

(A)

PURBANCHAL UNIVERSITY

2008

Bachelor of Technology in Biotechnology / First Semester / Final

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

Computer Foundation

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A: Long-answer Questions

Answer THREE questions.

3×10=30

1. Write and explain the important characteristics and applications of computer system.
2. Define Operating System. Explain the main functions of the operating system.
3. What is computer network? Explain the types of transmission media.
4. Explain the types of computer's memory available in the computer system.

Group B: Short-answer Questions

Answer FOUR questions.

4×5=20

1. What are the different number systems? Convert $(125)_{10} = (?)_{16}$.
2. Write down the features of High Level languages.
3. What is topology of network? Explain STAR topology with neat diagram.
4. What are computer generations? List out the features of the third generation of the computer.
5. Explain the terms bridge, router, and repeater in terms of computer network.
6. Define language translator. Differentiate between compiler and interpreter.

Contd. ...

(2)

Group C: Very Short-answer Questions

5×2=10

Answer FIVE questions.

- ✓ 11. Write down any four advantages of computer networks.
- ✓ 12. Explain Ring topology of the computer network.
- ✓ 13. Write any five examples of utility software.
- ✓ 14. What are the limitations of MS-DOS?
- ✓ 15. Define system and application software.
16. Define DDL and DML.
17. How is client-server network different from peer to peer to network?

2020/2/19/c

PURBANCHAL UNIVERSITY

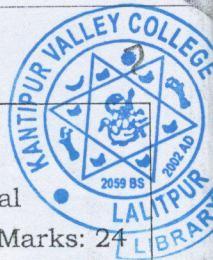
2012

Bachelor of Technology in Biotechnology / First Semester / Final

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

Computer Foundation



Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A:

Answer THREE questions.

3×10=30

1. What is printer? Differentiate between compiler and interpreter. Also explain assembler and monitor. 1.5+5+3.5
2. What is DBMS? Explain data model and its type. 2+8
3. What is Hybrid Computer? Explain the different generations of computer. 2+8
4. What is computer network? Explain the different types of network devices. 2+8

Group B:

Answer FOUR questions.

4×5=20

5. Differentiate between RAM and ROM.
6. Describe star, ring and bus topologies of computer networking.
7. Explain E-R Diagram. Create an E-R diagram of Banking System.
8. Differentiate between Analog and Digital Computer.
9. Subtract $(437)_{10}$ from $(652)_{10}$ by using
 - (a) 9's complement
 - (b) 2's complement by converting it into binary number.
10. Describe the different levels (generation) of programming languages.

17
Contd. ...

(2)

Group C:

Answer FIVE questions.

5×2=10

11. What is DOS?
12. What is Mainframe Computer?
13. What is secondary memory?
14. Convert $(EDB)_{16}$ to base 8 and base 2 number system.
15. Describe LAN and WAN of computer network.
16. What is Super-Computer?
17. What is Impact printer?
18. Describe operating system

≡

18

2070/3/17 03-D

4

PURBANCHAL UNIVERSITY

2013

Bachelor of Technology in Biotechnology / First Semester / Final

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

BT170CO; Computer Foundation

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A

Answer THREE questions.

3×10=30

1. What is DBMS? Write its advantages. Explain data model and its type. 1+2+1+6
2. What is Computer? Explain its characteristics. Differentiate between analog and digital computer? 1+5+4
3. Explain the major functions of operating system. Discuss multi programming OS and multi-processor OS. 6+4
4. What is computer network? Explain the different types of topologies with their diagram. 2+8

Group B

Answer FOUR questions.

4×5=20

5. Describe about switch, hub and bridge.
6. Differentiate between RAM and ROM.
7. Explain E-R Diagram. Create an E-R diagram of banking system.
8. Explain 4th and 5th generations of computer.
9. Subtract $(432)_{10}$ from $(876)_{10}$ by using
(a) 9's complement
(b) 2's complement by converting it into binary numbers.
10. What is Super Computer? Describe LAN and WAN of computer network.

Contd. ...

(2)

Group C

Answer FIVE questions.

5×2=10

11. What is DOS?
12. What is Mainframe computer?
13. What is secondary memory?
14. Convert $(EDB)_{16}$ to base 8 and base 2 number system.
15. What is Cache memory?
16. Describe CRT monitor.
17. Describe interpreter.
18. Database

≡

PURBANCHAL UNIVERSITY

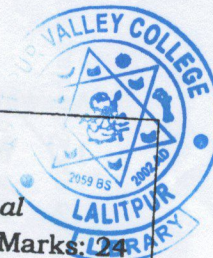
2015

Bachelor of Technology in Biotechnology / First Semester / Final

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

BT170CO: Computer Foundation (New Course)



Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A

Answer THREE questions.

