

No. of Printed Pages : 2

SET - 1

MCA (Revised)

Term-End Practical Examination

01415

June, 2011

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

www.ignouassignmentguru.com

1. Write a program using JSP that enables any student to change his/her address. Make necessary assumptions. 20

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

1. Write a program in C/C++ using open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 2

MCA (Revised)

Term-End Practical Examination

00844

June, 2011

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

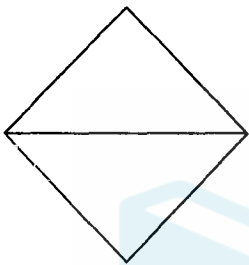
1. Write a program using JSP that enables any student to fill the examination form. Make necessary assumptions. 20

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 3

MCA (Revised)

Term-End Practical Examination

01059

June, 2011

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

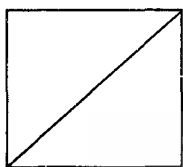
1. Write a program using JSP that enables any prospective student to fill the admission form. Make necessary assumptions. 20

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 4

MCA (Revised)

Term-End Practical Examination

00292

June, 2011

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

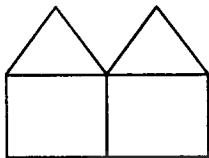
1. Write a program in JSP that enables any student to obtain information about a particular programme offered in the University. Make necessary assumptions. **20**

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 1

MCA (Revised)
Term-End Practical Examination
December, 2011

02024

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not successful** as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

www.ignouassignmentguru.com

1. Write a program in JSP that enables any student to change the medium of instruction of the programme with which she/he is enrolled. Make necessary assumptions. 20

PART - 2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries **20** marks and the **viva - voce** is for **5** marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



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No. of Printed Pages : 2

SET - 2

MCA (Revised)
Term-End Practical Examination

December, 2011

01044

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

-
1. Write a program using JSP that enables any student to know the status of assignment submitted by him/her. Make necessary assumptions. **20**

PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 3

MCA (Revised)

Term-End Practical Examination

01824

December, 2011

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

-
1. Write a program using JSP that enables any student to view his / her Latest Grade Card. Make necessary assumptions. **20**

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure.

20



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No. of Printed Pages : 2

SET - 4

MCA (Revised)
Term-End Practical Examination
December, 2011

00664

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not successful** as yet.

PART-1

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and viva-voce is for 5 marks.

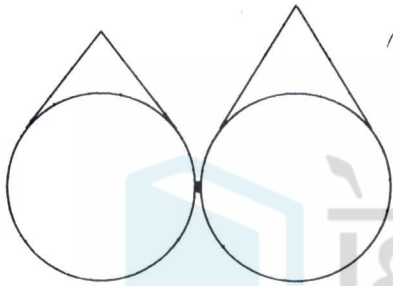
-
- www.ignouassignmentguru.com
1. Write a program using JSP that enables any student to view the counselling schedule of a course at a particular study center. Make necessary assumptions. 20

PART-2

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



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No. of Printed Pages : 2

SET - 1

MCA (Revised)
Term-End Practical Examination

December, 2012

08755

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a Program in JSP that enables any student to change his/her medium of instruction. Make necessary assumptions. **20**

PART - 2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries **20** marks and the **viva - voce** is for 5 marks.

1. Write a Program in C/C++ using open GL that draws the following figure :

20



No. of Printed Pages : 2

SET - 2

MCA (Revised)
Term-End Practical Examination 01095
December, 2012

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

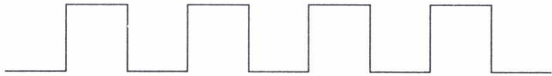
Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

1. Write a Program in JSP that enables any student to submit his/her assignment. Make necessary assumptions. 20

PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for **5** marks.

1. Write a Program in C/C++ using Open GL that draws the following figure. **20**



No. of Printed Pages : 2

SET - 3

MCA (Revised)
Term-End Practical Examination

December, 2012

02795

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not successful** as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

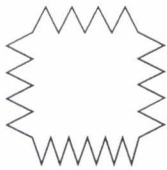
1. Write a Program in JSP that enables any student to apply for change of his/her examination center make necessary assumptions. 20

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PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 4

MCA (Revised)
Term-End Practical Examination
December, 2012

01255

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a Program in JSP that generates the Grade Card of a student after accepting his/her enrollment number as input. 20

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PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

SET - 1

MCA (Revised)
Term-End Practical Examination
June, 2013

01118

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for **5** marks.

