

JAMISIS

Newsletter of the CDS/ISIS User Group In Jamaica

Volume 4, Issue 1

March 2001

EDITORIAL

This issue of JAMISIS features the library of the Technical Vocational Education Training Division of the HEART Trust/National Training Agency. Miss Keisha Grant, Programmer at National Library of Jamaica interviews Miss Doreen Howell, Chief Librarian at TVET, as the basis for the article. The library at this division has centralized responsibility for providing professional library services to the 25 libraries of the academies, institutes and vocational training centers falling under the HEART Trust/NTA umbrella. The library at TVET uses CDS/ISIS for Windows (WINISIS) internally, and has initiated a programme for the computerisation of library operations through the system based on the use of WINISIS. In fact, a prototype for a wide area network linkage, based on WINISIS databases, has been established between Garmex Academy and the central library at TVET. This wide area network is also scheduled to be field tested at institutions as distant from the TVET head office as Montego Bay and Falmouth, with a view towards being implemented island wide.

The issue also takes a look at the National Library of Jamaica's approach to mounting its WINISIS based catalogues on its Website. NLJ will use a CDS/ISIS web interface programme called WXIS, developed by BIREME in Brazil. NLJ's Web master, Mrs. Bridgette Heron, writes on the steps taken to implement the interface. NLJ will assist other libraries, particularly the focal point libraries of the national library and information network, to mount WINISIS databases on the Internet after a field-testing phase is completed.

Continued on Page 2

CONTENTS

How to install Winisis.....	2
Using WXIS to mount databases on the Internet.....	3
Profile of TVET, HEART Trust Library (TVET).....	5
CDS/ISIS Question & Answer.....	8
Registered users of CDS/ISIS.....	10

=====

JAMISIS is the quarterly publication of the CDS/ISIS User Group Committee. The editorial responsibility is rotated among various institutions. This issue is edited by Byron Palmer of the National Library of Jamaica (NLJ). NLJ prints and distributes all issues. This issue was typeset by Keisha Grant. Articles and questions may be sent to:

Byron Palmer
National Library of Jamaica
12 East Street, Kingston
nljbp@infochan.com

Or

Ms. Audrey Chambers
Documentation Centre
ISER, UWI
Mona, Kingston 7
Amcham@uwimona.edu.jm

As usual an up-to-date list of registered users of CDS/ISIS (including both DOS and Windows versions) is included. There are now over 180 registered users. The popular questions and answers feature where common problems are highlighted is also included. This issue of JAMISIS is also published online on the web site of the National Library of Jamaica, www.nlj.org.jm.

HOW TO INSTALL WINISIS

By Keisha Grant, Field Programmer, NLJ

1. Open an application that will allow you to run the setup executable file, which is on diskette number 1, e.g. 'Run' from your windows start menu or 'windows explorer' etc.
2. Type or double click into setup, whichever corresponds to the program you are using. Setup will then start initializing.

The setup program will ask a number of questions on the placement of the various system files:

1. C:\WINISIS: You should accept the 'Winisis' directory and change the drive to your specifications.
2. CDS/ISIS FOR WINDOWS: Accept this prompt. It will be used to name the menu that opens the software.
3. C:\WINISIS\DATA: This is the directory where your databases and their records are located.
4. EN: Accept this prompt to make the default language English.
5. C:\ISIS\PROG: This will store the CDS/ISIS Pascal program in the 'Isis' directory.

