

CYBER LAW

Paper : 6-2-2

Full Marks : 80

Time : Three hours

The figures in the margin indicate full marks for the questions.

PART-A

Answer **any five** questions from the following :
1×5=5

1. What do you mean by Internet ?
2. What do you mean by Networking ?
3. What is Cyber Space ?
4. What do you mean by Computer Related Crime ?
5. What does C R A T stands for ?
6. What does L P O stands for ?

PART-B

Answer **any five** questions from the following :
2×5=10

7. What do you mean by online resources ?
8. What do you mean by Information Technology ?
9. What is cyber defamation ?
10. What is Spoofing ?
11. What is Sniffing ?
12. What is e-taxation ?

PART-C

13. Write short notes on **any five** from the following :
5×5=25

- (a) Cyber Security
- (b) Hacking and Cracking
- (c) Malicious Programs

(d) e-governance

(e) The Cyber Regulation Appellate Tribunal

(f) Legal Software

(g) Scope of Cyber Law in e-commerce.

PART-D

Answer **any five** questions from the following :
8×5=40

14. Explain the language of Cyber Space. What is the procedure for legal enactments of Cyber Laws ?
3+5=8
15. Write briefly about the objectives and salient features of the Information Technology Act, 2000.
4+4=8
16. What is Digital Signature ? How is it implemented in a Digital Certificate ? What is the difference between Digital and Electronic Signature ?
4+2+2=8
17. Discuss about the various cyber offences and their contraventions under the Information Technology Act, 2000.
8

18. Write a descriptive note on the "Freedom of Expression in Cyberspace."
8

19. Write an elaboratory note on 'Global Efforts on Electronic Communication and Protection'.
8

20. Elucidate the term 'Cyber Terrorism'. Discuss about the global trends in Cyber Law.
4+4=8

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44(3) COAR 3-2

2018

**COMPUTER ORGANIZATION
AND ARCHITECTURE**

Paper : 3-2

Full Marks : 80

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Answer very briefly: (*any ten*) 2×10=20
- (a) What do you mean by 'Computer Organization' and 'Computer Architecture'?
 - (b) Write *any two* differences between SRAM and DRAM.
 - (c) What is the need of Status register?
 - (d) Define Flash memory with example?
 - (e) What is Semiconductor Memory?
 - (f) What do you mean by 'Cache hit' and 'Cache miss'?

Contd.

- (g) Name the *three* functional groups of bus interconnection structure.
- (h) Define — Inter-register Transfer and Register Transfer Language.
- (i) What is Accumulator?
- (j) What is 'Program Counter'?
- (k) Write *any two* differences between PROM & EPROM.

2. Answer *any five* : 6×5=30
- (a) Explain the requirements of Stack and Subroutine.
 - (b) What is meant by Microoperations? Give brief introduction to *four* different types of microoperations.
 - (c) What do you mean by addressing mode? Why the addressing mode is used in the computers? Give *any two* valid reasons.
 - (d) Draw the block diagram of a complete processor depicting the Processor Organization.
 - (e) Explain the Microprogrammed Control Unit with the help of a block diagram.

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- (f) Briefly explain one-address, two-address and three-address instruction format.

3. Answer *any three* : 10×3=30
- (a) Explain different functional units of a Computer with proper diagram.
 - (b) Discuss *any two* schemes used to handle interrupts from multiple sources.
 - (c) Draw the logic diagram of Arithmetic Circuit with its function table.
 - (d) What is DMA? What is Cycle Stealing in DMA? Explain different signals associated with DMA Controller.

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800

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44 (6) EI 6·2 (N)

2018

MOBILE APPLICATIONS

Paper : 6·2·1

Full Marks : 50

Time : Two hours

The figures in the margin indicate full marks for the questions.

Answer **any five** questions.