1. Write a program in JSP that displays the address of examination center after accepting enrollment number of the student as input. 20

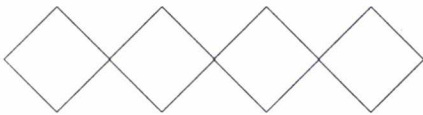
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PART - 2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : *Answer the following question. It carries 20 marks and the viva - voce is for 5 marks.*

1. Write a program in C / C++ using open GL that draws the following figure : 20





No. of Printed Pages : 2

SET - 2

MCA (Revised)
Term-End Practical Examination
June, 2013

00664

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a program in JSP that enables any student to apply for change of his / her study centre. Make necessary assumptions. **20**

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PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : *Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.*

1. Write a Program in C / C++ using open GL that draws the following figure : 20



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No. of Printed Pages : 2

SET - 3

MCA (Revised)
Term-End Practical Examination

June, 2013

00116

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a program in JSP that accepts Enrollment number as User Name and name of the student as password as inputs. The Program should validate them and display the identity card of the student. Make necessary assumptions. **20**

PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C / C++ using open GL that draws the following figure : 20





No. of Printed Pages : 2

SET - 4

MCA (Revised)
Term-End Practical Examination

June, 2013

01447

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

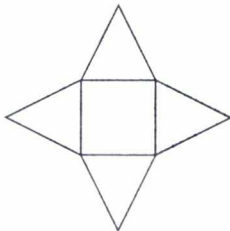
Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in JSP that enables any person to apply for admission to MCA of IGNOU. The program should check the eligibility of the person to enrol to MCA before enabling him / her to fill the admission form. Make necessary assumptions. 20

PART-2
COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the viva-voce is for 5 marks.

1. Write a program in C / C++ using open GL that draws the following figure : 20



No. of Printed Page : 1

SET - 1

MCA (Revised)
Term-End Practical Examination
December, 2013

01994

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not successful** as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries 20 marks and the vice-voce is for 5 marks.

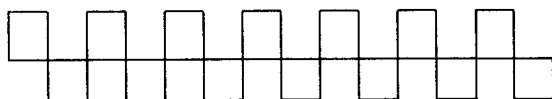
1. Write a program in JSP that enables any student to change the medium of instruction of the course with which the student is enrolled. Make necessary assumptions. 20

PART-2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the vice-voce is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Page : 1

SET - 2

MCA (Revised)

Term-End Practical Examination

00904

December, 2013

MCSL-054 : LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS AND MULTIMEDIA

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of *1 hour* duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

1. Write a program using JSP that enables any student to know the status of term end examination result of a particular course in which the student had appeared for term end examination. Make necessary assumptions. 20

PART-2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries 20 marks and the *viva-voce* is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Page : 1

SET - 3

MCA (Revised)
Term-End Practical Examination
December, 2013

00444

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a program using JSP that enables any student to view the date sheet of term end examinations for the courses for which s/he applied. **20**

PART-2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries **20** marks and the *viva-voce* is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. **20**



No. of Printed Page : 1

SET - 4

MCA (Revised)
Term-End Practical Examination
December, 2013

01854

**MCSL-054 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time allowed : 2 hours

Maximum Marks : 50

Note : There are *two* parts (Advanced Internet Technologies and Computer Graphics and Multimedia) in this paper. Each part is of *1 hour* duration. Attempt only that part(s) in which you are *not successful* as yet.

PART-1

ADVANCED INTERNET TECHNOLOGIES

Note : Answer the following question. It carries *20* marks and the *viva-voce* is for 5 marks.

1. Write a program using JSP that enables any student to view his/her profile based on your application form for admission. Make necessary assumptions. 20

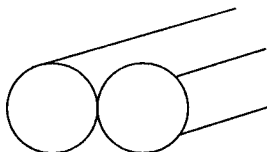
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PART-2

COMPUTER GRAPHICS AND MULTIMEDIA

Note : Answer the following question. It carries *20* marks and the *viva-voce* is for 5 marks.

1. Write a program in C/C++ using Open GL that draws the following figure. 20



No. of Printed Pages : 2

MCSL-054(P)/S1

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

02899

Term-End Practical Examination

June, 2014

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS AND MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two parts** in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to display the list of marks obtained in Assignment of MCSL-054 by all the students in a batch of MCA 5th Sem at a Study Centre. 20

PART II

Computer Graphics and Multimedia

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

2. Implement DDA line generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S2

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

02347

June, 2014

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES
AND COMPUTER GRAPHICS AND MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two parts** in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

