(Pages : 2) **F – 2699**

Reg. No. : .....

Name : .....

Fifth Semester B.Sc./B.C.A. Degree Examination, December 2018
Career Related FDP under CBCSS
Group 2(b) – Computer Science/Computer Application
Core Course
CS 1541/CP 1541
FREE AND OPEN SOURCE SOFTWARE (FOSS)
(2014 Admission Onwards)

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. What is a webpage ?
2. What is PHP ?
3. What is Linux Kernel ?
4. Which notation is used to give multiline comments in PHP ?
5. What is the purpose of reset ( ) ?
6. Define KDE.
7. Write the output of following statement.
   Echo gettype ("4").
8. What is Operating system ?
9. What is GPL ?
10. Define variables.

SECTION – B
(Short Answer)

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

11. Explain the purpose of settype () with example.
12. How to create an array in PHP ?
13. Define GNOME.
14. Explain ternary operator in PHP.
15. Differentiate between break and continue statement.

P.T.O.

16. Define constant.
17. How to define a function, write its syntax ?
18. Explain methods to pass arguments to a function.
19. What is an associative array ?
20. Write the code for simple input HTML form.
21. Explain any two string functions in PHP.
22. List out some advantages of Open source software over Proprietary software.

SECTION – C
(Short Essay)

Not to exceed **120** words, answer **any six** questions. **Each** question carries **4** marks. **(6×4=24 Marks)**

23. Differentiate between global and superglobal in PHP.
24. Define cookies. How to set cookie with PHP ?
25. Explain table creation in MySQL.
26. Explain operators in PHP.
27. Compare free software with open source software.
28. Write a PHP program to find the largest of 3 numbers.
29. Describe file system and directories in LINUX.
30. Explain conditional statements in PHP.
31. How sessions are handled in PHP ?

SECTION – D
(Long Essay)

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

32. Explain :
    a) Datatypes in MySQL.
    b) Loop Structures in PHP.

33. Describe :
    a) History of LINUX.
    b) PHP datatypes.

34. What are the merits of MySQL ? Explain the data types in MySQL.

35. Explain the history and features of Linux. List the main distributions of Linux.

(Pages : 3) **F – 2708**

Reg. No. : .....

Name : .....

Fifth Semester B.C.A. Degree Examination, December 2018
Career Related FDP Under CBCSS
Group 2(b) : Computer Applications
Core Course
CP 1543 : INTERNET PROGRAMMING
(2014 Admission Onwards)

Time : 3 Hours Total Marks : 80

SECTION – A

(Very Short Answer Type)

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

1. Write HTML tag to make emphasized text.
2. Expand XML.
3. What is CGI ?
4. What is the use of HTTP cookie ?
5. _____ Operator returns the type of a variable in Javascript.
6. Write the syntax of a function in Javascript.
7. What is Java servlet ?
8. What is the use of session ?
9. How to define hyper link in HTML ?
10. When does onload() event occurs in javascript ?

P.T.O.

SECTION – B

(Short Answer)

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

11. Explain cookies.

12. What are request and response objects ?

13. Explain the ways to insert CSS.

14. What are container tags in HTML ?

15. Explain arrays in javascript.

16. Explain the basic features of javascript.

17. Explain servlet lifecycle.

18. Explain event handling in javascript.

19. What is session ?

20. Explain hyperlink in HTML.

21. Explain the architecture of java servlets.

22. What is webserver ?

SECTION – C

(Short Essay)

Not to exceed **120** words, answer **any six** questions. **Each** question carries **four** marks. **(6×4=24 Marks)**

23. Difference between DHTML and XML.

24. Explain internet and WWW.

25. What is session ?

26. What are the characteristics of PHP ?

27. Give examples of common HTML event.

28. Explain about javascript identifiers, assignment operators.

29. What are the different servlet context interface method ?

30. What is http session ?

31. Define XML and VRML.

SECTION – D

(Long Essay)

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

32. 1) What is the difference between internet and WWW ?
    2) Discuss the attributes of Frame tag.

33. Explain control structure in javascript with suitable example.

34. Explain server side programming.

35. Define java servlet request and response interface.

(Pages: 2) **F – 2731**

Reg. No. : .....

Name : .....

Fifth Semester B.C.A. Degree Examination, December 2018
Career Related FDP under CBCSS
Group 2(b) : COMPUTER APPLICATIONS
Core Course
CP 1544 : System Analysis and Design
(2015 Admission Onwards)

Time : 3 Hours Total Marks : 80

SECTION – A

Answer **all** questions. **1** mark **each**. **(10×1=10 Marks)**

1. What is meant by benchmark testing ?
2. Define system.
3. What is a simulation program ?
4. What is the purpose of structure walk-through ?
5. What is the need of system test ?
6. What is system administration ?
7. What are the contents of data dictionary ?
8. What is DFD decomposition ?
9. What is meant by feasibility ?
10. What is the use of DFD ?

SECTION – B

Answer **any 8** questions. **2** marks **each**. **(8×2=16 Marks)**

11. Distinguish between different types if enterprises.
12. What is project management framework ?
13. How do you evaluate the performance of software ?

P.T.O.

