361.33427

100/5 100.00

10/50 NT

100/5 122.45

100/5 130.00

100/10 112.00

10/50 29.10

100/10 50.00

100/10 79.16

10/50 14.50

10/50 10.00

100/5 29.00

100/20 175.00

10/100 3.00

100/5 91.00

100/10 90.00

100/5 20.00

100/5 205.00

100/5 8.29

100/10 100.50

100/10 145.00

10/50 10.19

100/5 59.00

100/10 335.00

100/00 302.22

100/5 593.19

100/20126.25AL

10/50 125.00

10/50 10.00

100/5 63.00

100/5 450.00

100/5 180.00

100/5 56.75

100/5 22.00

100/10 35.00

100/5 72.00

100/10 101.00

100/20 143.75

100/5 115.00

100/5 70.00

100/5 100.00

100.10 100.00

9.50

100/10

10/50

10/50

NT

NT

10/50

10/50

10/50

10/50

Bangladesh elected FAO member

Bangladesh alongwith China, Indonesia, Japan, South Korea and Thailand were elected members of the Food and Agriculture Organisation (FAO), a message from Rome said, reports BSS.

Shri Lanka, Malaysia and India also won the FAO elec-

tions for the region of Asia. The 16th plenary meeting of the 27th biennial conference of FAO, held in Rome yesterday with the Minister for Agriculture and Irrigation, Water Resources and Flood Control, Majid-ul-Haq, in the chair, dealt with the election of the members of the FAO council for the terms of November 1993 to December 31, 1996 and January 1, 1995 to November 1997 for the regions of Africa, Asia, Europe, Latin America, the Carribbean, the near East and the South

West Pacific. In 1991 also Bangladesh under the leadership of the BNP government, contested and won a highly contested seat by a large margin. The term of that seat expires December 31.

The present victory will enable Bangladesh to occupy the important council seat up to November 1997 and allow it to provide leadership in the field of agriculture not only in the region but globally as well.

No joint monetary policy

Each CIS member to have its own currency

MOSCOW, Nov 23: Armenia introduces a new currency called the "dram" on Monday. becoming the fourth former Soviet republic this month to drop the rouble and take the plunge into full economic independence, reports AFP.

Moldova will do likewise a week from now when it switches to using the Romanian "lei". Kazakhstan adopted the

'tengue" and Uzbekistan the "som" on November 15 and Turkmenistan has been using the "manat" since the beginning

of the month. It is probable that before very long, the 15 members of the Commonwealth of Inde-

pendent States, which has replaced the Soviet Union, will each have its own currency. "It has become increasingly clear that these countries which have only just achieved their independence, would not agree

on a joint monetary policy," said one Westernexpert last week. In fact, since the breakup of the Soviet Union at the end of

in Moscow finally gave the newly independent republics. the choice of retaining the rouble and placing themselves in Russia's economic orbit or going their own way with their own currencies.

each former republic has been

aligned with that of the least

successful economy (Russia),"

