1(a.) Define HR Analytics?

People analytics, also known as HR analytics and talent analytics, is the use of data analysis on candidate and employee issues to understand their impact on business goals and evaluate the effectiveness of human resources initiatives.

**1(b) Explain HR measurement journey with HR maturity Journey.**

1(c). Discuss the concept of lean organization and the challenges of HR in the system.

A lean organization understands customer value and focuses its key processes to continuously increase it. The ultimate goal is to provide perfect value to the customer through a perfect value creation process that has zero waste.

2(a) Define HR metrics

HR metrics are a vital method for quantifying the impact and cost of HR processes and employee programs. It is also a strategy for measuring the progress or collapse of HR actions. HR metrics can uncover a business's strengths and vulnerabilities and facilitate an understanding of the areas

requiring focus or improvement as well as those ready for capitalization. From fundamental HR
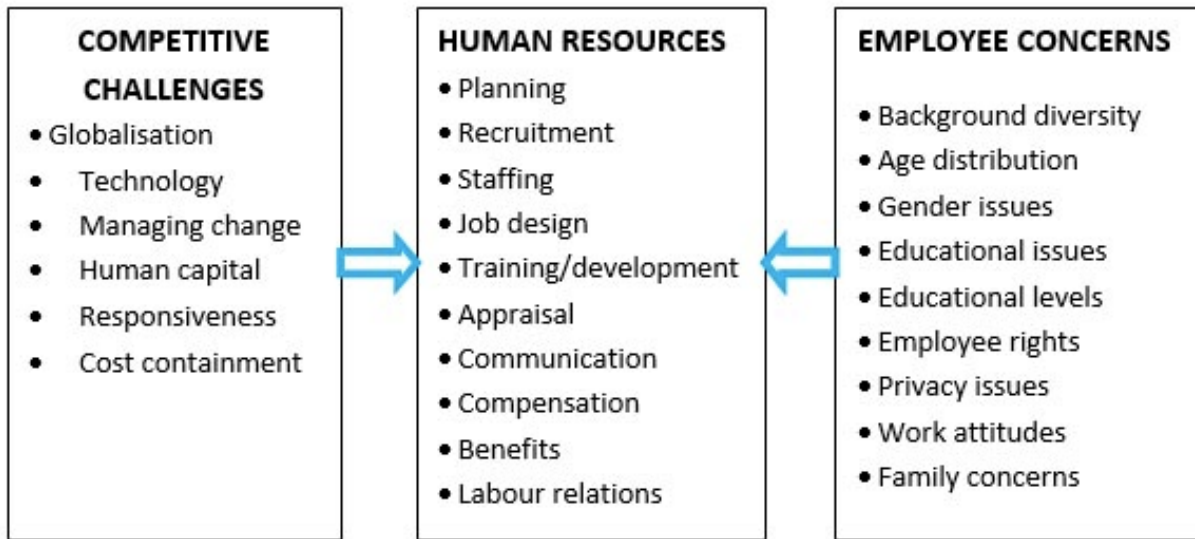
capability to revealing the precise value of each new worker, HR metrics are priceless for evaluating your business and devising future approaches. The most intuitive, user-friendly HR administration programs can make employing HR metrics easy, straightforward, and uncomplicated.

2(b) Differentiate between HR scorecard and workforce scorecard and their relationship with HR analytics.

How the Combination of the HR Scorecard and Analytics can be a Game Changer

Analytics of all types is the wave of the future. Right from Data Analytics that uses advanced forms of data analysis using large datasets and other pools of data to find patterns in the same to the Business Analytics tools that use trends and other indicators to arrive at forecasts for the future, Analytics is indeed something that represents Next Generation business practices.

Also, the HR (Human Resources) scorecard represents how the performance of employees and the HR Function, as well as the larger organization, can be optimized and be made more efficient through data-driven measures of performance and analysis using advanced forms of forecasting and analysis.

Thus, the combination of Analytics and HR Scorecard can indeed be a game changer for organizations seeking to leverage their human resources and make them more efficient in addition to tying them to the broader organizational performance.

How Such Tools can be Used

For instance, the HR Scorecard typically is used to generate ROI or Return on Investment of Human Resources wherein financial and operational measures are gathered and reported related to specific employee performance and how well such measures fit in with the broader organizational imperatives.

Analytics, on the other hand, can be used in any organizational function to derive the CBA or the Cost Benefit Analysis of various organizational initiatives. Further, Data and Business Analytic tools can be used to arrive at prognostications about the future using large datasets and trends.

