Reg. No. : ....

Name : ....

Third Semester B.C.A./B.Sc. Degree Examination, December 2016
Career Related FDP Under CBCSS
CP1342/CS1343/PC1371 : OPERATING SYSTEMS
(2014 Admission Onwards)

Time : 3 Hours   Max. Marks : 80

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

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

1. What is Volatile storage device ?

2. What is Program Counter ?

3. What is PCB ?

4. What is static linking ?

5. What is Physical address ?

6. What is Virtual memory ?

7. What is port ?

8. What is DMA ?

9. Define FAT.

10. Define Compaction.

SECTION – B   (8×2=16 Marks)
(Short Answer Type)

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

11. What is a process ?

12. What is the use of System call ?

13. What is the use of Scheduler ?

14. What is an Interrupt and IVT ?

15. How to create a new process in Unix ?

16. Define Deadlock.

17. Why page replacement is required ?

18. What are the two types of file access methods ?

19. Why page replacement is required ?

20. What are the two types of file access methods ?

21. Define Compaction.

22. What is spooling ?

SECTION – C   **(6×4=24 Marks)**
(Short Essay)

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

23. Differentiate Batch and time sharing system.

24. Write a note on Thread.

25. What are the scheduling criterias ?

26. Brief about Deadlock characterization.

27. Draw a process state diagram in brief.

28. Brief about the process control block.

29. Describe the Round Robin method of scheduling algorithm.

30. Describe the Resource allocation graph.

31. What is swapping ? Brief.

SECTION – D   **(2×15=30 Marks)**
(Long Essay)

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

32. Explain the deadlock avoidance algorithm.

33. Explain about Paging.

34. Discuss about the various Directory structure schemes.

35. Describe the different types of Disk scheduling strategies.

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Third Semester B.C.A. Degree Examination, December 2016
Career Related FDP under CBCSS
Group 2(b)-CP 1341 : COMPUTER NETWORKS
(2014 Admission Onwards)

Time : 3 Hours   Max. Marks : 80

PART – A

Answer all questions, each carries one mark :   **10**

1. In which type of connection more than two devices can share a single link ?

2. What is the unit of bit rate ?

3. What is Modem ?

4. Which type of network is designed to extend over an entire city ?

5. What is HDLC protocol ?

6. What is flow control ?

7. Which layer in OSI model use switches ?

8. What is the maximum throughput in slotted ALOHA protocol ?

9. Name the two types of congestion control algorithm.

10. TCP and UDP protocol belongs to which layer ?

PART – B

Answer **any eight** questions, **each** carries **two** marks : 16

11. What is the advantages of computer network ?

12. Compare optical fiber and copper wire and which one has more advantages than others ?

13. Explain the term bit rate and baud rate. The bit rate of a signal is 3000. If each signal unit carries 6 bit. What is the baud rate ?

14. Explain the functions of data link layer.

15. Give example where pipe lining can be applied in data communication.

16. Explain the byte oriented type of framing.

17. What are the different types of random access protocol ?

18. Explain the term hub and switch.

19. Explain the functions of token ring.

20. Explain the two types of congestion handling methods.

21. Explain the functions of routing and their classification.

22. Write short notes on file transfer protocol.

PART – C

Answer **any six** questions, **each** carries **four** marks : 24

23. Explain the different types of data transmission used in wire mode.

24. Explain LAN, MAN, WAN and compare these three.

25. Compare TCP/IP and OSI model.

26. Explain the different types of standard organisation used in data communication.

27. Explain the checksum method of error detection in detail.

28. Explain the different types of CSMA techniques in detail.

29. Explain the different types of Ethernet.

30. Compare congestion control and flow control.

31. Write short notes on DNS.

PART – D

Answer **any two** questions, **each** carries **fifteen** marks :   **30**

32. Explain the TCP/IP model in detail with functions of each layer.

33. Explain the different types of ALOHA protocol and derive its maximum throughput.

34. Explain the link state routing mechanism in detail.

35. Explain CRC code. Find the CRC for the data polynomial $x^4 + x^2 + x + 1$ where generator polynomial is $x^3 + 1$.

(Pages : 3)

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Reg. No. : ....

Name : ....

Third Semester B.C.A. Degree Examination, December 2016
(Career Related FDP Under CBCSS)
CP 1344 : PROGRAMMING IN JAVA
(2013 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A
(Very Short Answer Type)

One word to maximum of **one** sentence, Answer **all** questions.   **(10×1=10 Marks)**

1. Which company developed the Java programming language ?

2. What kind of files contain Java Source Code ?

3. Expand JVM.

4. What does "Portable" mean in the context of Computer Programming ?

5. What kind of files contain Java Bytecode ?

6. What is an Exception ?

7. Expand AWT.

8. What is HTML tag ?

9. What is Java Beans ?

10. What is JDBC ?

SECTION – B
(Short Answer)

Not to exceed **one** paragraph, answer **any eight** questions. **Each** question carries
two marks.   **(8×2=16 Marks)**

11. What is Bytecode ?

12. What is Java API ?

P.T.O.

13. What does "case sensitive" means ?

14. What is Integer Overflow ?

15. What substring is returned by the call alphabet.substring (6, 10) ?

16. What is "Composition of Methods" ?

17. What is the difference between overriding and overloading ?

18. What is Window ?

19. What is Multithreading ?

20. How does the Applet init() method invoked ?

21. What is an Applet Viewer ?

22. Write any two difference between XML and HTML.

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 Java program to illustrates how the values of integer variables can be changed with increment and decrement operators and illustrate the use of assignment operators.

24. Explain the structure of a Java program.

25. Explain the different types of inheritance used in Java.

26. What is the difference between abstract classes and interface ?

27. Write a Java program that creates a frame that contains a Button Component.

28. What is meant by controls ? What are the different type of controls in AWT ?

29. Explain with example 'an integer divided by zero condition at runtime'.

30. Explain file handling in Java.

31. Explain the order of Applet initialization.

SECTION – D

(Long essay)

Answer **any two** questions. **Each** question carries **15** marks,   **(2×15=30 Marks)**

32. Explain the different data types in Java.

33. Explain method declaration and method calling in Java with suitable example.

34. How is a package created in Java ? Write a Java program to prepare a mark list using package.

35. What is Event Handling ? Write a program for the Mouse Event Handling in Java.

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