## HSC-2026 পরীক্ষার্থীদের জন্য

# **HSC ICT Full Course**

(Online)

Online Batch Time

English Version - 3:00pm

Class & Exam Routine

Online Exam Time
From 9:00am to 11:00pm

ngiish version - 3:00pm		From 9:00am to 11:00
Date & Day	Live Class	Live Exam
06 September 2024 (Friday)	Live Class (ICT-01+02) ICT: Chapter - 03	Basic Introductory Live Exam <b>MCQ</b> (10×1=10); 10 min.
07 September 2024 (Saturday)	Live Class (ICT-03+04) ICT: Chapter - 03	Daily Live Exam (ICT-01+02) <b>MCQ</b> (10×1=10); 10 min.
13 September 2024 (Friday)	Live Class (ICT-05+06) ICT: Chapter - 03	Daily Live Exam (ICT-03+04) <b>MCQ</b> (10×1=10); 10 min.
14 September 2024 (Saturday)	Live Class (ICT-07+08) ICT: Chapter - 03	Daily Live Exam (ICT-05+06) <b>MCQ</b> (10×1=10); 10 min.
20 September 2024 (Friday)	Live Class (ICT-09+10) ICT: Chapter - 03	Daily Live Exam (ICT-07+08) <b>MCQ</b> (10×1=10); 10 min.
21 September 2024 (Saturday)	Live Class (ICT-11+12) ICT: Chapter - 03	Daily Live Exam (ICT-09+10) <b>MCQ</b> (10×1=10); 10 min.
27 September 2024 (Friday)	Live Class (ICT-13+14) ICT: Chapter – 03	Daily Live Exam (ICT-11+12) <b>MCQ</b> (10×1=10); 10 min.
28 September 2024 (Saturday)	Live Class (ICT-15+16) ICT: Chapter - 03	Daily Live Exam (ICT-13+14) <b>MCQ</b> (10×1=10); 10 min.
04 October 2024 (Friday)	Live Class (ICT-17+18) ICT: Chapter - 05	Daily Live Exam (ICT-15+16) <b>MCQ</b> (10×1=10); 10 min.
05 October 2024 (Saturday)	Live Class (ICT-19+20) ICT: Chapter – 05	Daily Live Exam (ICT-17+18) <b>MCQ</b> (10×1=10); 10 min.
08 October 2024 (Tuesday)	Monthly Live Exam-01; ICT Lecture-01 to 18 CQ (3×10=	30); 1.30 hrs. & MCQ (25×1=25); 20 min.
11 October 2024 (Friday)	Live Class (ICT-21+22) ICT: Chapter - 05	Daily Live Exam (ICT-19+20) <b>MCQ</b> (10×1=10); 10 min.
0	nline classes and exams will be closed on October 12 or	the occasion of Autumn Durga Puja.
18 October 2024 (Friday)	Live Class (ICT-23+24) ICT: Chapter - 05	Daily Live Exam (ICT-21+22) <b>MCQ</b> (10×1=10); 10 min.
19 October 2024 (Saturday)	Live Class (ICT-25+26) ICT: Chapter – 05	Daily Live Exam (ICT-23+24) <b>MCQ</b> (10×1=10); 10 min.