Taken together, Analytics tools can be used with the HR Scorecard to actualize truly Next Generation Measures of organizational performance as well as to actualize advanced forms of forecasting and measuring performance.

Indeed, both the HR Scorecard and Analytics represent the marriage of advanced forms of data and trend analysis with the scorekeeping and reporting of measures and indicators in a format based manner.

To see how this works in practice, we can take the example of the HR Scorecard measures of employee performance and how specific employees have justified the costs incurred on them with the derived benefits from their performance.

Thus, it is indeed the case that specific employees and their performance can be quantified and reported on the HR Scorecard using financial and operational measures.

In this context, Analytics using Big Data and Artificial Intelligence can be used to arrive at granular methods of data and business analytics. In other words, while the HR Scorecard can be used to generate and report the financial and operational measures, the Data and Business Analytics can be used in such reporting of measures by preparing the necessary measures of performance in a highly granular and sophisticated manner.

2(c) Explain the five overreaching component of an effective HR analytics framework using LAMP model.

Lighting the "LAMP"

"The Right Analytics"
Valid Questions and Results
(Information, Design, Statistics)

"The Right Logic"
Rational Talent Strategy
(Competitive Advantage, Talent Pivot Points)

HR Metrics and Analytics That Are A Force For Strategic Change

"The Right Measures"
Sufficient Data
(Timely, Reliable, Available)

"The Right Process"
Effective Knowledge Management
(Values, Culture, Influence)

3(a) What is predictive analytics?

Predictive analytics is the use of data, statistical algorithms and machine learning techniques to identify the likelihood of future outcomes based on historical data. The goal is to go beyond knowing what has happened to providing a best assessment of what will happen in the future.
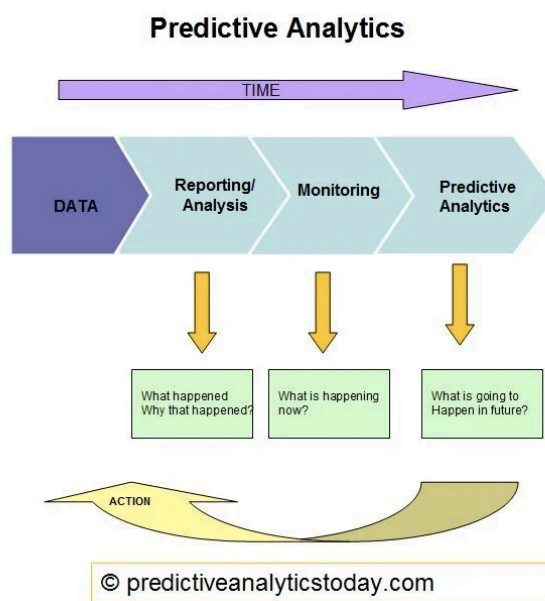
3(b) Briefly explain analytical capabilities and analytical value chain
Analytical skills refer to the ability to collect and analyze information, problem-solve, and make decisions. Employees who possess these skills can help solve a company's problems and improve its overall productivity and success. Learn more about analytical skills and how they work.

Value Chain Analysis

Support Activities

Firm Infrastructure	Management, finance, legal, planning
Human Resource Management	Professional development, employee relations, performance appraisals, recruiting, competitive wages, training programs
Technology Development	Integrated supply chain system, real-time sales information
Procurement	Real-time inventory, Communication with suppliers, Purchase supplies and materials

Margin

Inbound Logistics	Operations	Outbound Logistics	Marketing and Sales	Service
• Real-time inbound inventory data • Location of distribution facilities • Trucks • Material Handling • Warehouse	• Standardized model • Access to real-time sales and inventory system	• Order processing • Full delivery trucks	• Pricing • Communication • Promotion • Products based on community needs • Low prices	• Delivery • Installation • Repair • Greeters • Customer service focus

Margin

Primary Activities

3(c) Describe the steps involved in predictive analytics and determine the key performance indicators.

Predictive Analytics

TIME

DATA → Reporting/ Analysis → Monitoring → Predictive Analytics

What happened Why that happened?

What is happening now?

What is going to Happen in future?

ACTION

© predictiveanalyticstoday.com

Organizational goals
Revenue
Response times
Patient outcomes
Workforce

KPI measurements
Values
Charts
Thresholds
Indicators

Actions
Quality improvement
Outcomes
Transparency

Interpretations
Definitions
Indications
Control charts

4(a)What is an HRIS?