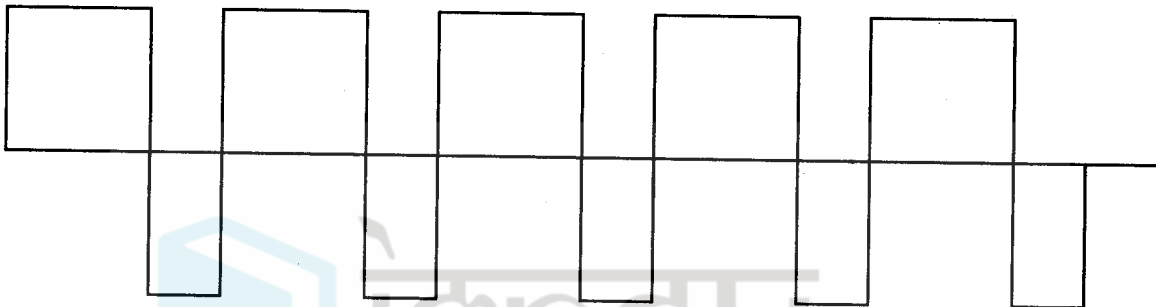
1. Write a program in JSP which take student enrolment number as input and displays the following details : 20
 - (i) Name and Address
 - (ii) Programme of study and Semester
 - (iii) Study Centre to which student is attached

PART II

Computer Graphics and Multimedia

Note: Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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01637

No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

June, 2014

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES
AND COMPUTER GRAPHICS AND MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two parts** in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to submit TEE, online examination form, for MCA-V Sem students of IGNOU. Also this program should tell whether a student has applied for examination or not. Make necessary assumptions wherever required.

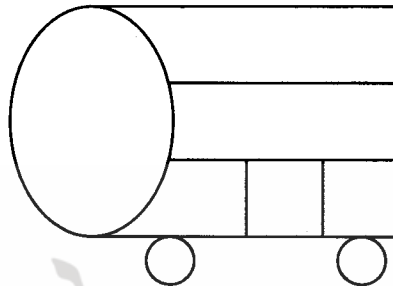
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

00484

Term-End Practical Examination

June, 2014

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES
AND COMPUTER GRAPHICS AND MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two parts** in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to create a webpage to display your personal details such as name, address, area of interest. This page should also display a background image, current date and time. Also provide a link JSP. After clicking on this link any JSP tutorial available on Internet should be opened.

20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S1

00424

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

December, 2014

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to create a web page of your study centre. This web page should have list of programmes offered by the study centre, address and phone number. Also the page should display a small paragraph on the objectives of the study centre.

20

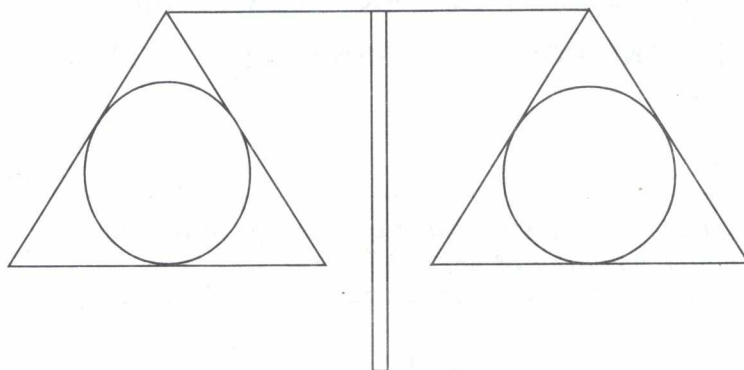
www.ignouassignmentguru.com

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks. .

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S2

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

December, 2014

00780

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to prepare a web page for a Travel Agency to display images of vehicles and their rate of hiring. Make necessary assumptions wherever required.

20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

01704

Term-End Practical Examination

December, 2014

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a program in JSP which displays the assignment marks of all the courses of MCA 5th semester of IGNOU of all the students in a batch. Make necessary assumptions, if any. Also display current date on this page. Do proper formatting and coloring of the page.

20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement DDA Line Generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2014

01887

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to display your brief profile including your image, date of birth, address, and educational qualification. Do proper formatting and coloring of this web page.

20

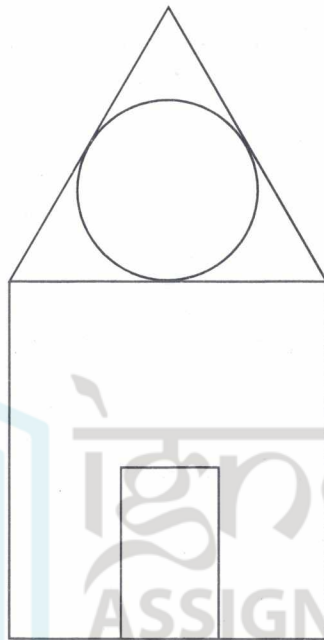
www.ignouassignmentguru.com

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S1

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

03263

Term-End Practical Examination

June, 2015

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a Servlet program to display the list of students of your class, who are eligible to appear in MCSL-054(P) Term-end Practical Examination. 20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Scan-Line Polygon Fill Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S2