25 October 2024 (Friday)	Live Class (ICT-27+28) ICT: Chapter – 05	Daily Live Exam (ICT-25+26) <b>MCQ</b> (10×1=10); 10 min.
26 October 2024 (Saturday)	Live Class (ICT-29+30) ICT: Chapter - 05	Daily Live Exam (ICT-27+28) <b>MCQ</b> (10×1=10); 10 min.
01 November 2024 (Friday)	Live Class (ICT-31+32) ICT: Chapter - 05	Daily Live Exam (ICT-29+30) <b>MCQ</b> (10×1=10); 10 min.
02 November 2024 (Saturday)	Live Class (ICT-33+34) ICT: Chapter - 04	Daily Live Exam (ICT-31+32) <b>MCQ</b> (10×1=10); 10 min.
08 November 2024 (Friday)	Live Class (ICT-35+36) ICT: Chapter - 04	Daily Live Exam (ICT-33+34) <b>MCQ</b> (10×1=10); 10 min.
09 November 2024 (Saturday)	Live Class (ICT-37+38) ICT: Chapter – 04	Daily Live Exam (ICT-35+36) <b>MCQ</b> (10×1=10); 10 min.
12 November 2024 (Tuesday)	Monthly Live Exam-02; ICT Lecture-19 to 36 CQ (3×10=	30); 1.30 hrs. & MCQ (25×1=25); 20 min.
15 November 2024 (Friday)	Live Class (ICT-39+40) ICT: Chapter - 04	Daily Live Exam (ICT-37+38) <b>MCQ</b> (10×1=10); 10 min.
16 November 2024 (Saturday)	Live Class (ICT-41+42) ICT: Chapter – 01	Daily Live Exam (ICT-39+40) <b>MCQ</b> (10×1=10); 10 min.
22 November 2024 (Friday)	Live Class (ICT-43+44) ICT: Chapter - 02	Daily Live Exam (ICT-41+42) MCQ (10×1=10); 10 min.
23 November 2024 (Saturday)	Live Class (ICT-45+46) ICT: Chapter - 02	Daily Live Exam (ICT-43+44) <b>MCQ</b> (10×1=10); 10 min.
29 November 2024 (Friday)	Live Class (ICT-47+48) ICT: Chapter - 06	Daily Live Exam (ICT-45+46) MCQ (10×1=10); 10 min.
30 November 2024 (Saturday)	Live Class (ICT-49+50) ICT: Chapter - 06	Daily Live Exam (ICT-47+48) MCQ (10×1=10); 10 min.
06 December 2024 (Friday)	Live Class (ICT-51+52) ICT: Chapter - 06	Daily Live Exam (ICT-49+50) <b>MCQ</b> (10×1=10); 10 min.
07 December 2024 (Saturday)	Live Class (ICT-53+54) ICT: Chapter - 06	Daily Live Exam (ICT-51+52) <b>MCQ</b> (10×1=10); 10 min.
08 December 2024 (Sunday)		Daily Live Exam (ICT-53+54) <b>MCQ</b> (10×1=10); 10 min.
10 December 2024 (Tuesday)	Monthly Live Exam-03; ICT Lecture-37 to 54 CQ (3×10=	:30); 1.30 hrs. & MCQ (25×1=25); 20 min.
12 December 2024 (Thursday)	Subject Final Exam (Full Syllabus) Board Standard CQ	(5×10=50); 2:30 min. & MCQ (25×1=25); 20 min.

