BL	08477	BLANK	00681	BLC	08480	BNF	11116	BNFF	11152
BN1	13490	BN2	11830	BN3	11866	BN6	12118	BN66	12190
CARD	08471	CHECK	13848	CID	18312	CIDC	18322	CKA	11529
CKB	11549	CN	11574	CONA	11504	CONB	11514	COUR	18338
COURC	18346	COURR	18354	CQN	11551	CT	11576	DBN	19840
DECA	18741	DECAX	18745	DECL	18697	DECS	18388	DECSR	18424
DECX	18750	DEC1	18688	DIV	19514	DIVB	19987	DIVA	19977
DIVC	19992	DIVD	00509	DIVJ	19576	DIVK	19528	DIVV	19792
DOUT	18724	D1X	19947	D2X	19952	D3X	19912	D3N	19912
D4X	19964	ERRA	12542	ERRAA	12578	ERRF	17456	ERR1	17781
ERR2	17845	ERR3	17919	ERR4	18013	ERR5	18069	ERR6	19069
ERR7	13559	FREQ	09813	FREQT	10234	GRA	00477	GRB	00487
HA	00853	HB	01015	HC	01177	HCA	12614	HCAA	12626
HCT	12694	HD	01339	HE	01501	H22	18225	HOLD	12903
HP20	13596	HP24	12354	HP36	02728	HX	18911	H22	18225
H24	17396	H322	14604	H44	01663	H488	14724	H522	14628
H588	14508	H722	14700	H822	14556	JA	13206	JA	13206
K	00417	L	00427	LCARD	17376	LOOP	13704	LOOPA	12766
M	00437	MAXS	18273	MEAN	18260	MEN	17615	MM	00457
N	00447	NAME	00561	NCARD	00003	NG	17671	NINE	00679
NMM	00843	NN	00467	NOCK	13980	NOMIT	19120	NOMZ	13800
NUMT	17581	OMIT	18286	PCOUR	15976	POUT	15652	PSA	15268
PSB	15412	PSEA	14848	PSEC	14884	PSECS	14804	PSSS	15064
PSX	15004	QC	11579	QQ	00512	QES	08474	RAD	12398
RAD24	12470	RCNN	16396	RCON	19105	RCONX	19117	RDEC	18460
READ	01684	RED	12410	RIGHT	18280	RM	08306	ROSP	17000
ROUT	17044	ROUTT	17024	RPUN	17256	RR	11608	RRC	11645
RRCC	18302	RRCP	11627	RTR	11650	RTTT	17068	RTZ	00504
RT1	00506	RT2	00508	SC	18256	SDC	00497	SEC	18326
SECC	18330	SETUP	13212	SIZE	00130	SQRS	18798	SQRT	18854
START	01672	STAT	01708	STT	11024	STUD	11782	TABZ	08289
TAB1	03087	TAB2	05688	TAS	18179	TBC	00409	TCNT	18382
TESTA	18249	TESTB	18253	THR	13920	THRA	12834	THRU	13908
THRUUA	12822	THRUU	13956	TNF	00510	TOUT	16892	TTN	16180
WET	10748	WRONG	18283	WT	11651	WTT	11530	WW	00514
X	00517	XA	18916	XCOUR	17440	XNAME	18365	XSAVE	17432
XSEC	17434	XSECA	17436	XSECB	17438	XTOT	17446	Y	08309
ZERO	00839	ZRA	18958	ZRB	02488	ZRC	19030	ZRD	02560
ZRE	02572	ZRF	02928	ZRG	02976	ZRJ	10808	ZRM	11938
ZRN	11926	ZRO	18922	ZRP	03036	ZRR	11416	ZRRX	11452
ZRZ	02416	ZSS	11312	Z10	00689	Z13	00692	Z18	00697
Z7	00686	Z8	00687	Z25X	18377	Z HA	00853	Z HB	01015
Z HC	01177	Z HD	01339	Z HDHD	01905	Z HE	01501	Z H1	01933
Z H2	01997	Z H22	02087	Z H4	01759	Z H44	02077	Z H5	01777
Z H6	01793	Z NMM	00843	Z ROSS	01663	Z START	02108	Z X	00517
Z ZERO	00839								

SYMBOL TABLE (40K)
485 QUESTIONS

ZZZZZ	39861	THRUUA	30974	SQRSUB	37566	RIGHTT	32688	DECSRR	37372
CHECKA	30902	AAA	37565	ADN	27548	ADR	27545	ANS	22699
ANSZ	27550	APA	35340	APB	35352	APC	35376	APCC	35020
APD	35408	APDD	35456	APNX	02680	ARN1	28402	ARN11	28426