6. S: Signifies small fonts, accept this option. Change to L: large font size, only if your Windows system was setup to use large fonts. If you choose L, and your system was setup to use small font, some of your menus may be truncated. To correct this problem, edit the 'syspar.par' file and modify 'parameter 133: Windows system fonts'. (*Winisis 1.3 and 1.4 do not have this option*)

See also page 16 of the reference manual

Winisis 1.4

In Winisis 1.4 there is message no. 244, that is, MESS [244]. in the print worksheet

This is a CANCEL or CLOSE button and shall be put in the message file at record 25 tag 5. That is, open the message folder within winisis, select msen.mst. Open the data entry screen, at record 25 add field 05 then type CLOSE then update the record

Winisis 1.4 now available

Registered users should send in two diskettes to receive the program

Using WXIS to mount databases on the Internet

Bridgette Heron
Web Master

Background

The National Library of Jamaica (NLJ) investigated a number of options to mount our library catalogue on the Web page. Since our catalogue was developed using CDS/ISIS, we particularly wanted to mount the catalogue as a CDS/ISIS database. This would enable us to ensure that the catalogue retain the sophisticated searching capability that CDS/ISIS possesses. It would also ensure that our clients who use our Online Public Access Catalogue (OPAC) in house, would find a familiar interface at the web site. However, of greatest significance was the fact that as the national distributor for CDS/ISIS, we wanted to have the capability to assist our very many clients to mount their databases on the Internet. Another overriding concern, was the fact that we are committed to building a national network using the Internet as the connectivity media. We consequently want to have a uniform database platform to enable seamless transfer of data and commonality of interface throughout the system.

We found a few programs that would provide Hence a programme that would allow us to retain the integrity of CDS/ISIS databases would be ideal.

We found a few programs that would provide a web interface for CDS/ISIS but they were mainly in a foreign language or required a different system platform, such as Unix. We became aware of WWWISIS developed by BIREME. However it required knowledge of Common Gateway Interface (CGI) scripts, which we did not possess in-house. Attempts were made to have local developers supply this capability but their proposals proved prohibitively expensive. The decision was later taken to have the staff of NLJ obtain the expertise required to mount the database.

Training

*Two members of staff of the National Library, Carol Nunes, Systems Administrator and Bridgette Heron, Web Master were able to obtain training at a Medcaribe workshop on WXIS put on at the Medical Library of the University of the West Indies. Eduardo Añé Padrón, the instructor for this two week workshop was from INFOMED in Havana, Cuba. The workshop covered the basics in creating a webpage, writing CGI scripts and integrating both using **WWWXIS XML IsisScript Server**, called WXIS.*

What is WXIS?

WXIS is a program that serves as an interface/gateway between a CDS-ISIS database and an HTML page. The WXIS program when executed runs scripts, such as CGI, which manages the requests and responses from client to server and server to client PCs.

It was developed by BIREME in Brazil. It is an update of the original web interface called WWWISIS.

Mounting the database

To carry out the installation of a database on the Web, the Web Master used a CDS/ISIS database consistent with the structure of that which was being distributed to CDS/ISIS users by the National Library. There were a number of tasks to perform before the actual mounting of the catalogue. Tasks such as: obtaining a copy of WXIS.exe and licence from Bireme to use the software; creation of individual inverted and related files for each retrievable field, modification of scripts and html templates, creation and integration of a search button on the homepage of National Library; installation of a server environment software – Omnihhttpd. Omnihhttpd was used

to emulate a virtual web server environment on a PC to enable the testing and running of the scripts.

Assistance was received from the instructor from the workshop in creating the databases for the retrievable fields. The database and interface was successfully created and tested.

Conclusion

The National Library of Jamaica is now technically able to mount its catalogue and other specialized indexes on its Web site. After a suitable testing time, the Library will assist other institutions to do the same.

**PROFILE ON THE TVET
(TECHNICAL AND VOCATIONAL
EDUCATION AND TRAINING)
HEART TRUST LIBRARY**

Based on an interview with the Librarian,
Doreen Howell
by Keisha M. Grant

INTRODUCTION TO THE LIBRARY

The library of the National TVET center was established in 1985 and formally located at Belmont Road. It moved to Hope Road in 1991 and is presently located at Gordon Town Road in St. Andrew.

TVET is a division of the Human Employment And Resource Training/National Training Agency (HEART/NTA). Its mission is to provide a wide variety of resources to support the development of technical and vocational education and training.