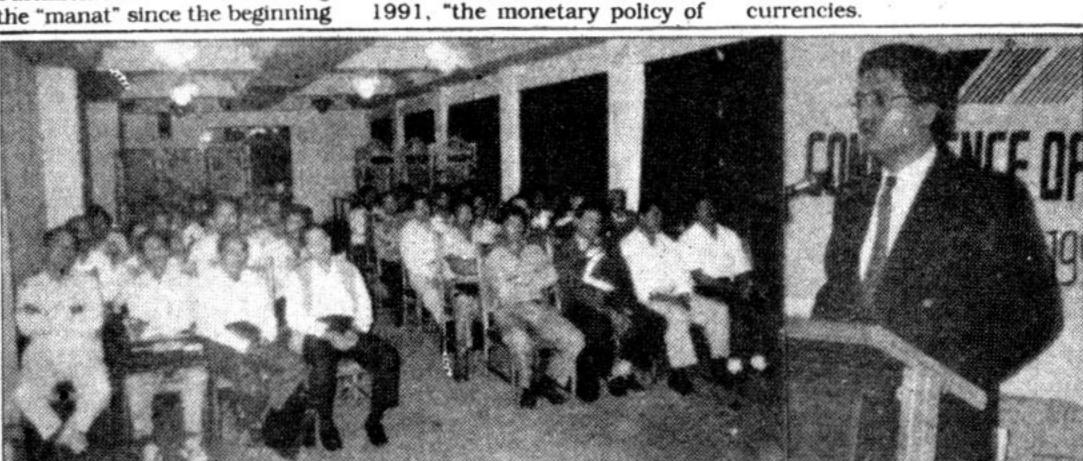
flation imported from its neigh-

bours, has severely handi-

capped the Russian economy.

Over the past two years, in-

Realising this, the reformers



Waliur Rahman Bhuiyan, General Manager (welding) of Bangladesh Oxygen Limited (BOL) addressing the resellers' conference of the company at a local hotel recently.

China-Cuba cooperation will grow: Zemin

HAVANA, Nov 23: Chinese President Jiang Zemin ended a visit to Cuba on Monday with a message of support for President Fidel Castro, saying his brief stay would lead to increased cooperation between the two communist countries. reports Reuter.

Jiang, the first Chinese leader to travel to the Caribbean island, left for Brazil shortly after midday after a 20-hour visit which included to sessions of talks with Castro.

There has been no official comment on the content of their discussions. Jiang said in a statement on his arrival that issues would include bilateral relations and an account of China's reform process, as well as an exchange of views on economic reconstruction.

Cuba, committed to preserving the gains of the 1959 revolution which brought Castro to power but suffering a severe economic crisis, has recently begun a process of cautious economic reform.

But while it has cited China - whose market reforms are far advanced — as an example of change, Havana says it does not intend to copy and specific country's model. And so far. Castro has not indicated Cuba is setting down the same path as China.

In their only publicly spoken comments during the visit, Castro paid tribute on Sunday to the achievement of Chinese communism and Jiang replied with praise for Cuba's spirit of independence.

Production cost of BJMC goods down by 20 pc

Production cost of BJMC produced goods has been lowered by 20 per cent in the' last three months from July-September, reports UNB.

Jute Minister A S M Hannan Shah disclosed this while speaking as chief guest at the conference of President and General secretaries of the 35 jute mills under Bangladesh Jute Mills Corporation (BJMC) here today at the BJMC Board room.

The production cost of per metric ton jute goods (item wise) excluding interest stood at carpet backing cloth (cbc) Tk 36401, sacking Tk 21785 and Hessian Tk 33255.

BJMC Chairman Moniruddin Ahmed and other directors of BJMC were present in the meeting.

Dhaka Stock Prices

At the close of trading on November 23,1993

Mixed trend

The trading on the floor of the Dhaka Stock Exchange (DSE) showed a mixed trend on Tuesday.

The turnover in volume term incurred a loss of 28 per cent while the turnover in value rose by 19.66 per cent

A total of 31061 shares changed hands at Taka 3182416.50 compared with Monday's 43326 shares valued at Taka 2659404.00. The number of the issues transacted was almost steady at a

remarkable level. It reached 47 from 46, in which 19 gained, 18 lost and 10 others traded at previous rates. Among the gainers, the share prices of the Stylecraft and the Pubali Bank increased significantly while the Bata Shoe and the Beximco Synthetic, the loss making issues of the day, were the biggest

contributors to the total volume. The DSE All Share Price Index fell to 361.33427 from 362.28092, a

little decline of 0.94 point. Since November 1, DSE has been calculating the Index on the basis of IFC All Share Price Index formula and the base date

Trading at a glance DSE Share Price Index

is 01.01.91.

