

BCA: 4th Semester

MATHEMATICS-IV

Code: 202

OBJECTIVE: To enable professional undergraduate students to understand the importance of Knowledge about mathematical probability & familiar with various numerical techniques.

QUESTIONS

- 1) What is Permutation and Combination explain with example.
- 2) What is Binomial Coefficients, Binomial Theorem?
- 3) Define Probability, Conditional Probability, and Baye's Theorem with the help of example.
- 4) What is Mean & Standard Deviation give example?
- 5) Discuss Mathematical Expectation with example?

PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

1. Cover page
2. Objectives
3. Index
4. Content
5. Conclusion
6. References
7. Softcopy AND Hardcopy
8. Give proper headings and subheadings
9. Explain every topic in points and using diagrams.
10. Put Examples

OUTCOME:

After doing this assignment, students will come to understand the importance of mathematics in computer science.

TEXT BOOKS:

[T1] S.S. Sastry, "Numerical Analysis"; Prentice Hall of India, 1998.

REFERENCE BOOKS:

[R1] Mathew, J.H., Numerical Methods for Mathematics, Science and Engineering, Prentice Hall Inc.J (2002).

OBJECTIVE: To highlight the features of different technologies involved in Web Development

QUESTIONS:

- 1) What are search engines? Also explain web portal.
- 2) What is the use of anchor tag in HTML?
- 3) Explain objects in Java Script.
- 4) Define filters and transitions.
- 5) What do you understand by web hosting?

PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

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9. Explain every topic in points and using diagrams.
10. Put Examples

OUTCOME:

Students should be able to design and implement a basic website and evaluate website organizational structure and design elements.

TEXT BOOKS

- [T1] The complete reference HTML, by Thomas A powell, TMH publication.
[T2] Mastering HTML 4.0 by Deborah S. Ray and Erich J. Ray. BPB Publication.
[T3] Internet and World Wide Web Deitel HM, Deitel ,Goldberg , Third Edition

REFERENCES

- [R1] HTML Black Book , Stephen Holzner, Wiley Dreamtech.
[R2]Rajkamal, "Web Technology", Tata McGraw-Hill, 2001.
[R3] Jeffrey C. Jackson, "Web Technologies : A Computer Science Perspective", Pearson.
[R4]XML How to Program by Deitel Deitel Nieto.

BCA: 4th Semester

Java Programming

Code: BCA 206

OBJECTIVE:

The objective of this paper is to identify the foundation terms and concepts that are commonly used in Java Programming. It also identifies the essential elements for making an effective Java Program. This course will give complete descriptions about the terms used in the Java Programming.

QUESTIONS:

- 1) Explain the features of Java as an Object Oriented Language.
- 2) Define Exception handling in Java using a suitable example.
- 3) Discuss the Applet and its life cycle.
- 4) Explain the various AWT tools in Java.
- 5) What is Java Servlet? Give an example.

PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

1. Cover page
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3. Index
4. Content
5. Conclusion
6. References
7. Softcopy AND Hardcopy
8. Give proper headings and subheadings
9. Explain every topic in points and using diagrams.
10. Put Examples

OUTCOME:

After doing this assignment, students will come to understand the important terminologies to related to the Java Programming.

REFERENCE BOOKS:

- [R1] Krishnamoorthy R, Prabhu S, "Internet and Java Programming", New Age Intl.
[R2] David Flanagan, Jim Farley, William Crawford and Kris Magnusson, "Java Enterprise in aNutshell", O'Reilly.

OBJECTIVE:

Students will be able to understand the basic of Software Engineering. Student would be able to explain the types of testing. Student should be able to understand the various components and function of Software Engineering

QUESTION:

- Q1. What is Software Engineering? Explain software engineering models with diagram.
- Q2. What do you mean by Software testing? Explain its various types.
- Q3. What do you mean by SDLC? Explain it with diagram.
- Q4. Explain difference between system testing and acceptance testing.
- Q5. Explain the COCOMO model with example.

PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

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9. Explain every topic in points and using diagrams.
10. Put Examples

OUTCOME:

After doing the assignment, students understand

- The various basic concept of Software Engineering.
- To understand the use of Software Engineering along with their applications.
- Understand the use and working of the various software testing .

REFERENCE BOOKS:

1. K. K. Aggarwal & Yogesh Singh, "Software Engineering", 2nd Ed., New Age International, 2005.
2. Rajib Mall, "Fundamental of Software Engineering", 3rd Edition, PHI Learning Private Limited

BCA: 4th Semester

Computer Networks

Code: 210

OBJECTIVE: To allow students to develop background knowledge as well as core expertise in networking technologies, which one of the fastest growing industries is in today's world.

QUESTIONS:

- 1) Explain Transmission Media and Transmission Mode.
- 2) What is Error Correction and Detection?
- 3) What is the difference between Hub and Switch?
- 4) What is Connection Management? Also mention the steps involved.
- 5) Define various categories of network.

PROCEDURE:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

1. Cover page
2. Objectives
3. Index
4. Content
5. Conclusion
6. References
7. Softcopy AND Hardcopy
8. Give proper headings and subheadings
9. Explain every topic in points and using diagrams.
10. Put Examples

OUTCOME:

The students will be exposed to different types of networks, various transmission media, their comparative study, fibre optics, error detection and correction.

TEXT BOOKS

- T[1]. A. S. Tanenbaum, "Computer Networks"; Pearson Education Asia, 4th Ed., 2003.
T[2]. Behrouz A. Forouzan, "Data Communication and Networking", 2nd edition, Tata Mc Graw Hill.

REFERENCES

- R[1]. D. E. Comer, "Internetworking with TCP/IP", Pearson Education Asia, 2001.
R[2]. William Stallings, "Data and computer communications", Pearson education Asia, 7th Ed., 2002.