STAFFING

The library, which is part of the audiovisual unit falls under Media Services. Other sections of the Media Services include technical services, graphics unit, a

clearinghouse and the printery. Together they have the responsibility of documenting, acquiring, producing, publishing and distributing training information products.

The Technical Service personnel of the unit, which includes a librarian, a library assistant and a clerical officer, acquire material appropriate for the libraries. They also catalogue and classify these materials.

The library staff consists of the chief librarian, a media technician and a library assistant. The chief librarian's duties include the supervision of 25 libraries in the Vocational Training Centres throughout the island. The chief librarian also organizes the programme of computerizing efforts for these libraries, in particular training programs carried out by the National Library of Jamaica.

The library does the centralized acquisition for all the libraries in the HEART/NTA system. The library assistant and clerical officer do the data entry for material acquired. Each institution's records are distinguished by library code. The records for each institution are exported to diskettes, transported to the appropriate library and then imported to the

database. Approximately 3000 entries are done per annum.

THE LIBRARY'S COLLECTION & USERS

The library's collection includes 85 diskettes, 220 CDROM, over 30 serial titles, 735 video and audiocassettes, over 11,000 books, as well as, a newspaper clipping collection.

Subject areas cover the curriculum or specialty areas of the 25 libraries in the centralized acquisition system. They include agriculture, building, carpentry, electrical installation, food preparation, psychology, and secretarial studies etc.

The collection is ideally suited for students of the academies, Vocational Training Centres (VTC) and persons in the Technical, Vocational Education and Training (TVET) system. Persons in TVET system are students or teachers of technical school or in technical areas of high school, college or university. The library has seating for 24 patrons, therefore off campus patrons must make an appointment to use the facilities.

Patrons may use the 2 computers in the Audio Visual unit to access the Internet and

CDROM or the viewing room for videotapes. The library staff retrieves and locates the material for the clients.

CDS/ISIS

Prior to obtaining CDS/ISIS, the library used a cataloguing register that functioned like a manual catalogue. CDS/ISIS for DOS was installed at TVET in 1994 and the windows version in 1998. By March 2001 all the libraries in the TVET system will have Winisis installed and their staff trained to use the software. It is also their long-term goal to allow all libraries in the Human Employment And Resource Training (HEART) system on-line access to the TVET Resource Centre Library. GARMEX HEART Academy is being used as a prototype in the networking efforts. Cornwall Automotive Training in Montego Bay and Kenilworth in Hanover are also scheduled to be provided with access to the central database at Gordon Town. These two network installations of Winisis will test the effectiveness and speed of database access over long distances. If this proves to be a satisfactory project then the other libraries will also be linked in the Wide Area Network.

SYSTEM SUPPORT

The Information and Technology Centre of the HEART Trust/NTA administers support for TVET computer systems.

The National Library of Jamaica provides support for the CDS/ISIS software. At present they have been traveling to all the HEART libraries to conduct training and installation of CDS/ISIS and the Circulation module. Any further maintenance will also be done by NLJ. They also provide telephone consultation for step-by-step instructions and problem solving. The CDS/ISIS link on the NLJ website provides an offsite support forum where users submit questions and get a feedback from our Webmaster.

PARENTAL ORGANISATION'S COMMITMENT

The HEART Trust has supported the library by affording funds for the acquisition of material, training of library staff. It demonstrates the overall interest in staff welfare.

PROBLEMS WITH CDS/ISIS

According to Miss Howell, the users of the software have not experienced any serious problems. She feels that they may need training or practice using the application to further expose them to the application. The library staff that had learned the DOS version may just need additional training to get acquainted with Windows version.

Other features she would like to see added to the software are an acquisitions module and an inter-library loan facility in the Circulation module.

FUTURE PLANS

TVET plans to provide Internet access and network all the libraries in the unit. Miss Howell is planning to obtain electronic journals and to link to the overseas cataloguing service provider, Online Computer Library Center (OCLC), based in Ohio.

