

# **GUIDANCE POINT:- PUNE'S PREMIER EDUCATION HUB**

Welcome to Guidance Point, your ultimate destination for comprehensive education and professional development! At Guidance Point, we believe in empowering individuals to unlock their full potential through accessible and high-quality education. With a vast array of courses covering all domains, from technology to arts, business to sciences, we strive to cater to the diverse learning needs of our users. Whether you're a student looking to enhance your academic performance, a professional aiming to upskill or reskill, or an enthusiast eager to explore new interests, Guidance Point is here to guide you every step of the way. What sets us apart is our commitment to excellence. We meticulously curate our course offerings, partnering with the best institutes and industry experts to ensure that you receive top-notch education that is both relevant and practical. Our platform leverages cutting-edge technology and innovative teaching methodologies to deliver engaging and immersive learning experiences.

## **BENEFITS:-**

### **1. Comprehensive Course:**

Our comprehensive course ensures thorough coverage of essential topics, equipping you with a well-rounded understanding of your subject matter, setting a strong foundation for your future endeavors.

### **2. Top Institute Partnerships:**

Through our partnerships with leading institutes, you gain access to world-class resources, expert guidance, and prestigious

certifications, empowering you to excel in your field and stand out among your peers.

### 3. Advanced Learning Technology:

Leveraging advanced learning technology, we offer dynamic and interactive learning experiences, incorporating simulations, virtual labs, and multimedia resources to enhance comprehension and retention of complex concepts.

### 4. Supportive Community:

Join our vibrant and supportive community of learners, mentors, and industry professionals, where you can collaborate, seek advice, and find encouragement, fostering a conducive environment for growth and success.

### 5. Personalized Learning Paths:

Tailor your learning journey to suit your unique needs and goals with our personalized learning paths, allowing you to progress at your own pace and focus on areas that align with your interests and career aspirations.

### 6. Quality Assurance Standards:

Rest assured that our courses adhere to rigorous quality assurance standards, ensuring that you receive high-quality instruction, updated curriculum, and valuable resources that meet industry benchmarks and standards.

### 7. Interactive Learning:

Engage in dynamic and interactive learning experiences through our immersive course content, live sessions, quizzes, and discussions, promoting active participation, collaboration, and deeper understanding of the material.

## 8. Career Opportunities:

Explore abundant career opportunities and pathways in your chosen field, supported by our comprehensive curriculum, industry partnerships, and career services, empowering you to pursue your dream job and achieve professional success.

# SYLLABUS

## **1: INTRODUCTION TO BIG DATA AND ITS CHARACTERISTICS**

- Understanding the concept of big data and its significance
- Exploring the characteristics of big data: Volume, Velocity, Variety, Veracity, and Value
- Real-world examples and use cases of big data

## **2: DISTRIBUTED COMPUTING PARADIGMS (HADOOP, SPARK)**

- Introduction to distributed computing and its role in handling big data
- Overview of Apache Hadoop ecosystem: HDFS, MapReduce, YARN
- Introduction to Apache Spark: In-memory processing, Spark RDDs, DataFrames, Spark SQL
- Use cases and applications of Hadoop and Spark

### **3: PROCESSING AND ANALYZING BIG DATA WITH MAPREDUCE**

- Understanding the MapReduce programming model
- Writing MapReduce programs in Java and Python
- Hands-on exercises to analyze big data using MapReduce

### **4: INTRODUCTION TO NOSQL DATABASES (MONGODB, CASSANDRA)**

- Overview of NoSQL databases
- Introduction to MongoDB: Document-oriented database
- Introduction to Apache Cassandra: Distributed, highly scalable NoSQL database
- Hands-on exercises to work with MongoDB and Cassandra

### **5: REAL-TIME DATA PROCESSING WITH APACHE KAFKA**

- Understanding the need for real-time data processing
- Introduction to Apache Kafka
- Setting up Kafka clusters and producers/consumers
- Use cases and applications of Kafka in real-time analytics

### **6: BIG DATA ANALYTICS TOOLS AND PLATFORMS**

- Overview of popular big data analytics tools and platforms
- Comparison of different big data analytics platforms
- Hands-on demonstrations of using big data analytics tools and platforms

## **7: DIMENSIONAL MODELING AND OLAP (ONLINE ANALYTICAL PROCESSING)**

- Analysis of real-world case studies and success stories in big data analytics
- Understanding the challenges faced and solutions implemented
- Discussion on best practices and future trends in big data analytics

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