



(Pages : 3)

D – 3296

Reg. No. :

Name :

Third Semester B.C.A./B.Sc. Degree Examination, December 2017
Career Related FDP Under CBCSS
(Computer Science/Computer Applications/Physics and Computer
Applications)
Core Course : CP 1342/CS 1343/PC 1371 : OPERATING SYSTEMS
(2014 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A (Very Short Answer Type) (10×1=10 Marks)

(One word to maximum of one sentences. Answer all questions)

1. Define Bootstrap Program.
2. Expand SCSI.
3. Write an example for Multi-Task Operating System.
4. What is the use of fork ?
5. What is dynamic linking ?
6. Define fragmentation.
7. Write the simple file allocation method.
8. What is DMA ?
9. Define compaction.
10. Define latency.

P.T.O.



SECTION – B (Short Answer Type)

(8×2=16 Marks)

(Not to exceed **one** paragraph, answer **any eight** questions. **Each** question carries **two** marks.)

11. What is Operating System ?
12. What is a process ?
13. What is the use of Scheduler ?
14. What is Context Switch ?
15. What is partition ?
16. What is page table ?
17. What are the two types of file access methods ?
18. Write the file allocation methods.
19. What is hash table ?
20. What is cache ?
21. Define seek time.
22. What are the two types of file access methods ?

SECTION – C (Short Essay)

(6×4=24 Marks)

(Not to exceed **120** words, answer **any six** questions. **Each** question carries **four** marks.)

23. Differentiate Batch and time sharing system.
24. What are the system call categories ?
25. Write a note on Thread.



26. What are the scheduling criterias ?
27. What are the services of operating system ?
28. Draw a process state diagram and brief.
29. Brief about the process control block.
30. Write a note on Semaphore.
31. Describe the Resource allocation graph.

SECTION – D(Long Essay)

(2×15=30 Marks)

(Answer **any two** questions. **Each** question carries **15** marks)

32. Explain the scheduling algorithms.
 33. Discuss about the various memory allocation methods.
 34. Explain about page replacement algorithm.
 35. Describe the different Disk scheduling methods in detail.
-

BCA



(Pages : 3)

D – 3300

Reg. No. :

Name :

Third Semester B.C.A. Degree Examination, December 2017
Career Related FDP Under CBCSS
Group 2(b) : Computer Applications
CP 1341 : COMPUTER NETWORKS
(2014 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

PART – A

Answer **all** questions. **Each** carries **one** mark.

10

1. Give an example of Half-duplex mode of data flow.
2. What type of switching mechanism used in internet ?
3. Which Transmission media used for high speed data communication ?
4. What is the Shannon's capacity formula ?
5. Which error detection method involves polynomials ?
6. What is LLC ?
7. Which layer in OSI model use bridges ?
8. What is the maximum throughput in pure ALOHA protocol ?
9. What is the address size of IPV6 ?
10. Which protocol used in email applications ?

PART – B

Answer **any eight** questions. **Each** carries **two** marks.

16

11. Explain the different type of data flow in communication with an example.
12. Write the advantage and disadvantages of fiber optic cable.

P.T.O.



13. Write short notes on satellite communication.
14. Explain the bit oriented type of framing techniques.
15. Explain the functions of data link layer.
16. Explain the term piggybacking.
17. How does slotted ALOHA improve the performance of the system over pure ALOHA ?
18. Write short notes on router.
19. Explain the functions of Token bus.
20. Explain the functions of adaptive and non-adaptive routing.
21. Explain the fragmentation technique.
22. Explain the two type of congestion handling methods.

PART – C

Answer **any six** questions. **Each** carries **four** marks.

24

23. Explain point to point and multipoint connection in detail.
24. Explain the different type of data transmission used in wireless mode.
25. Find the CRC for the data polynomial $x^4 + x^2 + x + 1$ where generator polynomial $x^3 + 1$.
26. Compare TCP/IP and OSI model.
27. Explain the functions of stop and wait protocol.
28. Explain the functions of slotted ALOHA and derive the maximum throughput.



- 29. Explain the different type of Ethernet.
- 30. Write short notes on leaky bucket algorithm.
- 31. Explain domain name system in detail.

PART - D

Answer **any two** questions. **Each** carries **fifteen** marks.

30

- 32. Explain the OSI reference model in detail with functions of each layer.
 - 33. Explain the IPV4 Header format in detail.
 - 34. Explain the distance vector routing mechanism.
 - 35. Explain the functions of two type of sliding window ARQ with different case.
-



(Pages : 3)

BUT
2014 Imp 1/11
D - 3302

Reg. No. :

Name :

Third Semester B.C.A. Degree Examination, December 2017
Career Related FDP Under CBCSS
Group 2(b) : COMPUTER APPLICATIONS
Core Course CP 1344
Programming in Java
(2014 Admission Onwards)

Time : 3 Hours

Total Marks : 80

SECTION – A

(Very short answer type) (**One** word to maximum of **one** sentences.
Answer **all** questions.)

(10x1=10 Marks)

1. What is the purpose of this keyword ?
2. Expand AWT.
3. Write the syntax of do while loop.
4. What is the use of finally statement.
5. How to declare constants in Java ?
6. What is the size of a double variable in Java ?
7. Which is the method to override when we implement ActionListener interface ?
8. What is a swing ?
9. What is JDBC ?
10. What is the last method to get executed during the life cycle of an Applet.



SECTION – B

(Short Answer) (Not to exceed **one** paragraph, answer **any eight** questions.

Each question carries **two** marks).

(8×2=16 Marks)

11. Define overloaded constructor.
12. Explain Applet tag.
13. Write a note on built-in streams in Java.
14. Explain Automatic type conversion.
15. Why Java programs are secured ?
16. What is an Interface ?
17. What is the purpose of `repaint()` in AWT ?
18. Explain the purpose of statement class in JDBC.
19. Write a simple Applet to write a message.
20. Write a note on ByteStream.
21. Explain the `drawstring()` function in Graphics class.
22. What is the significance of super keyword.

SECTION – C

(Short Essay) (Not to exceed **120** words, answer **any six** questions. **Each** question carries **four** marks.)

(6×4=24 Marks)

23. Write a note on IO package.
24. Explain nested try statements in Java.
25. Explain the various integer data types available in Java.
26. Explain packages in Java.



27. What are Strings ? Explain any 4 string handling function in Java.
28. Explain the steps to create a thread using runnable interface.
29. Write a note on java.applet package.
30. Write a Frame program to implement ItemListener.
31. Explain different Layout Managers.

SECTION – D

(Long Essay) (Answer **any two** questions. **Each** question carries **15** marks.)

(2×15=30 Marks)

32. Differentiate between overloading and overriding.
 33. Explain features of Java programming.
 34. Explain with an example how to write database application in Java.
 35. Explain different control structures in Java.
-