Government PG College, Ambala Cantt

Course File(Session 2023-24)

Name of Professor: DR. RUCHI

Class: BCOM(CAV)/ 6TH SEMESTER

Subject code and Name: BC(VOC)-605/SOCIAL NETWORKING AND DATA ANALYTICS

Max. Marks: 80

Internal Marks: 20

Time: 3 Hours

Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 15 marks each.

Social networking: concept, evolution and applications, expansion of social networking, using popular social networking sites: Facebook, twitter, linked in, Instagram, blogging etc., trends in social media, organize, access and share information using social networks.

Messaging services as social networking, business applications of social networking: product promotion, publicity, etc., social and ethical aspects of social networking, social networking and legislation: privacy issues, security, data protection, etc.

Big data and hadoop: concept and evolution. features of big data, managing big data, tools and languages used for data analysis - R, Excel, SQL, Python & Tableau; data visualization and statistical interpretation for analytics,

Introduction to data warehousing and OLAP; data preparation, predictive analysis – linear regression, classification, clustering, time series, etc.

Practical: The candidates should be able to make a profile on social networking and perform elementary data analytics for the same.

REFERENCES Mariam Salpeter, Social Networking for Career Success, Learning express, LLC.

- Guy Kawasaki, The Art of Social Media: Power Tips for Power Users, Portfolio Publishers
- Michael Richards, Social Media: Dominating Strategies for Social Media Marketing with Twitter,

• Facebook, Youtube, Linkedin, and Instagram, Create Space Independent Publishing Platform Victor Finch, Data Analytics for Beginners, Create Space Independent Publishing Platform

- Anil Maheshwari, Data Analytics Made Accessible, Amazon Digital Services LLC
- . Theobald, Data Analytics for Absolute Beginners, Independent

COURSE OBJECTIVES

The course objectives outlined are as follows:

- Role of Social Networking: Describe how information technology and decision support systems contribute to businesses and analyze current issues within firms to solve business problems.
- Understand the messaging services: Explore and define Management Information System (MIS) and its characteristics. Identify the components of an MIS. Understand the framework for understanding MIS. Explain Simon's Model of decision- making and distinguish between structured and unstructured decisions.
- Fundamental Principles of Big Data and Handhoop: Introduce the foundational principles of analysing and designing computer-based information systems, fostering an understanding of the techniques and methodologies employed in this process.
- **Impact of OLAP:** Enable students to assess the influence of the Internet and Internet technologies on electronic commerce and business operations. Understand the specific risks and vulnerabilities associated with computer systems in this context.
- Use of Data warehousing: Provide students with theoretical models used in examining functional ERP in the areas of personnel, financial, and production management.

These objectives collectively aim to equip students with a comprehensive understanding of how information technology, decision support systems, expert systems, internet technology, and database management systems intersect with business operations. By covering these topics, students will be better prepared to analyze, design, and utilize technological solutions to address contemporary business challenges and enhance organizational competitiveness.

COURSE OUTCOMES

After the successful completion of the course, students will be able to:

- Understand the leadership role of SNDT in achieving businesscompetitive advantage through informed decision-making.
- Understand the fundamental concepts of systems and their types.
- Apply the systems approach to analyze and solve complex problems.
- Define an information system and recognize its characteristics.
- Identify different types of information and their role in decision-making process.
- Describe the sub-systems of an information system, including OLAP. and their management levels.
- Analyse and synthesize business information and systems to facilitate the evaluation ofstrategic alternatives.
- Effectively communicate strategic alternatives to facilitate decision-making.
- Articulate the fundamental principles of information systems analysis and design.
- Demonstrate the skills necessary to conduct a requirements determination study.
- Analyse how information system impacts a firm.
- Interpret how to use information systems to solve business problems.
- Explore decision support systems and their role in planning, control, and decisionmakingprocesses.

Lesson Plan

Week No	Scheduled Dates	Topics to be covered
1	1-6 January	Social networking: concept, evolution and applications.
2	8-13 January	expansion of social networking using popular social networking sites.
3	15-20 January	Revision, Test, Facebook, twitter, linked in, Instagram, blogging etc.,
4	22-27 January	trends in social media, organize, access and share information using social networks, Revision, Test.
5	29-3 February	Messaging services as social networking, business applications of social networking.
6	5-10 February	product promotion, publicity, etc., Revision, Test.
7	12-17 February	social and ethical aspects of social networking. Oral Test.
8	19-24 February	social networking and legislation: privacy issues, security, data protection, etc. Revision, Test, Assignment-1.
9	26-2 March	Big data and hadoop: concept and evolution.
10	4-9 March	features of big data, Revision, Test. Oral Test
11	11-16 March	managing big data, tools and languages used for data analysis – R.
12	18-23 March	Excel, SQL, Revision, Test.
13	1-6 April	Python & Tableau; data visualization and statistical interpretation for analytics.
14	8-13 April	Revision, Test , introduction to data warehousing and OLAP.
15	15-20 April	data preparation, predictive analysis – linear

regression, classification, clustering, time series, etc Revision, Test, Assignment-2.