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

02273

June, 2015

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to create a web page to display your brief educational achievements. Also, this page should display current date and time. At the bottom of the page, display the number of times this page is visited by the users. 20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

00023

Term-End Practical Examination

June, 2015

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

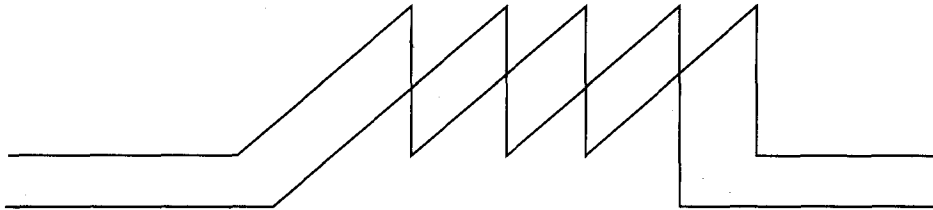
1. Write a JSP program to create a web page for a Used Car Sale Agency. Display the image of vehicle and its cost. Also, if image is clicked, details of vehicle are displayed. Make necessary assumptions, if required. Display the current date and time on this page. 20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

00493

June, 2015

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are **two** parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to create a web page to display the result of a Quiz Competition. This page takes control number from the candidates as input, then displays his/her result. Make necessary assumptions, if any.

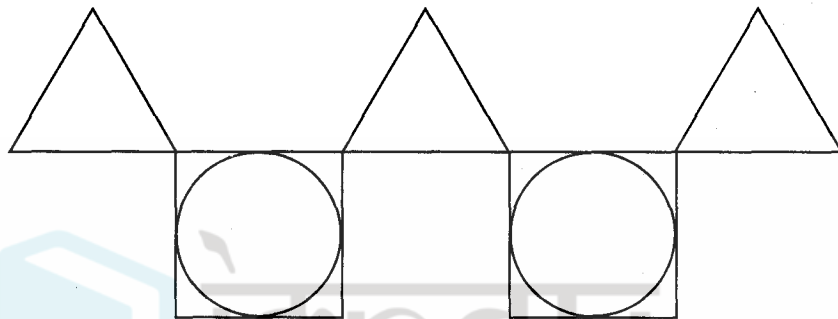
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S1

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2015

02128

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program to display the current balance in a savings bank account. Make necessary assumptions, if required.

20

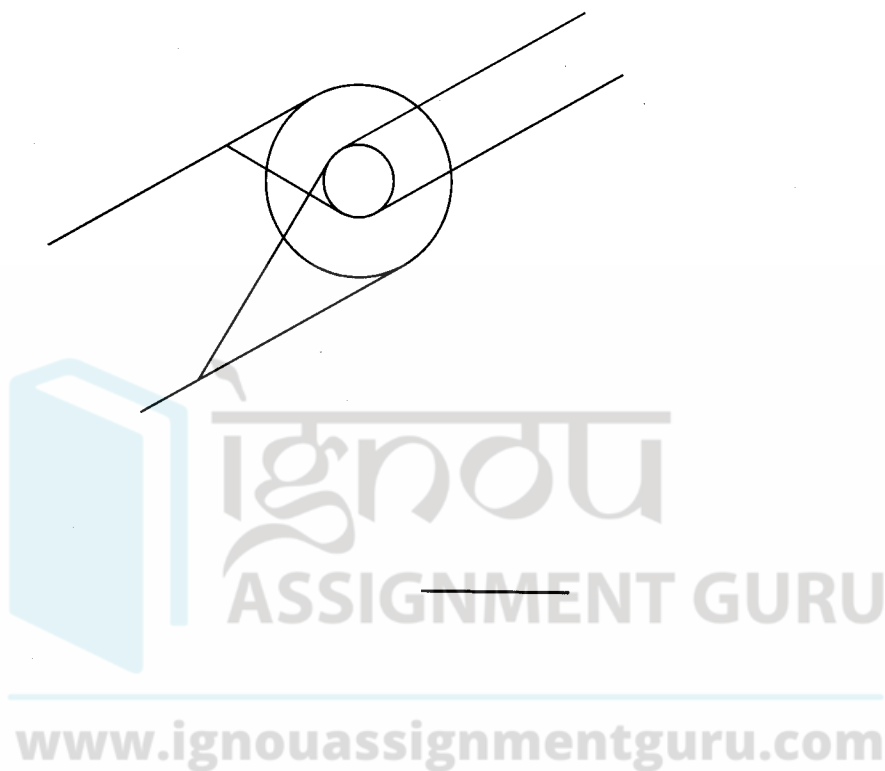
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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following diagram : 20



No. of Printed Pages : 2

MCSL-054(P)/S2

02267
MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

December, 2015

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program to display the date-sheet of term-end practical examination of MCA 1st to 5th semester of IGNOU.