Market Capitalisation Tk Furnover in Volume				17339096687.38 31061	
Turnover in Value Ti	ς			3182416.50	
Company's name	Previous	Closing	Change	Change	Number
	price		bsolute)	(% over)	of shares
	Tk	Tk	Tk	price	traded
Issues gained (19)			02/02/04	
National Bank	120.00	122.90	2.90	2.41	105
 Pubali Bank 	88.00	100.00	12.00	13.63	05
4th ICB M Fund	147.00	148.00	1.00	0.68	110
6th ICB M Fund	74.60	75.06	0.46	0.61	180
Peoples Insurance	300.00	302.00	2.00	0.66	40
BD Lamps	372.50	400.00	27.00	7.00	05
Apex Food	730.00	748.75	18.00	2.00	160
Zeal Bangla Sugar	6.60	6.80	0.20	3.00	500
Saiham Textile	88.98	90.00	1.02	1.14	20
* Stylecraft	150.00	205.00	55.00	36.66	100
Tallu Spinning	100.00	100.50	0.50	0.50	40
Beximco Infusion	300.50	302.22	1.63	0.54	460
Beximco Pharma	587.00	593.19	6.19	1.05	249
Kohinoor Chemical	62.82	63.00	0.18	0.28	05
Apex Tannery	388.00	390.00	2.00	0.51	20
Beximco	26.03	26.70	0.67	2.57	300
GQ Ball Pen	90.00	91.84	1.84	2.04	36
BD Autocars	45.00	46.00	1.00	2.22	80
Renwick Jajneswar	84.25	84.50	0.25	0.29	1
Issues lost (18)					
IDLC	222.00	221.62	0.38	0.17	26
Islami Bank	1385.00	1380.00	5.00	0.36	0
UCBL	105.00	100.00	5.00	4.76	8
Aftab Automobiles	194.32	192.00	2.32	1.19	6
Atlas BD	53.50	53.02	0.48	0.89	25
Aziz Pipes	245.50	239.25	6.25	2.54	2
Bengal Food	119.73	119.06	0.67	0.55	20
BD Oxygen	134.10	129.45	4.65	3.46	66
Dulamia Cotton	80.53	79.16	1.37	1.70	19
Modern Dyeing	30.00	29.00	1.00	3.33	0
Ambee Pharma	10.50	10.19	0.31	2.95	75
BCIL	340.00	335.00	5.00	1.47	' 1
		126.25	0.21	0.16	. 1004
*Beximco Synthetic Petro Synthetic	10.00	9.50	0.10	1.00	5
Apex Footwear	227.10	225.00	2.10	0.92	4
* Bata Shoe	75.00	73.88	1.12	1.49	1246
Monno Ceramic	314.57	300.00	14.57	4.63	10
Osmania Glass	295.31	295.00	0.31	0.10	5
Osmana Glass	200.01	200.00)	0.10	

Issues traded at previous rates (10) City Bank (5), Ist ICB M Fund (50), B Thai Aluminium (40), · Bengal Carbide(20), Howladar PVC (30), Quasem Drycells (2000), Singar BD (30), National Oxygen (500), Ashraf Textile (300), Ibnsina (90).