CDS/ISIS Questions & Answers

Q. After identifying and cleaning off a virus which corrupted the data in my Winisis database, I imported the records from my backup copy of the database files. However when I checked the database, I noted that the records were duplicated.

A. This duplication is caused by importing the records to the database and using the "merge option" which adds the records to the database. It is a common enough situation because the default is set to the "merge option". In cases where you want to overwrite the records in a database you need to select the "load option".

The Import procedures are:

1. Select the database.
2. Click on the word database from the pull down menu and click on the word "Import".
3. Select the drive from which the information is to be imported, for example a:
4. Select the file name, which is displayed in the dialog box, and click "OK".
5. Select the "load option" from the Import dialog box.
6. Click "OK".

NB. The message "Database will be overwritten" will be displayed on the screen. Click "OK". At the end of the process the message "Completed" will be displayed. Click "OK".

Q. During my data entry session I deleted a record and I was not able to type over the information in that space. Why?

A. If you want to enter new data in a record do not use the "Delete Key", just type over the old data, as in an ordinary edit exercise. If you have already deleted the record then you should undelete the record. Select data entry from your "Edit Option". Click on the "Option Button" and select "Undelete Record".

NB. In a case where you want to erase a record click on the "Option Button" and select "Clear Entries".

Q. Can I do a search by date of entry?

A. Yes. A free text search can be done. You can type the following expression:

?(v2>='20000101') * (v2<='20000131')

v2 represents the field tag for date of entry
20000101 and 20000131 represents the starting date and ending date of the month.

Q. Why does the computer hang up sometimes when one is exporting records.

A. It is likely that you have some blank records in your database. You should enter data in the blank records.

Taken from the CDS/ISIS listserve

Q. We use the DOS version of ISIS in the network environment (Novel/ Win 95). I have a certain suspicion that ISIS records are not locked safely in case of a simultaneous access of 2 (or more) users to one database. In our typical situation one user edits the record through the data entry sheet "A" while later the second one via the another sheet (say "B"). As both of them can work with the database in the same time some attempts to a simultaneous access to one record are very probable (and every network software should manage such a situation). Very often the simultaneous work results in a corrupted database file - some new records are missing, some records are displayed without the MFN (!!!???) on the bottom line of the data entry worksheet and the size of the MST file is 250 times (!!) higher than usually. Moreover, if I re-initialize the database and the number of records is changed to ZERO, the size of the MST file remains unchanged (!). Simply - a very strange behaviour ...

This situation arrives ONLY if there are simultaneous accesses to the database.

GOODBYE

A. If you have problems with concurrent data entry, check the following:

1. Do you have the line "14=1" in the SYSPAR.PAR. (It should appear before "0=..."). If not, add the line. Each computer working in the LAN should have 14=1 in the SYSPAR.PAR file.
2. Does the option "share" work in your LAN? If you are using Windows 3.x, possibly you should call the program share.exe in the autoexec.bat (It seems that the same is valid for Windows '95 and '98). This refers to each client computer used in the LAN for running CDS/ISIS.
3. Do a test. Try to update the same record from two computers. The second attempt from another computer should fail with the message, " ... locked by another user, try later."

If this still does not work, possibly there are problems with the "share" option.

Miss Keisha Grant, Programmer in the Information Network Systems Department, National Library of Jamaica, formerly the Automated Systems Department has resigned to further her education.

Miss Grant was one of the programmers who carried out installation, training and provided system support in regards to CDS/ISIS and Winisis. She was the person who collected data from the libraries for the National Bibliographic Database. Keisha was also the responsible for compiling JAMISIS and coordinating CDS/ISIS introductory workshops. As she did in this issue, Keisha usually does the interviews and writes the lead article on one of the libraries in our CDS/ISIS user group.

We will miss you Keisha. God bless you in your studies and pursuits. Well done Lady Keish.