20

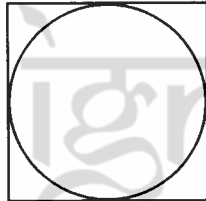
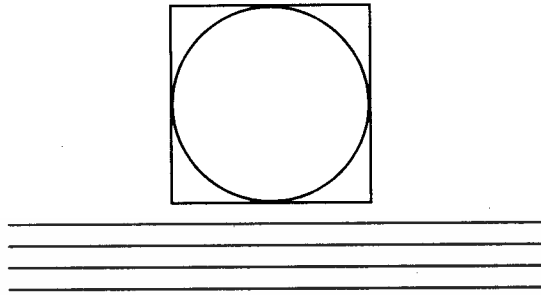
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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2015

01039

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program which takes the student roll number as input and displays the result of courses for which the student had appeared in the last term-end examination. Also, this program should display the current date and time. Make necessary assumptions, if required.

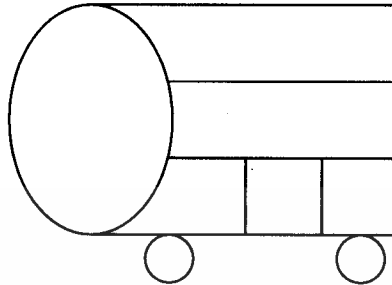
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2015

01809

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a program in JSP to create a web page which takes roll number of the student as input and displays the list of courses (of MCA 5th semester of IGNOU) for which assignments are not yet submitted to the study centre. Also display the current date and time on the page. Do proper formatting and colouring of the page. Make necessary assumptions, if required.

20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Generation algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 1

MCSL-054 - Set - 1

**MASTER OF COMPUTER APPLICATIONS (MCA)
(Revised)**

Term-End Examination

02706

June, 2016

**MCSL-054 - Set - 1 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time : 2 hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are not yet successful.*

PART - I

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

1. To appear in MCSL-054 term end practical exam, a student need to have minimum 70% attendance in practical counselling. Write a program using JSP to check whether a student is eligible for MCSL-054 term end practical exam or not. Make assumptions wherever required. 20

PART - II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Scan-Line Polygon Fill Algorithm in C/C++ using OpenGL. 20
-

No. of Printed Pages : 1

MCSL-054 - Set - 2

**MASTER OF COMPUTER APPLICATIONS (MCA)
(Revised)**

Term-End Examination

01866

June, 2016

**MCSL-054 - Set - 2 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time : 2 hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are not yet successful.*

PART - I

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

1. Write a JSP program to manage saving bank account. Your program should display current balance in account on request. Make required assumptions if any. **20**

PART - II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Cohen-Sutherland Line Clipping Algorithm in C/C++ using OpenGL. **20**
-

No. of Printed Pages : 1

MCSL-054 - Set - 3

**MASTER OF COMPUTER APPLICATIONS (MCA)
(Revised)**

Term-End Examination

00748

June, 2016

**MCSL-054 - Set - 3 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time : 2 hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are not yet successful.*

PART - I

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

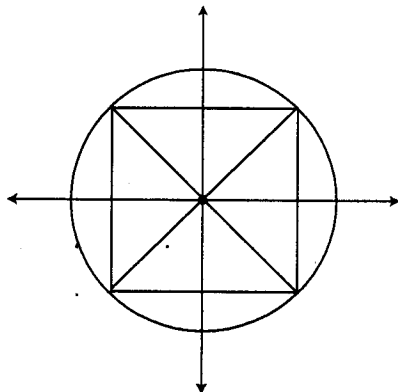
1. Write a JSP program in which take your date of birth as input and display age in the form of years, months and days. Also this program display whether you are younger or older than a person whose date of birth is : 10th July 1987. **20**

PART - II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL and draw the following figure. **20**



No. of Printed Pages : 1

MCSL-054 - Set - 4

**MASTER OF COMPUTER APPLICATIONS (MCA)
(Revised)**

Term-End Examination

00851

June, 2016

**MCSL-054 - Set - 4 : LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS
AND MULTIMEDIA**

Time : 2 hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are not yet successful.*

PART - I

Advanced Internet Technologies

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

1. Write a servlet program to display the counselling schedule of MCSL-054 course at a IGNOU MCA study centre. **20**

PART - II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Generation Algorithm in C/C++ using OpenGL. **20**

No. of Printed Pages : 2

MCSL-054(P)/S1

00883

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2016

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP and a JDBC program to manage savings bank accounts. This program should provide facilities for

20

- (a) Account Balance Enquiry
- (b) Withdrawal of Money
- (c) Deposit of Money

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Cohen-Sutherland Line Clipping Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S2