ARN3	02844	ARN4	02856	ARN6	28570	ARN7	28990	ARN7	28990
ATDE	36433	A14	37168	A8	37072	BA	30306	BFF	28922
BL	22677	BLANK	00681	BLC	22680	BNF	28866	BNFF	28902
BN1	32294	BN2	29934	BN3	29970	BN6	30222	BN66	30294
CARD	22671	CHECK	32652	CID	37116	CIDC	37126	CKA	29279
CKB	29299	CN	29324	CONA	29254	CONB	29264	COUR	37142
COURC	37150	COURR	37158	CQN	29301	CT	29326	DBN	39708
DECA	37545	DECAX	37549	DECL	37501	DECS	37192	DECSR	37228
DECX	37554	DEC1	37492	DIV	39382	DIVA	39845	DIVB	39855
DIVC	39860	DIVD	00509	DIVJ	39444	DIVK	39396	DIVV	39660
DOUT	37528	D1X	39815	D2X	39820	D3N	39820	D3X	39827
D4X	39832	ERRA	30646	ERRAA	30682	ERRF	36260	ERR1	36585
ERR2	36649	ERR3	36723	ERR4	36817	ERR5	36873	ERR6	37873
ERR7	32363	FREQ	27563	FREQT	27984	GRA	00477	GRB	00487
HA	00853	HB	01015	HC	01177	HCA	30718	HCAA	30730
HCT	30798	HD	01339	HE	01501	HG2	37179	HOLD	31007
HP20	32400	HP24	30458	HP36	02728	HX	37715	H22	37029
H24	36200	H322	33408	H44	01663	H488	33528	H522	33432
H588	33312	H722	33504	H822	33360	J	00407	JA	32010
K	00417	L	00427	LCARD	36180	LOOP	32508	LOOPA	30870
M	00437	MAXS	37077	MEAN	37064	MEN	36419	MM	00457
N	00447	NAME	00561	NCARD	00010	NG	36475	NINE	00679
NMM	00843	NN	00467	NOCK	32784	NOMIT	37924	NOMZ	32604
NUMT	36385	OMIT	37090	PCOUR	34780	POUT	34456	PSA	34072
PSB	34216	PSEA	33652	PSEC	33688	PSECS	33608	PSSS	33868
PSX	33808	QC	29329	QQ	00512	QES	22674	RAD	30502
RAD24	30574	RCNN	35200	RCON	37909	RCONX	37921	RDEC	37264
READ	01684	RED	30514	RIGHT	37084	RM	22506	ROSP	35804
ROUT	35848	ROUTT	35828	RPUN	36060	RR	29358	RRC	29395
RRCC	37106	RRCP	29377	RTR	29400	RTTT	35872	RTZ	00504
RT1	00506	RT2	00508	SC	37060	SDC	00497	SEC	37130
SECC	37134	SETUP	32016	SIZE	00485	SQRS	37602	SQRT	37658
START	01672	STAT	01708	STT	28774	STUD	29886	TABZ	22489
TAB1	03087	TAB2	12788	TAS	36983	TBC	00409	TCNT	37186
TESTA	37053	TESTB	37057	THR	32724	THRA	30938	THRU	37212
THRUUA	30926	THRUU	32760	TNF	00510	TOUT	35696	TTN	34984
WET	28498	WRONG	37087	WT	29401	WTT	29280	WW	00514
X	00517	XA	37720	XCOUR	36244	XNAME	37169	XSAVE	36236
XSEC	36238	XSECA	36240	XSECB	36242	XTOT	36250	Y	22509
ZERO	00839	ZRA	37762	ZRB	02488	ZRC	37834	ZRD	02560
ZRE	02572	ZRF	02928	ZRG	02976	ZRJ	28558	ZRM	30042
ZRN	30030	ZRO	37726	ZRP	03036	ZRR	29166	ZRRX	29202
ZRZ	02416	ZSS	29062	Z10	00689	Z13	00692	Z18	00697
Z7	00686	Z8	00687	Z25X	37181	Z HA	00853	Z HB	01015
Z HC	01177	Z HD	01339	Z HDHD	01905	Z HE	01501	Z H1	01933
Z H2	01997	Z H22	02087	Z H4	01759	Z H44	02077	Z H5	01777
Z H6	01793	Z NMM	00843	Z ROSS	01663	Z START	02108	Z X	00517
Z ZERO	00839								

SYMBOL TABLE (60K)
500 QUESTIONS

ZZZZZZ	40673	THRUUA	31740	SQRSUB	38332	RIGHTT	33454	DECSRR	38138
