

Class : 10

Time: 1 Hour 30 Minutes

Full Marks:50

Unit	Type of Questions	Q. No.	Area	No. of Questions	Marks
1.	Subjective	Group A (Computer Fundamentals)-20 Marks			
		1.a.	Computer Networking and Tele communication	1×2	2
		1.b	Ethical and social Issues in ICT	1×2	2
		1.c	Computer Security	1×2	2
		1.d	E-Commerce	1×2	2
		1.e	Contemporary Technology	1×2	2
		2.	Number system a. Conversion b. Binary calculations	2×1 2×1	4
	Objectives	3	Matching, Multiple choice, True & False	4×0.5	2
		4	Technical terms	4×0.5	2
		5	Full Forms (From the above Chapters)	4×0.5	2
2.	Subjective	Group B (Database Management System)-10 Marks			
		6.(a,b)	Introduction Creating database Entering and Editing data	2×2	4
		6.c	Querying database Creating and using forms Creating and printing reports	1×2	2
	Objective	7	Multiple choice/True and False	4×0.5	2
8		Technical terms/Matching	4×0.5	2	
3.	Subjective	Group C (Modular Programming in QBASIC)-15 Marks			
		9. (a,b)	Conceptual questions	1×1	1
			Function and use of QBASIC Statement/Functions	1×1	1
		10	Debug a program	1×2	2
		11	Output of the given program code	1×2	2
		12	Analytical Question (based on the given program code)	3×1	3
		13. a,b,	Write QBASIC program (two question from the below 3 section;) i. Creating user-define function ii. Creating Sub program iii. Sequential data file handling	2×3	6
	Subjective	Group D (Introduction to C language)-5 Marks			
14 a,b.		Conceptual questions (introduction to C-Language, data types, operators, keywords, scanf() and printf()) Write a C-Program	2×1	2	
		15. a.,b.	-Using IF statement -Using a looping statement	1×3	3
		Total		44	50

Time: 1 Hour

Full Marks:25

Unit	Group/Area	Topics	No of Questions	Marks
2	MS-Access (8 marks)	Structure of table and data entry	1×2	2
		Query	2×2	4
		Form/Report	1×2	2
3	Modular Programming in QBASIC (11 Marks)	Create a user defined function	1×3	3
		Create a sub program	1×3	3
		File Handling	2× 2.5	5
4	Introduction to C language (6 marks)	if Statement	1×3	3
		Looping Statement	1×3	3
		Total	10	25

INTERNAL PRACTICAL ASSESSMENT

Full Marks:25

Unit	Group/Area	Topics	No of Questions	Marks
2	MS-Access	Project Work		5
		Practical Exam: Create table/query/forms/report	2×2	4
3	Modular Programming in QBASIC	Project Work		10
4	Introduction to C language (6 marks)	Practical exam: if Statement/ Looping Statement	2 ×3	6
		Total	10	25

THEORETICAL EVALUATION

Subject: Computer Science

Full Marks:50

Questions Planning and Mark Weight age Distribution

Unit	Area/Unit	Weight age	Knowledge			Understandi ng			Application			High Ability			Marks Weight age		
			V	S	L	V	S	L	V	S	L	V	S	L	V	S	L
1.	Computer Fundamental	34	3	2		3				2	1				6	4	1
2.	Database management System	42	1	2			1			2					2	2	
3.	Programming in QBASIC	61	1				2		2					2	3	5	2
4.	Introducing to C Language	29	1											1	1		1
	Total	170	6	4		3	3		2	4	1			3	12	11	4

TYPES OF QUESTIONS

Types of Questions	Asked No.	Time Division	Full Marks
Very Short Questions	12	25 minutes	12
Short Questions	11	35 minutes	22
Long Short Questions	4	30 minutes	16
Total	27	1 hour 30 minutes	50