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00823

Term-End Practical Examination
December, 2016

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program to display your name, address, date_of_birth and current date and time. The program should also calculate your age and display it. 20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham Circle Drawing Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S3

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00763

Term-End Practical Examination

December, 2016

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to show the products' image, price, discount on offer and brief discription for an online shopping company of garments. The company sells garments for men, women and kids. Make necessary assumptions required. 20

PART II

Computer Graphics and Multimedia

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

2. Implement DDA Line Drawing Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S4

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00468

Term-End Practical Examination
December, 2016

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to create a web page to display the result of IGNOU MCA fifth semester TEE. This program should take enrolment number as input and display the result of all theory and practical courses. Make necessary assumptions required.

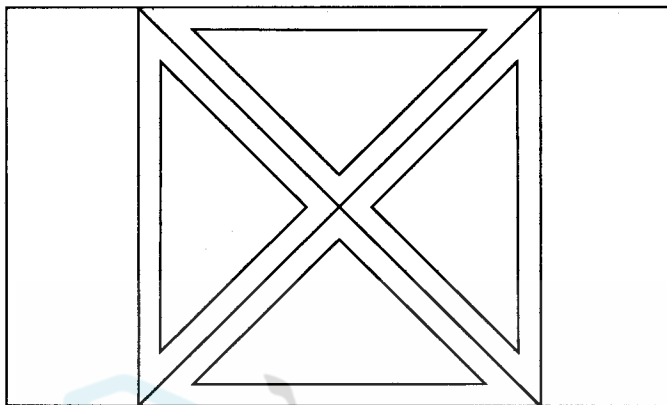
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S2

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

01375

June, 2017

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program named AGE_CALCULATOR which takes date of birth as input and displays the age. Make necessary assumptions. 20

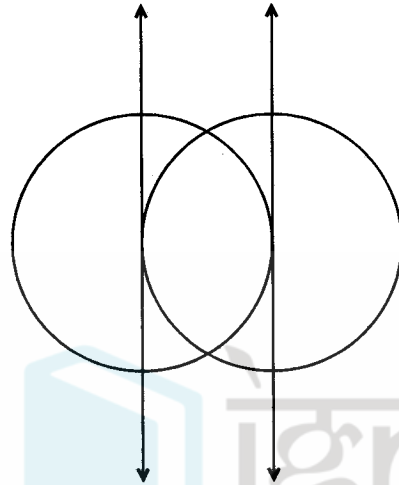
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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

00625

June, 2017

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to manage the attendance of MCSL-054 Lab Classes at SC. This program should facilitate students to see their attendance. Make necessary assumptions.

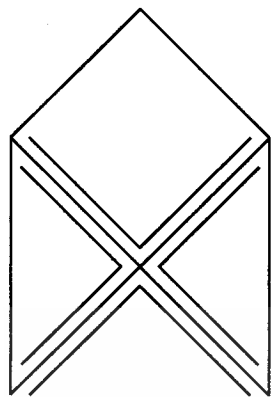
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

00856

June, 2017

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program, which takes student roll number as input and displays the result of all the courses of current semester. Make necessary assumptions. 20

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PART II

Computer Graphics and Multimedia

Note: Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement DDA Line Drawing Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S1

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

December, 2017

00413

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of **1 hour** duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program using JDBC which takes MCA fifth semester students' roll numbers as input and displays their name, address and email_id. Make necessary assumptions.

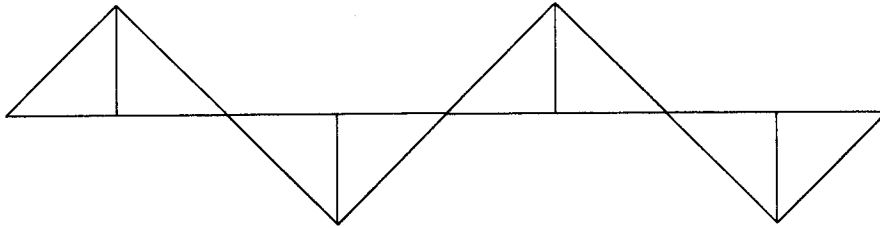
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S2

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

December, 2017

01533

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

- 1.** Write a JSP program using JDBC to develop an online leave management system, in which an employee can apply for leave and can see his/her leave balance. Make necessary assumptions.

20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement the Cohen-Sutherland line clipping algorithm in C/C++ using OpenGL.

20



No. of Printed Pages : 2

MCSL-054(P)/S3

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

00563 Term-End Practical Examination
December, 2017

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program using JDBC to develop a web page for an Electronic store. The program should take the product code as input and display product details including Product_Name, Model, Max_Price and Discount_on_offer. Make necessary assumptions.