DSE Shares and Debentures

FV/ML Closing

1000/1 885.00

100/5 170.00

100/5 290.00

100/20 110.00

100/20 221.62

100/5 154.00

1000/11380.00

100/5 122.90

100/5 100.00

100/10 80.00

100/5 100.00

100/5 100.00

100/5 100.00

100/5 400.00

100/5 174.00

100/5 146.00

100/10 148.00

100/10 101.72

100/10 75.06

100/10 189.06

100/10 210.33

100/5 192.00

10/50 53.02

100/5 239.25

100/5 400.00

100/5 270.00

10/50 20.00

100/5 67.00

100/10 116.00

100/5 59.00

100/5 200.00

100/5 503.00

100/5 200.00

10/50 50.00

100/5 60.00

100/5 748.75

100/5 60.00

100/5 143.00

100/5 500.00

100/5 119.06

100/5 800.00

100/5 550.00

100/52 240.00

10/50 129.45-

100/10 94:00

10/50 45:00

70.00

35.00

70.00

NT

NT

8.50

10/50

100/10

100/5

10/50

10/100

10/100

100/10

10/50

10/50

10/50

100/10

10/50

Modern Industries 100/5 335.00

100/5

100/10

10/50

10/50

26.00

Peoples Insurance 100/10 302.00

United Insurance 100/10 203.00

Bangladesh Autocars 100/5 46.00

B. Thai Aluminium 100/10

Renwick Jagneswar 100/5

Singer Bangladesh 100/5 960.00

114.00

109.00

Company

BANKS (12)

A.B. Bank

City Bank

IDLC Ltd

I.F.I.C

Al-Baraka Bank

Eastern Bank

Islami Bank

Pubali Bank

Rupali Bank

Uttara Bank

INVESTMENT (08)

1st ICB M. Fund

2nd ICB M Fund

3rd ICB M. Fund

4th ICB M. Fund

5th ICB M. Fund

6th ICB M. Fund

INSURANCE (04)

ENGINEERING (19)

Aftab Automobiles

Bangladesh Lamps

Atlas Bangladesh

Bengal Carbide

Eastern Cables

Howlader PVC

Karim Pipe

Metalex Corp.

Monno Jutex

National Tubes

Quasem Drycells

FOOD & ALLIED (28)

Panther Steel

A.B Biscuit

Apex Food

Aroma Tea

Bangas

BL.T.C.

B.T.C.

N.T.C

Alpha Tobacco

Amam Sea Food

B.D. Plantation

Ctg. Vegetable

E.L. Camellia

Rabeya Flour

Rupan Oil

Tulip Dairy

Yousuf Flour

BD Oxygen

Zeal Bangla Sugar

FUEL & POWER (04)

Eastern Lubricant

National Oxygen

Padma Oil Co.

Anowara Jute

JUTE (12)

Ahad Jute

Frogleg Export

Dhaka Vegetables

Gemini Sea Food

Bengal Food

Monno Staffllers

Bengal Steel

Aziz Pipes

ICB Unit Cert.

Sales Price

Re-purchase

Green Delta

U.C.B.L

LC.B

National Bank

Shamser Jute

Sonali Ansh

TEXTILE (20)

Alhaj Textile

Arbee Textile

Ashraf Textile

Chand Textile

Chand Spining

Desh Garments

Dulamia Cotton

GMG Ind. Corp.

Modern Dyeing

Quasem Textile

Saiham Textiles

Rahim Textile

S.T.M. (ORD)

Swan Textile

Tamijuddin

Tallu Spinning

CHEMICALS (20)

Ambee Pharma

Bangla Process

Beximco Infusion

Beximco Pharma

Kohinoor Chemical

Progressive Plastic

Reckitt & Colman

Rahman Chemicals

PAPER & PRINTING (06)

Petro Synthetic

B. Synthetics

N Polymer

Pharma Aids

Therapeutics

Wata Chentical

Phoenix Leather

The Engineers

Texpick Ind

Savar Refractories

The Ibnsina

Pharmaco

PHARMACEUTICALS &

Stylecraft

Padma Textile

Eagle Star Textile

Sprialised Jute

Shine Pukur Jute

■ Computer ■

BCS Computer Show '93

HE month of November is quite interesting for the computer lovers. So far, two grand exhibitions were held. One in Chittagong at Hotel Agrabad and the other, at Hotel Sheraton, Dhaka.

The biggest ever computer show in the country is also going to take p. ce +1 is month.

The Bangladesh Computer Samity (BCS) is going to organise the biggest computer exhibition ever at the Hotel Sonargaon on November 26-27, 1993.

The BCS is the only authorised association among the computer community in Bangladesh. It was founded in 1987 with a motto to organise, to remove anamolies, to promote mass communication, to motivate the public and raise general awareness. The Samity was registered in 1992.