SYLLABUS: 2080
First Terminal Examination

Opt II Computer

Class: 10

S.No	Topics	Periods	Teaching Methods	Teaching Materials	Evaluation Techniques & Tools	Remarks
1	Computer Fundamentals Networking and Telecommunication Requirement of network- Hardware/software/devices Communication media/protocols Data communication mode/components Client and Server Types of Network LAN,MAN,WAN Elements of network Transmission Media- Guided ,Unguided Internet and its services LAN topologies/protocols Network architecture-centralized, client server, peer to peer Network devices-switch, hub ,router, bridge, modem, gateway Repeater, Connector, Mode of communication -Simplex, half duplex, full duplex	12	Explanation, Discussion, Drawing, Slides	References books pictures Multimedia devices	Homework unit test viva drawings	
2	Ethical and Social issues in ICT Introduction Digital Citizenship Digital Footprint IT policy 2012/ETA Opportunities and threat in Social Media	6	Explanation, Discussion, slides	References books pictures Multimedia devices	Homework unit test viva drawings	
3	Number System Introduction Base of a number system Types of Number System Conversion of Number system Binary Addition, Subtraction, Multiplication, Division Some basic terms related to number system	9	Explanation, Discussion, Drawing, Slides	References books pictures Multimedia devices	Homework unit test	
4	Programming Language Qbasic Modular Programming, Advantages of procedure, Main and Sub Module Types of Procedure: Sub Procedure and Function Procedure Global and Local Variables, parameters and arguments Arguments pass by value and pass by reference Differentiate between built in function and user defined function Function /Procedure declaration Define and call procedures(FUNCTION..END FUNCTION ,SUB...END SUB,CALL) Types of function and procedure Use of def..fn function, declare function. and sub..end sub	15	Explanation, Discussion, Drawing, slides, practical lab	References books pictures Multimedia devices	Homework Unit test viva, practical file, practical test.	
		42				

For Practical exam

Time: 1hrs

F.M =25

P.M=10

S.No	Group/Area	Topic	No of questions	Marks
1	Qbasic (25 marks)	SUB..End SUB	1+1+1	5X3
		Function..End Function	1+1	5+5
		Total	5	25

SYLLABUS: 2080
Mid-Terminal Examination

Opt II Computer

Class: 10

S.No	Topics	Per iods	Teaching Methods	Teaching Materials	Evaluation Techniques & Tools	Rem arks
5	ECOMMERCE Introduction Benefits and limitation of E-Commerce Types of E-Commerce E-commerce in Nepal M-commerce Online payment.	7	Explanation discussion	References books	Homeworks, Unit test and Viva	
6	Contemporary Technology Cloud Computing AI Virtual Reality E-governance Mobile Computing IOT	7	Explanation Discussion, Newspaper	References books	Homeworks, Unit test and Viva	
7	Database management System Introduction Advantages of database, DBMS, elements of database, Records, fields, data and data types, table, primary key,relation,attributes,fields,sorting,indexing ,filtering,queries,form,report	22	Explanation Discussion and Practical lab	Computer System	Homeworks, Unit test and Viva and practical test	
8	Computer Security Introduction Hardware security/Software security Security Threats Malicious Codes Security Mechanism Antivirus Software	6	Explanation and Discussion	References books	Homeworks, Unit test and Viva	
	Revision	10	Discussion	Questions collection	viva	
		52				

For Practical exam

Time: 1hrs

F.M =25

P.M=10

S.No	Group/Area	Topic	No of questions	Marks
1	Ms-access (10 marks)	Structure of Table and Data entry	1+1	2+2
		Query	1+1+1	2+2+2
		form/report	1+1	3+2
2	Qbasic (15 marks)	Sub/Function... End Sub/Function	1+1	5X2
		Total	9	25

SYLLABUS: 2080
Pre-Qualifying Examination

Opt II Computer

Class: 10

S.No	Topics	Per iods	Teaching Methods	Teaching Materials	Evaluation Techniques & Tools	Rema rks
9	Qbasic Sequential File Handling Classification of Files File modes Creation of Sequential File in Output and Append mode, read data from file, add to the file, delete unnecessary records, use of input mode.	18	Explanation discussion and practical lab	References books and Computer System	Home work ,Unit Test and Viva	
10	Programming in C Introduction Features /Structure of C program C tokens/Keywords in C language Data types in C Statements-simple and compound statements Operators and Expressions Input/output functions	8	Explanation discussion and practical lab	References books and Computer System	Home work , Unit Test and Viva	
11	Control Structures In C Programming Introduction Sequence Decision looping	12	Explanation discussion and practical lab	References books and Computer System	Home work , Unit Test and Viva and presentation	
12	Project work Guidance (algorithm, flowchart, coding, processing and control module) Menu base, modular concept ,data organization in file and manipulate as per need ,cover page, preface, table of contents, theoretical aspects of the project, objectives, design the system and module, write the code, testing and debugging, get the output and write the conclusion	5	Discussion and Practical lab	Computer System	Viva , Presentation practical test	
	Revision	5	question collection + Student Question	VIVA	Presentation , VIVA	
		48				

For Practical exam

Time: 1hrs

F.M =25

P.M=10

S.No	Group/Area	Topic	No of questions	Marks
1	Qbasic (10 marks)	SUB /FUNCTION... END SUB/ FUNCTION	1+1+1	2+2+2
		File handling	1+1	2+2
2	C-programming (10 marks)	IF..Else Statement	1+1	2+2
		Looping Statements	1+1+1	2+2+2
3	Ms-Access (5 marks)	Structure of table and data entry	1	3
		Form/Report/Query	1	2
		Total	12	25