

नोट : सभी 04 प्रश्न पत्र हल करना अनिवार्य है।

नोट : प्रत्येक खण्ड को पृथक्-पृथक् उत्तर-पुस्तिका में लिखना अनिवार्य है।

Note: Each section is compulsorily written on separate answer sheet.

H-2661

M. Sc. (Fourth Semester) Examination, 2021

COMPUTER SCIENCE

Paper : First

(Internetwork Applications)

Maximum Marks : 40

Note: Attempt all questions. Each question carry equal marks. Each question must be answered in maximum 800 words.

1. Discuss the major kinds of information contained in IP Header with the help of IP header format diagram.
2. What do you understand by Gateway Protocols? Briefly explain EGP and CGP.
3. Discuss the working of E-mail in an Internet Environment.
4. What are the major issues and concerns related to security and Security Access Policies? Discuss.
5. Write notes on any **two** of the following :
 - (a) Mailbox
 - (b) ATM Services
 - (c) Proxy Services
 - (d) Essential features of Web Server

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M. Sc. (Fourth Semester) Examination, 2021

COMPUTER SCIENCE

Paper : Second

(Computer Graphics & Multimedia)

Maximum Marks : 40

Note: Attempt all questions. Each questions carry equal marks. Each question must be answered in maximum 800 words.

1. Explain types of printers with working principle and characteristics.
2. Calculate the pixel portions along a straight line between A(10,12) and B(20,20) using DDA algorithm.

3. Rotate point A(2, 4) in 2-dimensional plane by an angle 90° in anti-clockwise direction.
4. What are different software and hardware required for multimedia? Explain.
5. Describe in detail, various applications of multimedia.

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M. Sc. (Fourth Semester) Examination, 2021

COMPUTER SCIENCE

Paper : Third

(Artificial Intelligence)

Maximum Marks : 40

Note: All questions are compulsory. Each question carries equal marks. Each question must be answered in maximum 800 words.

1. List the fields and also describe any three fields that form the basis of AI.
2. Explain any **two** with example :
 - (i) Knowledge Based System
 - (ii) Knowledge Manipulation Representation and Applications of Knowledge
 - (iii) Meta Knowledge
3. What do you mean by PROLOG? Explain in detail.
4. Explain any **two** :
 - (i) Limitations and advantages of expert system
 - (ii) Properties of WHS
 - (iii) Conversion to Clausal form
 - (iv) Syntax and semantics of FOPI
5. Explain any **two** :
 - (i) State space with example
 - (ii) Difference between logic programming and prolog
 - (iii) Importance of AI
 - (iv) Knowledge Organisation

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M. Sc. (Fourth Semester) Examination, 2021

COMPUTER SCIENCE

Paper : Fourth

(Software Engineering)

Maximum Marks : Regular 40

Note: All questions are compulsory. All questions carry equal marks. Each question must be answered in maximum 800 words.

1. Why Software Engineering is known as a phaser development approach? Explain phases of Software Engineering.
2. What is Project Staffing? Explain different team structures.
3. Explain Verification and Validation method in detail.
4. What is meant by Software Reliability? Write its concept and explain measures of reliability and availability.
5. Explain White Box Testing with suitable example.