CHECKA	31668	AAA	38331	ADN	28298	ADR	28295	ANS	23299
ANSZ	28300	APA	36106	APB	36118	APC	36142	APCC	35786
APD	36174	APDD	36222	APNX	02680	ARN1	29152	ARN11	29176
ARN3	02844	ARN4	02856	ARN6	29320	ARN7	29740	AST	37071
ATDE	37199	A14	37934	A8	37838	BA	31072	BFF	29672
BL	23277	BLANK	00681	BLC	23280	BNF	29616	BNFF	29652
BN1	33060	BN2	30700	BN3	30736	BN6	30988	BN66	31060
CARD	23271	CHECK	33418	CID	37882	CIDC	37892	CKA	30029
CKB	30049	CN	30074	CONA	30004	CONB	30014	COUR	37908
COURC	37916	COURR	37924	CQN	30051	CT	30076	DBN	40520
DECA	38311	DECAX	38315	DECL	38267	DECS	37958	DECSR	37994
DECX	38320	DEC1	38258	DIV	40194	DIVA	40657	DIVB	40667
DIVC	40672	DIVD	00509	DIVJ	40256	DIVK	40208	DIVV	40472
DOUT	38294	DIX	40627	D2X	40632	D3X	40592	D3X	40639
D4X	40644	ERRA	31412	ERRAA	31448	ERRF	37026	ERR1	37351
ERR2	37415	ERR3	37489	ERR4	37583	ERR5	37639	ERR6	38639
ERR7	33129	FREQ	28313	FREQT	28734	GRA	00477	GRB	00487
HA	00853	HB	01015	HC	01177	HCA	31484	HCAA	31496
HCT	31564	HD	01339	HE	01501	HG2	37945	HOLD	31773
HP20	33166	HP24	31224	HP36	02728	HX	38481	H22	37795
H24	36966	H322	34174	H44	01663	H488	34294	H522	34198
H588	34078	H722	34270	H822	34126	J	00407	JA	32776
K	00417	L	00427	LCARD	36946	LOOP	33274	LOOPA	31636
M	00437	MAXS	37843	MEAN	37830	MEN	37185	MM	00457
N	00447	NAME	00561	NCARD	00010	NG	37241	NINE	00679
NMM	00843	NN	00467	NOCK	33550	NOMIT	38690	NOMZ	33370
NUMT	37151	OMIT	37856	PCOUR	35546	POUT	35222	PSA	34838
PSB	34982	PSEA	34418	PSEC	34454	PSECS	34374	PSSS	34634
PSX	34574	QC	30079	QQ	00512	QUES	23274	RAD	31268
RAD24	31340	RCNN	35966	RCON	38675	RCONX	38687	RDEC	38030
READ	01684	RED	31280	RIGHT	37850	RM	23106	ROSP	36570
ROUT	36614	ROUTT	36594	RPUN	36826	RR	30108	RRC	30145
RRCC	37872	RRCP	30127	RTR	30150	RTTT	36638	RTZ	00504
RT1	00506	RT2	00508	SC	37826	SDC	00497	SEC	37896
SECC	37900	SETUP	32782	SIZE	00500	SQRS	38368	SQRT	38424
START	01672	STAT	01708	STT	29524	STUD	30652	TABZ	23089
TAB1	03087	TAB2	13088	TAS	37749	TBC	00409	TCNT	37952
TESTA	37819	TESTB	37823	THR	33490	THRA	31704	THRU	33478
THRU	31692	THRUU	33526	TNF	00510	TOUT	36462	TTN	35750
WET	29248	WRONG	37853	WT	30151	WTT	30030	WW	00514
X	00517	XA	38486	XCOUR	37010	XNAME	37935	XSAVE	37002
XSEC	37004	XSECA	37006	XSECB	37008	XTOT	37016	Y	23109
ZERO	00839	ZRA	38528	ZRB	02488	ZRC	38600	ZRD	02560
ZRE	02572	ZRF	02928	ZRG	02976	ZRJ	29308	ZRM	30808
ZRN	30796	ZRO	38492	ZRP	03036	ZRR	29916	ZRRX	29952
ZRZ	02416	ZSS	29812	Z10	00689	Z13	00692	Z18	00697
Z7	00686	Z8	00687	Z25X	37947	Z HA	00853	Z HB	01015
Z HC	01177	Z HD	01339	Z HDHD	01905	Z HE	01501	Z H1	01933
Z H2	01997	Z H22	02087	Z H4	01759	Z H44	02077	Z H5	01777
Z H6	01793	Z NMM	00843	Z ROSS	01663	Z START	02108	Z X	00517
Z ZERO	00839								