#### Online Classes & Exam Procedure:

- \* Go to this website udvash.com and click on 'Join Now' menu to give Live Class & Exam. Login to class HSC ICT Full Course using your admitted registration number to participate in classes and exams.
- \* The Daily Live Exam will run from 09:00 am to 11:00 pm as per the date mentioned in the routine. A student can participate in the Live Exam only once during this period. However, for more practice, students can participate in the ICT MCQ Practice Exam of the same syllabus multiple times.

### **HSC ICT Full Course Syllabus (Online)**

		ICT (Reference Book: <b>UDVASH</b> Parallel Text)		
Chapter	Lecture	Syllabus		
		Number System- History of Invention of Numbers, Egyptian / Hieroglyphics Number System, Babylonian Number System, Roman		
	ICT-01	Number System, Mayan Number System, Hindu-Arabic Number System, Types of Number Systems, Decimal or Decimal, Binary or		
		Binary Number System, Octal Number System, Hexadecimal Number System.		
	ICT-02	Number System Conversion - Convert decimal to any other number system.		
	ICT-03	Convert any other number system to decimal.		
	ICT-04	Reciprocal conversion of any number system other than decimal, conversion with calculator, binary addition-subtraction.		
	ICT-05	Signed numbers, 1's complement, 2's complement.		
Chapter-3 Number System and Digital Device	ICT-06	Code, BCD Code, Alpha Numeric Code, ASCII Code, E <mark>BCDI</mark> C Code, Unicode.		
	ICT-07	Boolean Algebra- Boolean variables and consta <mark>nts, Boo</mark> lean fundamental theorem, truth table.		
	ICT-08	Boolean Functions, Boolean Equations, Dualit <mark>y, Logic G</mark> ates, Basic Logic Gates.		
	ICT-09	Implementation of any circuit with compo <mark>und gate, u</mark> niversal gate, special logic gate, NAND or NOR.		
	ICT-10	Circuits and Equations (Drawing Logic Circuits from Boolean Equations, Writing Equations from Logic Circuits), Logic Functions		
	101 10	Simplification.		
	ICT-11	Generating Functions from Tru <mark>th T</mark> ables <mark>, Boolean A</mark> lgebra at a Glance.		
	ICT-12	Digital Devices- Encoder, Dec <mark>oder</mark> , Half A <mark>dder.</mark>		
	ICT-13	Full adder, implementation of desired logic circuit using one or more ICs, implementation of full adder using half adder.		
	ICT-14	Latch, Clock/Clock Pulse, Fli <mark>pflop (S</mark> R Flipflo <mark>p, JK Flip</mark> flop, D Flipflop, T Flipflop		
	ICT-15	Structure of register, paral <mark>lel load re</mark> gister or b <mark>uffer</mark> register, counter, mode number or modulus of counter, synchronous counter.		
	ICT-16	Asynchronous counter, shi <mark>ft-register c</mark> ounter, creative questions.		
	ICT-17	Programming- Concept of program, programming language, different generations of programming languages, first generation,		
	.0/	second generation, th <mark>ir</mark> d ge <mark>neration, fourth</mark> generation, fifth generation, level of programming language (low, middle, high)		
	ICT-18	Translator program, <mark>com</mark> piler, <mark>interpreter, asse</mark> mbler.		
	ICT-19	Steps of program cr <mark>eatio</mark> n, progr <mark>am organization, a</mark> lgorithm, flowchart (flow diagram), flowchart symbols, basic pattern of		
	101.15	flowchart formation <mark>, rules for</mark> creat <mark>ing a flowchart.</mark>		
	ICT-20	Examples of algorith <mark>m and flowch</mark> art, pseudocode.		
	ICT-21	C-Programming- History of programming language, structure of C program, constants, variables, data types, operators and their applications.		
0h 1 5	ICT 22	Unary Operators, Bina <mark>ry Operators, Arithme</mark> tic Op <mark>erators,</mark> Relational Operators, Logical Operators, Bitwise Operators, Assignment		
Chapter-5	ICT-22	Operators, Precedence of Operators.		
Programming	ICT-23	Ternary operators, keywords, library fu <mark>nctio</mark> ns and <mark>hea</mark> der files.		
Language	ICT-24	Comments, input/output, format specifie <mark>rs,</mark> escape <mark>se</mark> quences.		
	ICT-25	Control Statement- Branching & Looping, Conditional Control Statement (if, if - else, if - else if - else).		
	ICT-26	Conditional control statement (switch - case - default), loop with go to statement.		
	ICT-27	Loop (for loop, while loop, do while loop), entry control and exit control loop.		
	ICT-28	Array- Concept of array, array declaration and array element access.		
	ICT-29	Dimensions, one dimensional array, two-dimensional array, three-dimensional array.		
	ICT-30	string (character array)		
	ICT-31	function or user defined function.		
	ICT-32	Area and Boundary of Variables, Creative Questions.		
1/	ICT-33	Internet and Web Introduction- Internet Introduction, Web Introduction, Web Design Concept, Web Page and Web Site, Static		
	101 33	Website, Dynamic Website, Network Protocol, Domain Name, URL.		
	ICT-34	Website structure, tree or hierarchical structure, web-linked or network structure, sequence or linear structure, hybrid or		
Chapter-4	101 34	combination structure, web publishing and hosting.		
Chapter-4 Introduction to	ICT-35	HTML- Introduction and versions of HTML, sample HTML code, element and tag, different types of tags, HEAD section tags.		
web design	ICT-36	Body section tags, heading tags, text formatting tags.		
and HTML	ICT-37	Style Attributes & CSS.		
	ICT-38	Hyperlink, Add Image, Add Image in Background, List (Ordered & Unordered List)		
	ICT-39	Table, border attribute, cells pacing and cellpadding attribute, border manipulation, pot (text box, radio button, check box, file input, submit)		
	ICT-40	Special Characters, Semantic Elements, Some Special Terminology, Creative Questions.		
Chapter-1		Information and Communication Technology and Our Bangladesh- Data and Information, Technology, Information and		
Information and		Communication Technology: Bangladesh Perspective, Digital Bangladesh Initiative Software Industry, Concept of Global Village-		
		Elements of Establishing Global Village, Communication, Housing, Education, Medical, Employment, Office, Business, Trade,		
Technology:		Research, news, entertainment, social media, cultural exchange, VR- History, Constituents of Virtual Reality, Application and		
	1	Impact of Virtual Reality, Uses and Benefits of Virtual Reality, Recent Trends in Information and Communication Technology-		