Out of 26 BCS members, 18 are participating in the exhibition. According to the President of the Samity. Sajjad Hossain. the aim is to display the state of the art of technology in comby Zakaria Swapan

puter industry today through this exhibition. We take pride in the fact that not only most of the leading computer companies are represented in BCS but also they will exhibit their latest products during these two days.

=== Star Special =====

He further says. "Globally computer industry is the fastest growing industry of the 90s. and you will be happy to know that Bangladesh is not far behind, at least in terms of usage and some skills."

Moin Khan, General Secretary of the samity says. "I hope this show will create the awareness in the minds that the computer is a medium, not just

He adds. "probably some of the systems on display will roll the eyeballs; but let us not get carried away as we still have a long, long way to go. I hope the BCS Computer Show '93 will generate the enthusiasm for this industry which needs to be

identified as a thrust sector for Bangladesh. You will all be able to see for yourself where the industry is today."

Abdullah H Kafi, the Convenor of the Exhibition Committee and Treasurer of BCS, explained the reason why eight of the 26 members did not participate in the show.

In a recent interview to the Daily Star he says, "some of the members are not ready to perticipate in the show right now and some had already attended other shows earlier this month.

He also says, this is the first time that the Samity is organising such a big exhibition. As such they are facing various types of problems like the financial, managerial and organisational. He hopes that the experience for this exhibition will help all BCS members in improving their business.

Kafi points out that absence of a regular exhibition venue is

a major problem for the organisers. There is no permanent place for regular shows. The hotels are very expensive for them. He suggests, there should be an exhibition centre in the country. And some professional body should come up to organise and conduct the whole thing. He is hopeful about the show and is expecting more than 10,000 visitors in the two-day show.

For a better perticiaption, the Exhibition Committee has already published a flyer. They are also going to publish a colourful souvenir on the occasion. The Samity will hold a press conference to inform the public about the exhibition.

The exhition will remain open from 11.00 am to 8.00 pm on Nov 26th and from 10.00 am to 8.00 pm on Nov 27th. You will get a "Visitors Registration Form" at the entrace which you will have to fill up.

For our readers, we give below all the names of the exhibitors and their products.

Exhibitors & Their Products

Abacus & Automation Ltd. Tel: 816917 Fax: 813017 AST desktop & Notebook computer. Products AST server & Multi Processor Com-

puter. The Accsees Pvt. Ltd. Tel: 812542 Fax: 813014 Accsees PCs. UPS. Stabilizer & Products

Bangla Software, Networking products. Ananda Computers Tel: 283866, 253214, 246873 Fax: 866332 Full range of Apple products, AUVA PC's, SONICA Monitors & BIJOY Bangla Software

Automation Engineers Tel: 323127 Fax: 813014 Products

Products

Megaplus PC's & ABAHA Bangla Soft-BEXIMCO Computers Ltd. Tel: 861891-5 Fax: 863470 IBM Computers and Banking Software

Procucts CITech Company Ltd. Tel: 405751 Fax: 833648 APPLE and DIGITAL Computers, SEIKOSHA Printers & BASUNDHARA. Bangl Software

Computer Solutions Ltd. Tel 328858 Fax: 813186 IBM RISC 6000, MITAC PC, CANON & Products NEC Printer, CALCOMP Digitizers, LAN. Business & Accounting Softwares.

Computer Services Tel: 816215 Fax: 813014 Products

MCA PC, NEC Printer, Business & Accounting Software, Networking prod-Tel: 244267, 244179 Fax: 863508

DATEC Ltd. Products

FLORA Ltd.

Products

Products

PC's, Printer, UPS, OMR, OCR & Computer Forms. Tel: 861416, 230491 Fax: 863461 COMPAQ, EPSON, & HP PC and Print-

ers. Powertronics UPS, Verbatim Diskette. Graphics Information Systems. Tel: 833016 Fax: 833526 BULL & ZENITH Data System PC's NEC

Products Printers IBM World Trade Corporation. Tel: 232845 Fax: 863511

IBM Computer Products Products International Office Equipment. Tel: 233317 Fax: 863860 OKI Printers, SENDON UPS, LANIER **Products** PPC, EXIDE on line UPS, Canofile 250.