1. A structure of database table is given bellow :
[assume appropriate data type]

Roll no

Name

Fees

Write code to design a data entry form to store the data into a table while clicking into the submit button on the form (use mobile application). 10

2. Explain the architecture of Android operating system. 10
3. Explain Android application life cycle. 10
4. (a) Design a mobile application that read an audio file and play it. 5
(b) Explain the working of Linux kernel. 5
5. (a) What is Activity? Explain the activity life cycle. 5
(b) Design a mobile application for creating simple calculator. 5
6. Write short notes : (**any two**) 2×5=10
(a) SDK overview
(b) Android menu system
(c) HTML5
(d) Media APIs.

Contd.

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44 (Sem-3) OOPR 3-4

2018

**OBJECT ORIENTED PROGRAMMING
IN C++**

Paper : 3-4

Full Marks : 80

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

Answer **any five** questions.

1. Define the following terms with examples :
4×4=16
- i) Polymorphism
 - ii) Encapsulation
 - iii) Multilevel Inheritance
 - iv) Inline function.
2. i) Differences between object oriented and
procedure oriented programming. 4

Contd.

ii) What is function ? How can you define
member function inside and outside
class ? Write a program in C++ to
illustrate the concept of friend function.
1+4+7=12

3. i) What do mean by this pointer ? Give
one example. 4

ii) Write a program to create a class
product which store information such
as product_id, product_name, and
price. Write member functions for
creating and displaying the values of
various classes and objects. 10

iii) What is a virtual base class ? 2

4. i) What do you mean by function
overloading ? How can you declare and
define overloaded function ? Explain
with a program in C++. 9

ii) Write a C++ program to swap two
numbers using call by value and call
by reference. 7

5. i) Is there any difference between private
and protected inheritance ? Explain
with suitable examples. 10

ii) Explain the concept of dynamic binding.
6

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6. i) What do mean by abstract class ? 2

ii) Write a C++ program to implement
single inheritance with public access
specific. 7

iii) Write a program to demonstrate use of
static data member and static member
function. 7

7. i) What is template ? Briefly explain with
one example. 5

ii) Explain various file operations in C++
with suitable examples. 8

iii) What is the need of virtual function ?
3

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2018

WEB TECHNOLOGY

(Old Course)

Paper : 6.2

Full Marks : 80

Time : Three hours

The figures in the margin indicate full marks for the questions.

PART-A

Answer **any five** questions from the following :
1×5=5

1. What does WWW stands for ?
2. What does CGI stands for ?
3. What is DTD ?
4. What is Internet ?
5. What is an URL ?
6. What is FTP ?

PART-B

Answer **any five** questions from the following :
2×5=10

7. What do you mean by Web Technology ?
8. What is Domain Name System (DNS) ?
9. What is a Web Browser ?
10. What is a Proxy Server ?
11. What is HTML ?
12. What do you mean by a Firewall ?

PART-C

13. Write short notes on **any five** from the following :
5×5=25

- (a) TCP/IP
- (b) Services of Internet
- (c) Advantages of Scripting Languages
- (d) IP Addresses and its working
- (e) Web Server Security

(f) XML

(g) ASP and PHP

(h) Website and Website administration.

PART-D

Answer **any five** questions from the following :
8×5=40

14. What is JavaScript ? What are the various kinds of function in JavaScript ? Mention about the key usage and features of JavaScript. 2+3+3=8
15. What is VBScript ? Mention the benefits of VBScript. Discuss about VBScript variables and operations. 2+2+4=8
16. Discuss about hyperlinks, multimedia, DHTML and DTD. 2+2+2+2=8
17. Explain the types of internet connection — dial-up, Broadband, VSAT and WiFi. 2+2+2+2=8
18. Explain the roles of JDBC and ODBC in linking database to the web. 4+4=8

19. Write brief notes on : 2½+2½+3=8
COM, DCOM and CORBA.
20. How interactive document can be created using JavaScript ? What are the advantages of creating dynamic page ? 5+3=8