Bangladesh		Defense, ICT in Defense Industry, Space Expedition, Application of ICT in Space Research, Space Expedition: Bangladesh	
Perspective		perspective , Robotics, Features of Robot, Some Important Robot Introduction in Technology World, Use of Robot, Artificial	
p		Intelligence, How Artificial Intelligence Works, Applications of AI, Uses of AI, Disadvantages of Artificial Intelligence, Cryosurgery.	
		Biometrics, Areas of Application of Biometric Technology, Steps of Individual Identification in Biometrics Technology,	
		Bioinformatics, Gene Engineering, Methods of Genetic Engineering, Application of ICT in Genetic Engineering, Uses of Genetic	
	ICT-42	Engineering, Genetic Engineering in the Context of Bangladesh, Nanotechnology methods, advantages and applications of	
		nanotechnology, ICT-based production systems, information and communication technology and economic development, ethics	
		in the use of information and communication technology, some discussed cybercrime incidents, different types of cybercrime,	
		laws to suppress cybercrime, information and communication technology in social life Effects- Positive Effects of Information	
		Technology, Negative Effects of Information Technology, Creative Questions.	
	ICT-43	Data Communication and Data Transmission- Concept of Data Communication, Signals (Analog and Digital), Fundamentals of Data	
		Communication, Bandwidth, Calculation of Bandwidth, Data Transmission Methods, Parallel and Serial Transmission, Synchronous,	
		Asynchronous and Isochronous Transmission, Modes of Data Transmission, simplex, half duplex and duplex transmission, unicast,	
		broadcast and multicast.	
Chapter-2	ICT-44	Data Communication Media, Wireless Medi <mark>a- Electro-</mark> Magnetic Spectrum and Reasons to Use Radio Waves, Microwaves and	
Communication		Infrared, Radio Waves, Microwaves, Terres <mark>trial Micro</mark> wave, Satellite Microwave, Infrared, Wireless Communication Systems,	
Systems and		Wireless Internet Access Points, Hotspot <mark>, Bluetooth</mark> , Wi-Fi, WiMAX, mobile communications, different generations of mobiles.	
Networking	ICT-45	Wired medium – twisted pair ca <mark>ble,</mark> coax <mark>ial cable, c</mark> onnectors of coaxial cable, fiber optic cable, laser and LED, computer	
		networking – concept of netw <mark>orki</mark> ng, pu <mark>rpose of c</mark> omputer network, types of networks, classification of network according to	
		geographical spread, service delivery and control.	
	ICT-46	NIC, Modem, Hub, Switch, R <mark>outer, Ga</mark> teway, <mark>Repeate</mark> r, Bridge, Network Topology, Cloud Computing - Characteristics of Cloud	
		Computing, Positive and N <mark>egative Ef</mark> fects of Cl <mark>oud C</mark> omputing, Creative Questions.	
<b>Chapter-6</b> Database Management system	ICT-47	Database- Difference between data and information, concept of database, spreadsheet vs database, computer memory and file	
		and database storage.	
	ICT-48	Advantage of using t <mark>he</mark> dat <mark>abase, area of us</mark> e of the database (corporate, office, bank etc.).	
	ICT-49	Table, Field, Record, Entity, Att <mark>ribute, Value, Data</mark> type, Relational Database - General Database vs Relational Database	
	ICT-50	Features and uses o <mark>f RDB</mark> MS, Key (Primary Key, Composite Primary Key, Foreign Key).	
	ICT-51	Relationship (One to one, One to Many, Many to Many), Entity Relationship Diagram (ERD).	
	ICT-52	Structured Query Language- CRUD, DML/DDL, Database Creation, Table CRUD, Record CRUD.	
	ICT-53	Sorting, Joining, Inde <mark>xing.</mark>	
	ICT-54	Data Security- Data Encryption, Creative Questions.	