Byron Palmer

REGISTERED USERS OF CDS\ISIS OR WINISIS

ORGANISATION	PHONE NUMBER
1. AIRPORT AUTHORITY OF JAMAICA	926-1622
2. ASSOCIATION OF DEVELOPMENT AGENCIES	927-5784
3. ASSOCIATION OF WOMEN'S ORGANISATION IN JAMAICA	968-8260/906-1251/920-7270/7460
4. ATTORNEY GENERAL'S CHAMBERS	922-6140
5. AULOUS MADDEN	922-1491/1074
6. BANK OF JAMAICA	922-0825/0750
7. BOB MARLEY FOUNDATION	978-2991
8. CABLE AND WIRELESS JAMAICA LIMITED - MARKETING & RESEARCH	926-9700
9. CABLE AND WIRELESS JAMAICA LIMITED -TRAINING CENTER	928-2419
10. CABLE AND WIRELESS JAMAICA LIMITED -INTERNATIONAL RELATIONS CENTRE	926-9700
11. CANADIAN COOPERATION OFFICE	929-3597-8
12. CARIBBEAN CEMENT COMPANY	960-8864-5
13. CARIBBEAN COASTAL AREA MANAGEMENT FOUNDATION	986-3573
14. CITIZENS BANK	960-0165/2357
15. CITIZENS CENTER FOR CONSTITUTIONAL REFORM	978-4047-9
16. CLOUGH, LONG & CO.	922-0535-8
17. CONSTRUCTION RESOURCES & DEVELOPMENT CENTER	978-4061
18. COOPERS AND LYBRAND	926-9377
19. COUNCIL OF VOLUNTARY SOCIAL SERVICES	922-9365-6
20. CREATIVE PRODUCTION TRAINING CENTRE	967-4482/448
21. DELOITTE AND TOUCHE CHARTERED ACCOUNTANTS	922-6825-7
22. DESNOES AND GEDDES	923-291/9573/9886
23. DUNN, COX ORRETT AND ASHENHEIM	922-1500/2140-1/2146-7
24. EAGLE FOUNDATION FOR ENTERPRISE	968-3695-7
25. FAIR TRADING COMMISSION	960-0120-4/960-2620
26. FISCAL SERVICES - EDP	927-1031/1125
27. FOOD & AGRICULTURE ORGANIZATION OF THE UNITED NATIONS	929-5674/4107

28. GLEANER COMPANY, THE	922-3400
29. GRACE KENNEDY - LIBRARY	922-3440-9
30. HYDROLOGY CONSULTANTS LTD.	927-8000
31. INSTITUTE OF JAMAICA -AFRICAN CARIBBEAN INSTITUTE OF JAMAICA /MEMORY BANK (ACIJ/MB)	922-4793
- JUNIOR CENTRE	922-0620-6
-SCIENCE LIBRARY	922-0620-6
32. INTER-AMERICAN DEVELOPMENT BANK (IADB)	926-2342
33. INTER-AMERICAN INST. FOR COOPERATION ON AGRICULTURE	926-2342/960-6943
34. INTERNATIONAL SEABED AUTHORITY	922-9105-9
35. JAMAICA AGRICULTURAL DEVELOPMENT FOUNDATION	929-8090-2
36. JAMAICA ALCAN COMPANY	986-2561
37. JAMAICA ARCHIVES	984-2581
38. JAMAICA BAUXITE INSTITUTE	927-2073-9
39. JAMAICA BUREAU OF STANDARDS	926-3140-7
40. JAMAICA CONSERVATIONAL DEVELOPMENT TRUST	960-2848-9/920-1084
41. JAMAICA CULTURAL DEVELOPMENT COMMISSION	926-5726-9/906-4252-3
42. JAMAICA EMPLOYER'S FEDERATION	922-6762/5524/6908
43. JAMAICA EXPORTER'S ASSOCIATION	929-1292 / 926-0586
44. JAMAICA INFORMATION SERVICE	960-8554/6988
45. JAMAICA LIBRARY SERVICE	926-3310
46. JAMAICA PRIVATE POWER COMPANY	928-4532/9404
47. JAMPRO - DOCUMENTATION CENTER	929-9450
48. JAMAICA SOCIETY FOR THE BLIND	927-3760
49. JAMAICA TOURIST BOARD	929-9206
50. JOINT TRADE UNION RESEARCH DEVELOPMENT CENTER	927-2468
51. KINGSTON AND ST.ANDREW PARISH LIBRARY	924-9277
52. LIFE OF JAMAICA	929-8920
53. LIVINGSTON, ALEXANDER & LEVY	922-6310
54. MARK FIGUEROA	
55. MINISTRY OF AGRICULTURE, FISHERIES DEPT.	923-8811- 3
56. MINISTRY OF AGRICULTURE, FORESTRY DEPT.	924-2667-8/2612