20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Scan-Line Polygon Fill algorithm in C/C++ using OpenGL.

20



No. of Printed Pages : 2

MCSL-054(P)/S4

MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)

Term-End Practical Examination

December, 2017

00953

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a program using JSP and JDBC which manages a savings bank account and provides the facility to :
 - (a) See Account balance
 - (b) Deposit money in the Account

Make necessary assumptions.

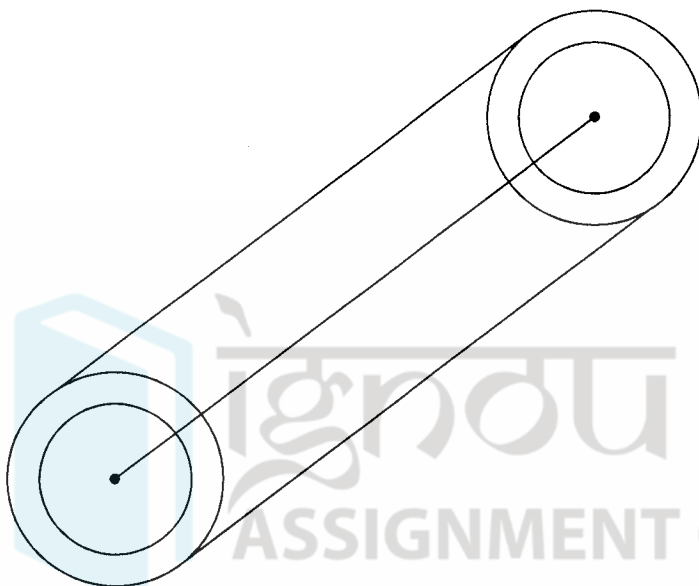
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



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No. of Printed Pages : 2

MCSL-054(P)/S1

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

02159

Term-End Practical Examination

June, 2018

**MCSL-054(P)/S1 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are not yet successful.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program which takes your name and address as input and displays it. Also, make provision to display length of the name entered.

20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement DDA Line Generation Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S2

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

00630

Term-End Practical Examination

June, 2018

**MCSL-054(P)/S2 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a servlet program using JDBC which takes enrollment number of MCA 5th Semester student and displays his marks of all the courses of 5th Semester. Make necessary assumptions required.

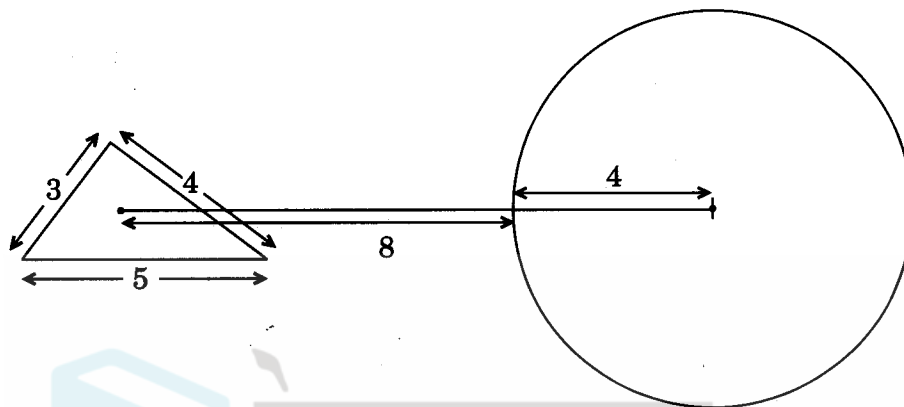
20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



No. of Printed Pages : 2

MCSL-054(P)/S3

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

June, 2018

00177

**MCSL-054(P)/S3 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program using JDBC to find the sum of amount deposited (Account Balance) in two saving accounts. The program should take account numbers as input and should display their sum. Make necessary assumptions required. 20

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PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham's Line Generation Algorithm in C/C++ using OpenGL. 20



No. of Printed Pages : 2

MCSL-054(P)/S4

**MASTER OF COMPUTER APPLICATIONS (Revised)
(MCA)**

Term-End Practical Examination

June, 2018

00314

**MCSL-054(P)/S4 : LABORATORY COURSE IN ADVANCED INTERNET
TECHNOLOGIES AND COMPUTER GRAPHICS & MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

Note : *There are two parts in this paper. Each part is of 1 hour duration. Attempt only that part(s) in which you are **not yet successful**.*

PART I

Advanced Internet Technologies

Note : *Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.*

1. Write a JSP program to manage students' address records. This program should take students' name, address, mobile number, enrollment number and email ID as input and store it in a database table. Also, make provision to display student address after taking enrollment number as input.