14. What are the functions of programs in an information system ?
15. What is the need of audit trail ?
16. What are the different approaches in unit testing ?
17. What are the important factors to be considered in selecting a training method ?
18. What are the goals and objectives of business systems ?
19. Give an example for data dictionary entry for a data store.
20. Explain the concept : *information system is an essence of a business.*
21. What are the different approaches in integration testing ?
22. Define PARIS model.

SECTION – C

Answer **any 6** questions. **4** marks **each.** **(6×4=24 Marks)**

23. Discuss about different feasibility considerations.
24. Draw a DFD for student information system.
25. Discuss about different control techniques used in information systems.
26. Give the outline of a test plan.
27. What are the different aspects of implementing conversion strategy ?
28. Discuss about different financial considerations in software selection.
29. Describe different approaches to determine the quality of software.
30. Illustrate decision trees and tables with examples.
31. Explain financial control procedures.

SECTION – D

Answer **any 2** questions. **15** marks **each.** **(2×15=30 Marks)**

32. Explain different phases in software development life cycle.
33. Discuss about different fact finding techniques.
34. Give a detailed account and factors of hardware and software specification.
35. Define information system and explain the need for audit control and security in IS.

(Pages : 3) **F – 2701**

Reg. No. : .....

Name : .....

Fifth Semester B.Sc./B.C.A. Degree Examination, December 2018
Career Related FDP Under CBCSS
Group 2(b) : Computer Science/Computer Applications
CS 1543/CP 1542 : COMPUTER GRAPHICS
(2014 Admn. Onwards)

Time : 3 Hours Max. Marks : 80

SECTION – A

(Very short answer type)

One word to maximum of **one** sentence. Answer **all** questions. **Each** question carries **one** mark. **(10×1=10 Marks)**

1. Define pixel.
2. What is resolution ?
3. What is anti-aliasing ?
4. What is refresh buffer ?
5. What is transformation ?
6. What is Rotation ?
7. What is shearing ?
8. What do you mean by perspective projection ?
9. What is a color model ?
10. What is Morphing ?

P.T.O.

SECTION – B

(Short answer type)

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

11. What is a raster scan system ?

12. What are the output hardware devices used for computer graphics ?

13. What is computer graphics ?

14. Explain boundary fill algorithm.

15. Explain the advantages and disadvantages of DDA algorithm.

16. What are homogeneous co-ordinates ?

17. Define clipping? And types of clipping.

18. What are the important properties of Bezier Curve ?

19. Explain Window-to-Viewport mapping.

20. What are the two types of projections ?

21. Explain Wire Frame Model.

22. State the difference between CMY and HSV color models.

SECTION – C

(Short essay)

Not to exceed **120** words. Answer **any six** questions. **Each** question carries **four** marks. **(6×4=24 Marks)**

23. Digitize a line from (20, 22) to (25, 25) on a raster screen using Bresenham's straight Line algorithm.

24. What is LCD ? Explain its advantages and disadvantages.

25. Explain Digital Differential Analyzer (DDA) Line drawing algorithm.

26. Explain scaling of 2D objects with example.

27. Explain Depth buffer.

28. Explain about B-Spline curves.

29. With suitable examples, explain any one of the 3D transformations.

30. Explain Back face detection.

31. Explain in detail about CMY color model.

SECTION – D

(Short Essay)

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

32. Explain any four input devices.

33. Write a detailed note on the basic two dimensional transformations.

34. Explain Sutherland-Hodgeman polygon clipping algorithm with suitable example.

35. Explain the concept of projection.

(Pages : 3) **F – 2684**

Reg. No. : .....

Name : .....

Fifth Semester B.C.A. Degree Examination, December 2018
Career Related FDP Under CBCSS
Group 2(b) : COMPUTER APPLICATIONS
Core Course
CP 1542 : Computer Graphics and Multimedia
(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. Write down any one pros of the multimedia.
2. What is meant by MIDI ?
3. Define Resolution.
4. Define Graphics Kernel System.
5. What is meant by translation vector ?
6. Define flat shading.
7. What is meant by illumination model ?
8. What is meant by orthographic parallel projection ?
9. Define visible surface detection method.
10. Define projection reference point.

P.T.O.

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 meant by multimedia ?

12. Define Hypermedia.

13. List out the disadvantage of DDA line drawing algorithm.

14. What is meant by aspect ratio ?

15. Define : 2D transformation.

16. Write the matrix representation for 2D Rotation.

17. What is meant by anti-aliasing ?

18. What are the primitive types of clipping operations ?

19. Define refresh buffer.

20. What is meant by window ?

21. What is meant by composite transformation ?

22. List out the three types of shading.

SECTION – C

(Short Essay)

Not to exceed **120** words, answer **any six** questions. **Each** question carries **four** marks. **(6×4=24 Marks)**

23. Describe the hardware of multimedia.

24. Explain the applications of multimedia.

25. Discuss the DDA line drawing algorithm.

26. Explain the steps of flood fill algorithm.

27. List out the properties of Bezier curve.

28. Explain two dimensional shearing with an example.

29. Describe the Back face removal method for visible surface detection.

30. Explain the principles of illumination.

31. How to map the window to view port ?

SECTION – D

(Long Essay)

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

32. Apply the Mid Point method for the generation of circle and list the algorithm steps with example.

33. Explain in detail about the 3D transformations with suitable example.

34. Describe the two types of projection methods with neat diagram.

35. Explain in detail about the following color models.
    a) RGB color model
    b) CMYK color model
    c) HSV color model.