57. MINISTRY OF AGRICULTURE, OLD HOPE ROAD	977-0580
58. MINISTRY OF ENVIRONMENT AND HOUSING	926-1590/1325
59. MINISTRY OF FINANCE & PLANNING	922-8600-16
60. MINISTRY OF FOREIGN AFFAIRS AND FOREIGN TRADE	926-4220-8
61. MINISTRY OF INDUSTRY, COMMERCE & TECHNOLOGY	929-8990-9/754-5501
62. MINISTRY OF LABOUR, SOCIAL SECURITY AND SPORT, BUREAU OF WOMEN'S AFFAIRS	754-8576-8
63. MINISTRY OF MINING AND ENERGY, GEOLOGY DEPT.	927-1936-40
64. NCB GROUP LIBRARY	929-9050-9
65. NCB - TRAINING SCHOOL	968-1191/920-2170
66. NATIONAL COMPUTER SERVICES	929-5470-4
67. NATIONAL COUNCIL ON DRUG ABUSE	920-8291
68. NATIONAL COUNCIL OF LIBRARIES, ARCHIVES AND INFORMATION	927-5958/0662
69. NATIONAL FAMILY PLANNING BOARD	968-1631-6
70. NATIONAL HOUSING TRUST	929-6500-9 / 968-6953
71. NATIONAL INVESTMENT BANK OF JAMAICA	960-9690-8
72. NATIONAL RESOURCES CONSERVATION AUTHORITY	923-5155/66
73. NATIONAL WATER COMMISSION	929-5430/6286/6796
74. NUNES, SCHOLEFIELD, DELEON AND CO.	960-8995/9008-9
75. OFFICE OF DISASTER PREPAREDNESS	928-5111-4
76. OFFICE OF THE PRIME MINISTER	927-5958
77. PAN AMERICAN HEALTH ORGANISATION/ WORLD HEALTH ORGANISATION	926-1990-2
78. PETROLEUM CORPORATION OF JAMAICA	929-5380-9
79. PLANNING INSTITUTE OF JAMAICA	967-3690-2
80. PRIVATE SECTOR ORGANIZATION OF JAMAICA	927-6957-8
81. ST. THERESA'S RECTORY	927-1259/1494/977-4206
82. SCIENTIFIC RESEARCH COUNCIL	927-1771-4
83. SOCIETY OF JESUS IN JAMAICA	922-3209
84. STATISTICAL INSTITUTE OF JAMAICA	926-2175-6
85. SUPREME COURT	922-8300
86. TRAFALGAR DEVELOPMENT BANK	929-4761
87. URBAN DEVELOPMENT CORPORATION	922-8310

88. UNITED NATIONS DEVELOPMENT PROGRAM	978-2390-97
89. UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION	929-7087-9
90. UNITED NATION POPULATION FUND	978-2390-97
91. VICTORIA MUTUAL BUILDING SOCIETY	922-6602
92. WEST INDIES HOME CONTRACTORS	922-6670-9
93. ZENAS GERIG LIBRARY	969-8210