J A N Associates Tel 861444 Fax: 866977, 863060 NEC Printer, Monitor, Notebook. Products Diskettes, Computer Forms & all kinds of Computer accessories and supplies. LEADS Corporation Ltd. Tel: 252565 Fax:863984 NCR Computer and printers **Products** Tel: 882890-1, 882868 Fax: 883911 NSS

IBM & LEXMBARK Products

SEIKOSHA & OTC Printer, COPAM **Products** Computer. Syquest & Centralion Products. UNIDEV Limited Tel: 234861, 230419 Fax: 863435 ACER PC. SEAGATE and IT Bank solu-Products

Sigma Trade Internationi Tel: 238406 Fax: 863029

tions.

Puzzle Puzzle

A person flew in an aeroplane 500 km to the east, then 500 km to the north and then flying the same distance to the south came back to the original position. How was it possible?

Answer: The person was 500 kms away from the north pole.

CALCULATOR INSTRUCTIONS PROBLEMS TO BE SOLVED ZOME RECORDED ON PAPER LOAD 6 CALCULATOR **INSTRUCTIONS** PROBLEMS TO BE SOLVED RECORDED -ON PAPER ADD 4 (p) INSTRUCTIONS CALCULATOR **PROBLEMS** TO BE SOLVED RECORDED ON PAPER **EXECUTE** (c) 715. CALCULATOR INSTRUCTIONS PROBLEMS TO BE SOLVED RESULTS ALSO RECORDED RECORD SUME **ANSWER** 6+4.0 FIG. 1.1. USING A CALCULATOR

MULTIPLY 5 (or Multiply by 5) **EXECUTE** (or Press equal sign)

The author is the Systems Director of Rafl Computer Systems Limited. Rafl Computer Systems Ltd is involved in conducting the 'O' Level Computing Studies programme at Scholastica and The Aga Khan School.

The Embedded Computing by Mahfuza Koli

HE average person in a rich country operates dozens of computers a day. But they are aware of only one and that is the desktop PC. They notice this computer because it has a screen and a keyboard. On the other hand the most commonly used computers have no screen and keyboards. The hidden computers sit inside microwave ovens telephones, video recorders, photocopiers and automated teller machines. In our country, our people also use these tools and like other developed

countries, they never think

about the computer inside these

tools. In the developed country,

programme embedded computers could become a moneyspinner of Microsoft dimensions. It might be Wind River Systems, a small software firm based in Alameda, California. Wind River went public on the back of its booming business with bluechip embedders such as AT&T. Boeing and the Mitsubishi group. Wind River has doubled its sales each year since 1987 and had revenues of 25m dollar last year with an operating profit of 3m dollar.

Wind River supplies an offthe-shelf set of software tool for users to develop their applications on a powerful UNIX workstation, and then lets them · download the finished instruc



the average family car. All told. some 400m 'embedded computers' are in use around the world. By contrast, only 140m personal computers have so far made it on to desks and laps.

Even more gadgets would have embedded computers but for one problem: finding enough programmers to give the embedded devices their instructions especially now that the product life cycle is often less than a year. Being unique, every new application has to be programmed from scratch. in Japan, most scientists are busy in their electronics industries in producing embedded computers and that is why the country has never been able to muster an independent software industry.

The Economist reports, "a firm that could provide an offthe-shelf software package to

tions into the embedded device Market researchers at International Data Corporation (IDC) reckon that worldwide demand for embedded software will reach 7.5 billion dollar by 1995. Early embedded computers

in TV-sets and telephones used simple 4-bit and 8-bit microprocessors that could take only limited advantages of software. But as with PCs. embedded computers have now graduated to powerful 16-bit and 32-bit versions as chip prices have tumbled. IDC forecasts the growth rate of this market is 35% per year and sales of 3.2 billion by 1995.