20

PART II

Computer Graphics and Multimedia

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Bresenham's Circle Generation Algorithm in C/C++ using OpenGL. 20
-



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No. of Printed Pages : 2

MCSL-054/S1

Master of Computer Application (Revised) (MCA)

Term-End Examination

December, 2018

LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS AND MULTIMEDIA

Time : 2 Hours

Maximum Marks : 50

-
- Note :** (i) There are *two* Parts in this paper.
(ii) Each Part is of 1 hour duration.
(iii) Attempt only that part(s) in which you are not yet successful.
-

[2]

Part—I

(Advanced Internet Technologies)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

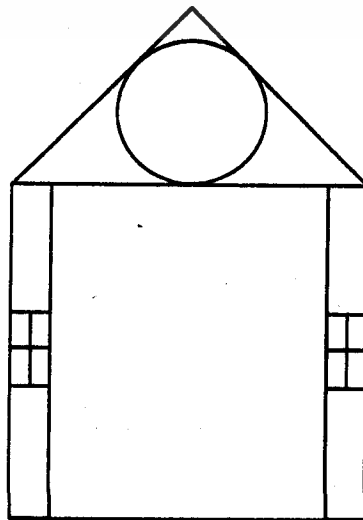
1. Write a servlet program to manage savings bank account. This program should take account number as input and should display account details. Also program should have feature for updating contact details of account-holders. Make necessary assumptions. 20

Part-II

(Computer Graphics and Multimedia)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using open GL that draws the following figure : 20



181793

No. of Printed Pages : 2

MCSL-054/S2

Master of Computer Application (Revised) (MCA)

Term-End Examination

December, 2018

LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS AND MULTIMEDIA

Time : 2 Hours

Maximum Marks : 50

-
- Note :** (i) There are *two* Parts in this paper.
(ii) Each part is of 1 hour duration.
(iii) Attempt only that part(s) in which you are not yet successful.
-

[2]

Part—I

(Advanced Internet Technologies)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

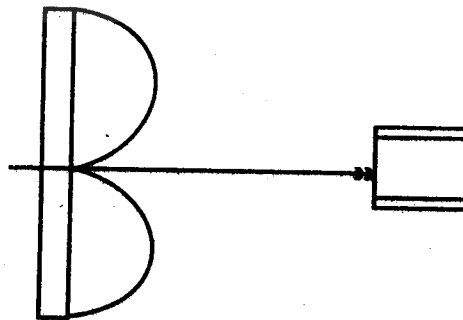
1. Write a program using JSP and JDBC to keep records of attendance of practical counselling classes of courses MCSL-045 and MCSL-054. The program should provide the percentage of attendance in counselling classes after taking student enrollment number as input. Make necessary assumptions. 20

Part-II

(Computer Graphics and Multimedia)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Write a program in C/C++ using OpenGL that draws the following figure : 20



MCSL-054/S2

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182863

No. of Printed Pages : 2

MCSL-054/S3

**Master of Computer Application
(Revised) (MCA)
Term-End Examination
December, 2018**

**LABORATORY COURSE IN ADVANCED
INTERNET TECHNOLOGIES AND
COMPUTER GRAPHICS AND
MULTIMEDIA**

Time : 2 Hours

Maximum Marks : 50

-
- Note :** (i) There are *two* Parts in this paper.
- (ii) Each Part is of 1 hour duration.
- (iii) Attempt only that Part(s) in which you are not yet successful.
-
-

[2]

Part—I

(Advanced Internet Technologies)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

1. Write a servlet program using JDBC to keep students records which includes Student_Name, Enrollment_No., Programme, Study_Centre_Code, Mobile_number and Address. Program should display student details after taking Enrollment_No or Mobile_number as input. Make necessary assumptions. 20

Part—II

(Computer Graphics and Multimedia)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Scan-Line Polygon Fill algorithm in C/C++ using open_GL. 20

183723

No. of Printed Pages : 2

MCSL-054/S4

Master of Computer Application (Revised) (MCA)

Term-End Examination

December, 2018

LABORATORY COURSE IN ADVANCED INTERNET TECHNOLOGIES AND COMPUTER GRAPHICS AND MULTIMEDIA

Time : 2 Hours

Maximum Marks : 50

-
- Note :** (i) There are two Parts in this paper.
(ii) Each Part is of 1 hour duration.
(iii) Attempt only that Part(s) in which you are not yet successful.
-

[2]

Part—I

(Advanced Internet Technologies)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

1. Write a JSP program using JDBC to manage issue and returning of books in a library. Make necessary assumptions. 20

Part—II

(Computer Graphics and Multimedia)

Note : Answer the following question. It carries 20 marks and the viva-voce is of 5 marks.

2. Implement Cohen-Sutherland line clipping algorithm in C/C++ using open GL. 20

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