

Reg. No.

--	--	--	--	--	--	--	--	--	--



BCACACN 303

**Third Semester B.C.A. Degree Examination, February/March 2023
(NEP – 2020)
(2022 – 23 Batch Onwards)
COMPUTER COMMUNICATION AND NETWORKS (DSCC)**

Time : 2 Hours

Max. Marks : 60

Note : Answer any six questions from Part – A and any one full question from each Unit in Part – B.

PART – A

1. a) Define computer network. (6×2=12)
- b) What is unicasting and broadcasting ?
- c) What is meant by guided media ?
- d) What is digital modulation ?
- e) What is multicast routing ?
- f) What is meant by subnetting and subnets ?
- g) List the two main protocol in transport layer.
- h) Expand SMTP, MIME.

PART – B

Unit – I

2. a) Explain in brief different layers of OSI reference model.
- b) Differentiate connection oriented and connectionless service. (6+6)
3. a) Explain in brief different layers of TCP/IP reference model.
- b) Write a note on the following (i) Mobile users (ii) Social issues. (6+6)

P.T.O.



Unit – II

- 4. a) Write a note on (i) Coaxial cable (ii) Fiber optics.
- b) Explain the different types of switching techniques. **(6+6)**
- 5. a) With a neat diagram explain Time Division Multiplexing.
- b) Explain any two popular techniques for error detection. **(6+6)**

Unit – III

- 6. a) Explain store and forward packet switching.
- b) With a neat diagram explain the format of IP version 6 protocol. **(6+6)**
- 7. a) What is congestion ? List and explain the approaches to congestion control.
- b) With a neat diagram explain classful addressing.
- c) Explain the types of OSPF messages. **(4+4+4)**

Unit – IV

- 8. a) List and explain the built-in HTTP request methods.
 - b) Write a short note on Domain Name system.
 - c) Explain the process of TCP Sliding window. **(4+4+4)**
 - 9. a) With a neat diagram explain the architecture of Email system.
 - b) Explain the technique of Remote Procedure Call. **(6+6)**
-

Reg. No.

--	--	--	--	--	--	--	--	--	--



BCAENLN 301

**III Semester B.C.A. Degree Examination, February/March 2023
(2022-23 Batch Onwards) (NEP 2020)**

ENGLISH

**L2 – Generic English
(Ability Enhancement Compulsory Course)**

Time : 2 Hours

Max. Marks : 60

**UNIT – I
(Play) (30 Marks)**

I. Answer **any one** of the following in about **300** words : **(1×20=20)**

- 1) '*Tara* is predominantly a play about gender discrimination and about the attitude of some Indian parents.' Elaborate.
- 2) Analyze the character of Bharati.
- 3) Attempt a detailed character sketch of Tara.

II. Answer **any two** of the following in about **100** words **each** : **(2×5=10)**

- 1) Write a note on Patel's dreams regarding Chandan's future.
- 2) Significance of Dr. Thakkar's presence in the play, *Tara*.
- 3) The interplay of 'completeness' and 'incompleteness' in the play.
- 4) Prema, Nalini and Roopa's treatment of Chandan and Tara as 'freaks.'

**UNIT – II
(Writing Skills) (30 Marks)**

III. Answer **any one** of the following in a paragraph of about **200** words : **(10×1=10)**

- 1) Write a paragraph describing the most important person in your life.
- 2) Write an argumentative paragraph on 'College education does not make students employable'.
- 3) Write a paragraph comparing school life with college life.

P.T.O.



IV. Answer **any one** of the following :

(10×1=10)

- 1) You placed an order for a mobile phone through an online shopping App but received a bar of soap instead. Write a letter of complaint to the customer care of the online shopping app expressing your grievance and demanding action.
- 2) Write a Job application along with C.V. for the post of Computer Operator at Raghu Computers, H R Complex, Hampankatta, Mangalore-575001. Your name and address will be Aman Sharma, Akshaya Compound, Kudroli, Mangalore-575003.
- 3) You are planning to go on a holiday to Kerala with your family. Write a letter of enquiry to a travel agency asking them about the different travel packages, accommodation, food and the total cost of the trip.