So, it is clear that, potential software houses can easily enter into this market with right planning. Some entrepreneurship is needed to start right at this moment.

Computing Bytes

The Paily Star Computer Awareness Course by Yousuf M Islam

As part of its Computer Literacy Programme, the Daily Star is starting computer awar-eness course titled "Computing Bytes". The course will be published in weekly instalments appearing every Wednesday.

The course will consists of two diagrams explaining the underlying concepts, a brief write up, relevant illustrative examples and questions. To benefit from the course, the reader is invited to study each diagram, read the write up, consider the examples, answer the questions in writing, and preserve the answers in a file. The reader should also cut out the course material and attach it to the file. The reader should subsequently compare his/her answer with the published answer shown elsewhere in the section.

A test will be published at the end of each part. This test should be filled in and compared with the results published in the subsequent week.

Comments or questions on course material which is difficult to understand would be most welcome.

Part —I Introduction to Computers

Aim of Part I To introduce fundamental concepts. To achieve this, the reader is invited to construct a computer system from familiar devices. The fundamental concepts are introduced while con-

Reader objectives While studying Part I, the reader should look for the answer to the following questions:

structing the computer system.

A Peripheral Device What is: Hardware & Software A Storage Device A Byte A Computer A Computer Program An Operating System A Computer Input & Output Data & Information A Manual Data Processing System A Computerised Data Processing System

A Program Works

Familiar Devices The calculator is a familiar device. We use it as a tool to do our arithmetic calculations quickly. It can do calculations quickly as it is electronic. This is what a computer essentially does. It does calculations quickly.

Let us examine the functions of a calculator more closely and see whether we can construct a computer system using a calcu-Using a Calculator (Fig. 1.1)

Imagine we need to solve the sum " 6 + 4 " which is written

on a piece of paper. Our assistant has the calculator. We have

to shout out the instructions. The instructions would be: Load 6 (or Enter 6) Add 4 (or Plus 4) Execute (or Press the Equal Sign)

A Computer Works

Record Answer (or Tell me the answer) We would then write down the answer so that we could use the answer later without having to do the sum again.

Q. 1.1 Write the instructions for doing the sum " 7x 5".

Ans. 1.1 LOAD 7 (or Enter 7) RECORD ANSWER (or Give me the answer)

10/50 Delta Jute (14% 2003) 10/50 NT Gawsia Jute 100/5 87.00 Islam Jute 80.00 100/5 Jute Spinner 100/5 105.00 Mutual Jute 10/50 Northern Jute

10/50 21.00 Eagle Box 100/5 16.00 Monospool Paper 100/5 67.00 Paper Converting 100/10 16.25 Paper Processing 10/50 50.00 10/50 52.00 Sonali Paper SERVICE (02) 10/50 12.00 Bangladesh Hotel 10/50 Bd. Service MISCELLANEOUS (18) 100/20 225.00 Apex Footwear 100/5 390.00 Apex Tannery 10/50 30:00 10/100 73.88 Bata Shoe 26.70 10/100 Beximco 100/5 100/5 208.67 Ctg. Cement 10/50 91.84 G. Q. Ball Pen 50.00 100/5 10/100 Himadri Ltd. 100/5 10.00 Milon Tannery 100/5 300.00 100/20 99.00 New Dhaka Refac

100/5 295.00 Usmania Glass DEBENTURES (05) 1760.00 Beximco 1999/1 17% 1998 Beximco Infusion 1500/2 1649.74 (17% 1998)Beximco Pharma 1428/1 1165.00 (17% 1998) 1500/1 1325.00 Quasem Silk (17% 1994) Beximco Synthetic2500/2 2510.00

Note : FV = Face Value ML= Market Lot NT= Not Traded AL = Allotment Letter