SCHOOLS

PRIMARY INSTITUTIONS

1. ASCOT PRIMARY SCHOOL	949-7353
2. FRANKLYN TOWN PRIMARY	928-2538

SECONDARY INSTITUTIONS

1. ARDENNE HIGH SCHOOL	927-8138
2. ARDENNE EXTENSION	“
3. BALACLAVA COMPREHENSIVE	963-2223/2569
4. B. B. COKE COMPREHENSIVE HIGH SCHOOL	
5. BELLEFIELD COMPREHENSIVE HIGH SCHOOL	963-4407
6. BRIDGEPORT COMPREHENSIVE HIGH SCHOOL	988-4489
7. BUSTAMANTE COMPREHENSIVE HIGH SCHOOL	986-3293
8. CARIBBEAN CENTRE FOR CHANGE	
9. CAMPION COLLEGE	927-9458
10. CLARENDON COLLEGE	987-2213/785-0127
11. CONVENT OF MERCY "ALPHA"	928-1342
12. DUNOON PARK TECHNICAL HIGH SCHOOL	928-1137
13. FAIR PROSPECT HIGH SCHOOL	913-1652
14. GARVEY MACEO HIGH SCHOOL	986-7005
15. HAMPTON HIGH SCHOOL	966-5161/5163
16. HILLEL ACADEMY	925-1980/9485
17. HOLY CHILDHOOD HIGH SCHOOL	926-2171/968-2447
18. IMMACULTE CONCEPTION HIGH SCHOOL	924-6888-9/1719
19. JOSE MARTI	907-5553/984-0443
20. KINGSTON COLLEGE	922-5929

21. KINGSTON TECHNICAL HIGH SCHOOL	922-1170-1/967-4690
22. LITTLE LONDON HIGH SCHOOL	955-7091
23. MANCHESTER HIGH SCHOOL	962-2616
24. MCGRATH COMPREHENSIVE HIGH SCHOOL	903-8624/8464-6
25. MEADOWBROOK HIGH SCHOOL	941-0390
26. OBERLIN HIGH SCHOOL	942-6940/6943-4
27. ORACABESSA HIGH SCHOOL	
28. QUEEN HIGH SCHOOL	924-2997/969-8468
29. SAVANNA-LA-MAR HIGH SCHOOL	955-2574
30. ST. ANDREW TECHNICAL HIGH SCHOOL	923-7107
31. ST. ANNE'S HIGH SCHOOL	922-6964
32. ST. ELIZABETH TECHNICAL HIGH SCHOOL	966-2293/9800-2
33. ST. GEORGE'S HIGH SCHOOL	922-5087/2458
34. ST. HUGH'S HIGH SCHOOL	926-8526
35. ST. VINCENT STRAMBI CATHOLIC HIGH SCHOOL	965-8564
36. VAUXHALL HIGH SCHOOL	928-1047/2304
37. WOLMERS GIRLS SCHOOL	922-4048

TERTIARY INSTITUTIONS

1. BETHLEHEM MORAVIAN COLLEGE	966-5148/5293
2. BROWN'S TOWN COMMUNITY COLLEGE	975-2339/2457
3. CARIBBEAN AGRICULTURAL RESEARCH & DEV. INSTITUTE	927-1231
4. CARIBBEAN CENTRE FOR CHANGE	965-0003-5/3265-7
5. CHURCH TEACHER'S COLLEGE	962-662/2864/0701
6. COLLEGE OF AGRICULTURE SCIENCE AND EDUCATION	993-5656
7. DENTAL AUX. TRAINING SCHOOL	926-1576
8. EDNA MANLEY COLLEGE OF ARTS	929-2352
9. EDNA MANLEY COLLEGE OF DANCE	929-2350-3
10. EDNA MANLEY COLLEGE OF MUSIC	929-2350-3
11. EXCELSIOR COMMUNITY COLLEGE	938-0751-2
12. GC FOSTER COLLEGE	984-2907/8
13. INSTITUTE OF CHARTERED ACCOUNTANTS OF JAMAICA	929-5869/6082
14. INSTITUTE OF MANAGEMENT & PRODUCTION	929-2830