3×10=30

1. What is DBMS and data model? Explain briefly the method of designing database. Explain data redundancy with example. 1+1+6+2
2. What is operating system? Explain major function of Operating systems. Explain UNIX and LINUX operating system. 1+5+2+2
3. Explain briefly the architecture of digital computer with diagram. 10
4. Why do need computer network? Explain briefly different types of computer network. List the internetworking devices. 1+8+1

Group B

Answer FOUR questions.

4×5=20

5. Discuss about switch, hub, and router.
6. Differentiate between primary and secondary memory of digital computer.
7. What do you mean by E-R diagram? Create an E-R diagram of your college.
8. What is software? Explain different types of software.
9. Explain 2nd and 3rd generation computers.
10. Subtract 379_{10} from 285_{10} by using.
(a) 2's complement (b) 10's complement

Contd. ...

(2)

Group C

5×2=10

Answer FIVE questions.

- ✓ 11. What are data and information?
- ✓ 12. Explain Hybrid computer.
13. How do we convert binary system to Hexadecimal system?
- ✓ 14. Differentiate between impact and non-impact printer.
- ✓ 15. What is high level language? Why is it popular?
- ✓ 16. Explain network topology.
17. Explain CRT monitor.

≡

3842625524

PURBANCHAL UNIVERSITY

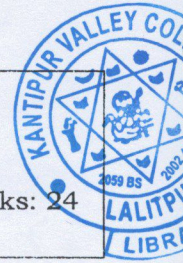
2016

Bachelor of Technology in Biotechnology/First Semester/Final

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

BT170CO: Computer Foundation (New Course)



Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A

Answer THREE questions.

3×10=30

1. Differentiate between computing and computer. Explain the anatomy of the computer system with individual components with neat and clean diagram. 2+8
2. Differentiate between Database and DBMS. Explain in detail about the Rational Database model with support of E-R Diagram. 3+7
3. Why operating system is important for the computer system? Explain in details with its functions. Brief about the type of operating system. 2+3+5
4. What do you mean by computer network? Discuss the type of computer network topology. 1+4+5

Group B

Answer FOUR questions.

4×5=20

5. Differentiate between the generations of the computer with key characteristics. 5
6. What is hardcopy output? Differentiate between the impact and non impact printer. 5
7. Define computer software? Explain the types of computer software. 5
8. Why memory management system is important to the computer system. Brief about RAM and ROM. 5

Program

Contd

(2)

9. What are devices used in network. Compare between the network cables. 5
10. Explain briefly about application and utility software. 2.5+2.5

Group C

Answer FIVE questions.

5×2=10

11. Differentiate between digital and analog computer?
12. Define magnetic disk.
13. Define flowchart and algorithm
14. Define word-processing and spread sheet.
15. Change the following:
(a) $(248)_{10}$ to $()_2$ (b) $(ABF)_{16}$ to $()_2$
16. Change the following:
(a) $(1100110)_2$ to $()_8$ (b) $(C12)_{16}$ to $()_8$
- 17(a) Add (11000110) and (100111) .
(b) Subtract 110010 from 11001 using Complements

≡

PURBANCHAL UNIVERSITY

2018

Bachelor of Technology in Biotechnology/First Semester/*Final*

Time: 03:00 hrs.

Full Marks: 60 / Pass Marks: 24

BT170CO: Computer Foundation (*New Course*)

Candidates are required to give their answers in their own words as far as practicable.

Figures in the margin indicate full marks.

Group A

Answer THREE questions.

3×10=30

1. Differentiate between computing and computer. Compare between data and information. Explain in details about the internal structure of the computer system. 2+2+6
2. Define database and DBMS. Explain, in details different models of database. 2+8
3. Why operating is important for the computer system? Explain in details with its functions. Write briefly on multiprocessing, multiprogramming and time sharing. 2+3+5
4. Define computer network and discuss about its importance? Discuss the type of computer network. Explain the details about the network topology. 2+4+4

Group B

Answer FOUR questions.

4×5=20

5. Explain the different types of computer. 5
6. What is hardcopy output and softcopy output? Differentiate between the impact and non impact printer. 2+3
7. Define computer software? Explain the types of computer software. 2+3
8. Why memory management system is important to the computer system. Discuss briefly about RAM and ROM and cache memory. 2+3
9. Discuss about the types of network cable used in networking. 5

Contd. ...

(2)

Group C

Answer FIVE questions.

5×2=10

- ✓ 10. Differentiate between the key features of 1st and 2nd generation of computer.
11. Differentiate between high level language and low level language.
12. Define word-processing, spread sheet and DOS.
- ✓ 13. Define secondary storage device with example.
- ✓ 14. Define E-R diagram with suitable example
15. Change the following:
✓ (a) $(209)_{10}$ to $()_2$ (b) $(B24)_{16}$ to $()_8$ (c) $(1100110)_2$ to $()_{16}$
- ✓ 16. Subtract $(125)_{10}$ from $(92)_{10}$ using 2's complement and 10's complement.

≡