#### For any information regarding the online program contact the following numbers

Dhaka Branches: Mirpur-01713-236705, Rupnagar-01713-236734, Cantonment-01713-236724, Uttara-01713-236707, Mohammadpur-01713-236701 Science Lab.-01713-236706, Farmgate (Green Road)-01713-236710, Farmgate (Malek Tower)-01713-236711, Shantinagar-01713-236703 Malibagh-01713-236702 Motijheel-01713-236908, Basabo-01713-236722, Banshri-01713-236723, Laxmibazar-01713-236720, Jatrabari-01713-236719 Dania-01713-236718 Savar-01713-236721 Gazipur-01713-236746, Narayanganj-01713-236717, Konapara-01713-236757, Tongi-01713-236759 Bakshibazar-01713-236712 Khilgaon-01713-236768.

Branches outside Dhaka: Mymensingh (Natun Bazar) - 01713 - 236716, Mymensingh (KB) - 01713 - 236769, Kishoreganj - 01713 - 236739 Netrokona - 01713 - 236767 Jamalpur - 01713 - 236740, Sherpur - 01713 - 236749, Tangail - 01713 - 236737, Sirajganj - 01713 - 236742, Bogura - 01713 - 236727 Gaibandha - 01713 - 236755 Rangpur (Medical Mor) - 01713 - 236726, Rangpur (Khamar Mor) - 01713 - 236783, Kurigram - 01713 - 236753, Lalmonirhat - 01713 - 236777 Saidpur - 01713 - 236741 Dinajpur - 01713 - 236733, Thakurgaon - 01713 - 236748, Panchagarh - 01713 - 236778 Joypurhat - 01713 - 236754, Naogaon - 01713 - 236756 Chapainawabganj - 01713 - 236747, Rajshahi - 01713 - 236713, Natore - 01713 - 236751, Pabna - 01713 - 236736, Kushtia - 01713 - 236735, Meherpur - 01313 - 368670 Chuadanga - 01713 236764, Jhenaidah - 01713 - 23676, Magura - 01713 - 236752 Jashore - 01713 - 236731, Narail - 01713 - 236788, Khulna - 01713 - 236715 Satkhira - 01713 - 236750, Pirajpur - 01713 - 236790, Bhola - 01713 - 236791, Barishal - 01713 - 236730, Patukhali - 01713 - 236784, Shariatpur - 01713 - 236782 Gopalganj - 01713 - 236760, Faridpur - 01713 - 236728, Chandpur - 01713 - 236765, Noakhali - 01713 - 236745, Feni - 01713 - 236744, Cox's Bazar - 01713 - 236766 Chittagong (Chawkbazar) - 01713 - 236714, Chittagong (Halisahar) - 01713 - 236758 Sylhet - 01713 - 236729, Habiganj - 01713 - 236773, Moulvibazar - 01713 - 236785 Sunamganj - 01713 - 236779.