15. INSTITUTE OF MANAGEMENT SCIENCES	968-4985-6
16. JAMAL	928-5181/8393
17. JAMAICA INSTITUTION OF ENGINEERS	929-6741
18. JAMAICA INSTITUTE OF MANAGEMENT	927-5857
19. JAMAICA INSTITUTE OF POLITICAL EDUCATION	929-1690/3236
20. MANAGEMENT INSTITUTE OF NATIONAL DEVELOPMENT	927-1761-3
21. MICO TEACHER'S COLLEGE	929-5260-6
22. MONEAGUE COLLEGE	973-0489/0461
23. NORMAN MANLEY LAW SCHOOL	927-1235/1899
24. NORTHERN CARIBBEAN UNIVERSITY	962-4258
25. ST. MICHAEL'S THEOLOGICAL CENTRE	927-1259/1494/977-4206
26. UNITED THEOLOGICAL COLLEGE	927-1724/2868
27. UNIVERSITY OF TECHNOLOGY	
i. - CALVIN MCKAIN LIBRARY	927-1680/2657
ii. - ENTREPRENEURIAL CENTER	927-1696-7
28. UNIVERSITY OF THE WEST INDIES	
i. -CARIBBEAN FOOD & NUTRITION INSTITUTE	927-1540-1
ii. -CARIBBEAN SUSTAINABLE DEVELOPMENT	927-1660
iii. -CENTER OF ENVIRONMENT AND DEVELOPMENT	977-1659/5530
iv. -COMMUNITY HEALTH & PSCHIATRY	927-2476
v. - DEPARTMENT OF ECONOMICS	927-1661-9
vi. -DEPARTMENT OF EDUCATION, DOC CENTER	927-2409
vii. - DEPARTMENT OF LIBRARY STUDIES	927-2944
viii. - DEPT. OF SOCIAL AND PREVENTATIVE MEDICINE	927-2476/2893
ix. - HEALTH PROMOTION RESOURCE CENTER	927-2893
x. - INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH	927-0233
xi. - MAIN LIBRARY	927-2123
xii. - MEDICAL LIBRARY	927-1073/1068

HUMAN EMPLOYMENT AND RESOURCE TRAINING/NATIONAL TRAINING AGENCY (HEART/NTA)

1. ABOVE ROCKS	903-9441/9628/944-6602-4
2. BEECHAMVILLE, ST. ANN	972-4098
3. BLACK RIVER	965-2718-9
4. BOYS TOWN	923-5545
5. BUFF BAY	913-6358-9
6. CORNWALL AUTOMOTIVE TRAINING	971-2550-3
7. CULLODEN	963-5638
8. EBONY PARK	987-1334-6/1319
9. FALMOUTH	
10. GARMEX ACADEMY	923-5700-6
11. GORDON TOWN	977-1707-8
12. JAMAICA GERMAN AUTOMOTIVE SCHOOL	926-5656
13. JUNCTION	
14. KENILWORTH	953-5719/5765/5315
15. LLUIDAS VALE	903-6331/6334
16. MONTEGO BAY (REGIONAL OFFICE)	
17. NATIONAL TOOLS AND ENGINEERING INSTITUTE	923-8419
18. OLD HARBOUR	983-9236
19. PLANNING & PROJECTS DEV.ELOPMENT DIVISION	929-3410-8
20. PETERSFIELD	955-5148/5697
21. PORT MARIA	994-2666/9155/9666
22. PORTMORE	988-1122/1135
23. ROCKFORT	923-1392-3/1301-2
24. RUNAWAY BAY HEART HOTEL & TRAINING INST.	973-2671
25. SEAFORD TOWN	
26. STONY HILL	942-2016/2557/3057