V. Answer **any one** of the following :

(1×10=10)

- 1) Bharathi Education Society is starting a new college. Draft an advertisement within a frame, with a logo, slogan and USP.
 - 2) Create a product manual for a laptop. List its distinct features.
 - 3) Design a brochure for a new computer showroom in your locality.
-

Reg. No.

--	--	--	--	--	--	--	--	--	--

BCAOSSN 301

**Third Semester B.C.A. Degree Examination, February/March 2023
(NEP-2020)**

(2022-2023 Batch Onwards)

OPEN SOURCE TOOLS

(Skill Enhancement Course)

Time : 2 Hours

Max. Marks : 30

Note : Answer *all* questions from Part – A and *any one full* question from *each* Module of Part – B.

PART – A

(12×1=12)

1. a) What is open source ?
- b) Mention any two rights of open source software.
- c) Give two examples for free software.
- d) What is public domain ?
- e) List the four participants in OSS development projects.
- f) Write any two tools used for open source development.
- g) What is License ?
- h) What is Copy left ?
- i) List any four free software license provider.
- j) What is Mozilla Firefox ?
- k) Expand GCC and FSF.
- l) Write any two features of Open Office.

P.T.O.



PART – B

Module – 1

2. a) Explain any three criteria of “distribution terms” of open source software.
b) Write a note on BSD. (3+3)
3. a) Write the differences between proprietary and open source licensing model.
b) Explain any three free software license providers. (3+3)

Module – 2

4. a) Write a note on software engineering methodology.
b) What is Copyright ? Explain. (3+3)
5. a) Write a note on open source software development.
b) Define Patent. Write a note on it. (3+3)

Module – 3

6. a) Write a note on history and features of Apache.
b) How Wikipedia works ? Explain. (3+3)
 7. a) What is Joomla ? Explain.
b) What are the components of open office ? Explain. (3+3)
-

Reg. No.

--	--	--	--	--	--	--	--	--	--



BCACACN 302

**Third Semester B.C.A. Degree Examination, February/March 2023
(NEP – 2020)**

**(2022 – 23 Batch Onwards)
C# AND DOT NET FRAMEWORK
(DSCC)**

Time : 2 Hours

Max. Marks : 60

Note : Answer any six questions from Part – A and any one full question from each unit in Part – B.

PART – A

(6×2=12)

1. a) What are paired and unpaired tags ?
- b) What are out parameters in C# methods ?
- c) Differentiate constant and readonly members of C# classes.
- d) List any four tools in tool box.
- e) Write the VB Code to create TextBox at run time.
- f) Write the purpose of Value and Step properties of ProgressBar.
- g) What is DataReader ?
- h) Write any two TextMode property values of Web TextBox control with their purpose.

PART – B

Unit – I

2. a) Explain any four formatting tags with example.
- b) Explain the purpose of remove(), replace(), equals(), split() methods of string class in C#.
- c) Explain Boxing and Unboxing in C#. **(4+4+4)**
3. a) Explain any two HTML Lists with example.
- b) List the advantages and disadvantages of client-side scripts.
- c) What are Parameter arrays in C# ? Explain with example. **(4+4+4)**

P.T.O.



Unit – II

- 4. a) With syntax and example how a class is defined in C# ?
b) Explain Solution Explorer and Server Explorer of VB .NET IDE.
c) Explain static and private constructors in C#. **(4+4+4)**
- 5. a) Explain multilevel inheritance with an example.
b) Explain Properties Window and Component Tray VB .NET IDE.
c) With example explain how to define operator overloading in C#. **(4+4+4)**

Unit – III

- 6. a) With syntax explain Select Case statement.
b) Explain WindowState, Text, ControlBox, Enable properties of Windows Form.
c) Explain ScrollBar Control with its unique properties. **(4+4+4)**
- 7. a) With syntax and example explain For Each loop in VB .NET.
b) Explain PasswordChar, MaxLength, ReadOnly, TextAlign properties of TextBox control.
c) Explain Insert, RemoveAt, Count, AddRange methods of ListBox Control. **(4+4+4)**

Unit – IV

- 8. a) Explain any four ADO .NET objects.
b) Explain Compare Validator Control.
c) Explain any four methods of GridView Control. **(4+4+4)**
 - 9. a) Explain any two navigation in Datasets.
b) Explain any four public properties of web Button control.
c) Explain ValidationSummary Control with its unique properties. **(4+4+4)**
-