A Human Resources Information System (HRIS) is the most used software in HR. In this blog, we will give an overview of what an HRIS is, its main functionalities, and everything you need to know to have a basic understanding of the HRIS.

4(b)Bring out the typical application of HR analytics

BENEFITS OF HR ANALYTICS

Improve hiring

Improve experience

Improve processes

01 02 03 04 05 06

Reduce attrition

Productive workforce

Gain trust

4(c) Elucidate the process of connecting HR analytics to business benefit with few examples

9 business critical benefits of HR analytics
1. Improve retention.
2. Drive employee performance.
3. Create better compensation and incentive programmes.
4. Supercharge recruitment.
5. Make real change to company culture.
6. Improve employee engagement.
7. Enable better workforce planning.
8. Promote better employee development.

5(a) what is HR dashboard?

An HR dashboard is a business intelligence tool that allows Human Resource teams to track, analyze and report on HR KPIs. ... This way, HR teams can quickly find insights that will improve recruiting, optimize workplace management and enhance employee performance.

5(b)Write a brief note on statistical use for HR analytics and important vendors.

Analytics is a combination of the two terms "analysis" & "statistics". It refers to any analysis driven through the application of statistics. HR analytics is analytics applied to the domain of HR. These analytics can be advanced predictive analytics, or basic, descriptive statistics. This means that HR analytics is a data-driven approach to managing people at work (Gal, Jensen & Stein, 2017).
he world of HR, as well as people in general, can be extremely random. Statistics help to understand, capture, and predict the randomness of our world. It can reduce risk by estimating uncertainties and reveal hidden aspects in day-to-day HR processes. For example, using analytics you can predict who is most likely to leave the organization, estimate whether you are rewarding different employees fairly, and discover biases in your hiring process. Without it, you miss out on a lot of valuable information needed to make better people decisions.

It's always statistics in one form or another to the rescue!

Statistics has just three core parts, that's all. These three musketeers (individually or combined!) can tackle any data-driven solution for HR under the sun!

The three parts are:

- Descriptive statistics

- Inferential statistics

- Statistical modeling

5(c)Critically examine the difficulties in obtaining data , ethics in data measurement and data collection.

The data collection challenges are reported below under the following themes:
1) location, 2) health literacy and language of data collection instrument, 3) duration of data collection, 4) researcher fatigue, and 5) sensitive information.

Ethical Considerations in Data Collection Data collection is central part of community health improvement efforts. Sometimes, the aim is to learn more about a problem as it is experienced by a specific group of people; other times it is to see if people are better off after participating in an intervention. Most data is collected through surveys, interviews, or observation. It's important to keep in mind the following when you collect data:

It is good practice to let people know who you are (your name, organization and reason for collecting data when you ask them if they would like to participate.
? You should have permission from participants (people providing the data) and they should be made aware that their involvement is voluntary. Participants are free to withdraw from any active data collection or intervention program at any point without pressure or fear of retaliation.
? Avoid or minimize anything that will cause physical or emotional harm to participants. Make participants aware of any potential harms prior to their participation.
? Try to remain neutral and unbiased. Don't let your personal preconceptions or opinions interfere with the data collection process.
? Collecting data (i.e. through surveys) is often done under the assumption that information provided is confidential and the findings will be anonymous. You should let participants know when you will have to break confidentiality (e.g. in the case of harm to themselves or someone else) and whether results will be anonymous or not.
? When collecting data, try to avoid taking advantage of easy to access groups simply because they are there (this is called "convenience sampling"). Data should be collected from those that most help us answer our questions.
? Be respectful of people's time and when possible, compensate them for it.

6(a) Define HR Scorecard?
The HR scorecard, or Human Resource Scorecard, is a well-known HR tool. In this article, we will explain what the HR scorecard is, the difference between the HR scorecard and the balanced scorecard, modern-day critique, and show an example template of the HR scorecard.

6(b) explain how HRIS help in HR decision making.

6(c) Discuss the data sources, requirement and types of data required in HR metrics.

HR DATA SOURCES

HRIS data			Other HR data
Recruiting	Demographic data	Performance management	CRM data
Learning management	Job architecture	Compensation & benefits	Financial data
Succession planning	Talent development	Exit interview	Production management data
Learning	Travel	Mentoring	Sales data
Employee survey data	Wellbeing and wellness	Absence data	Other sources

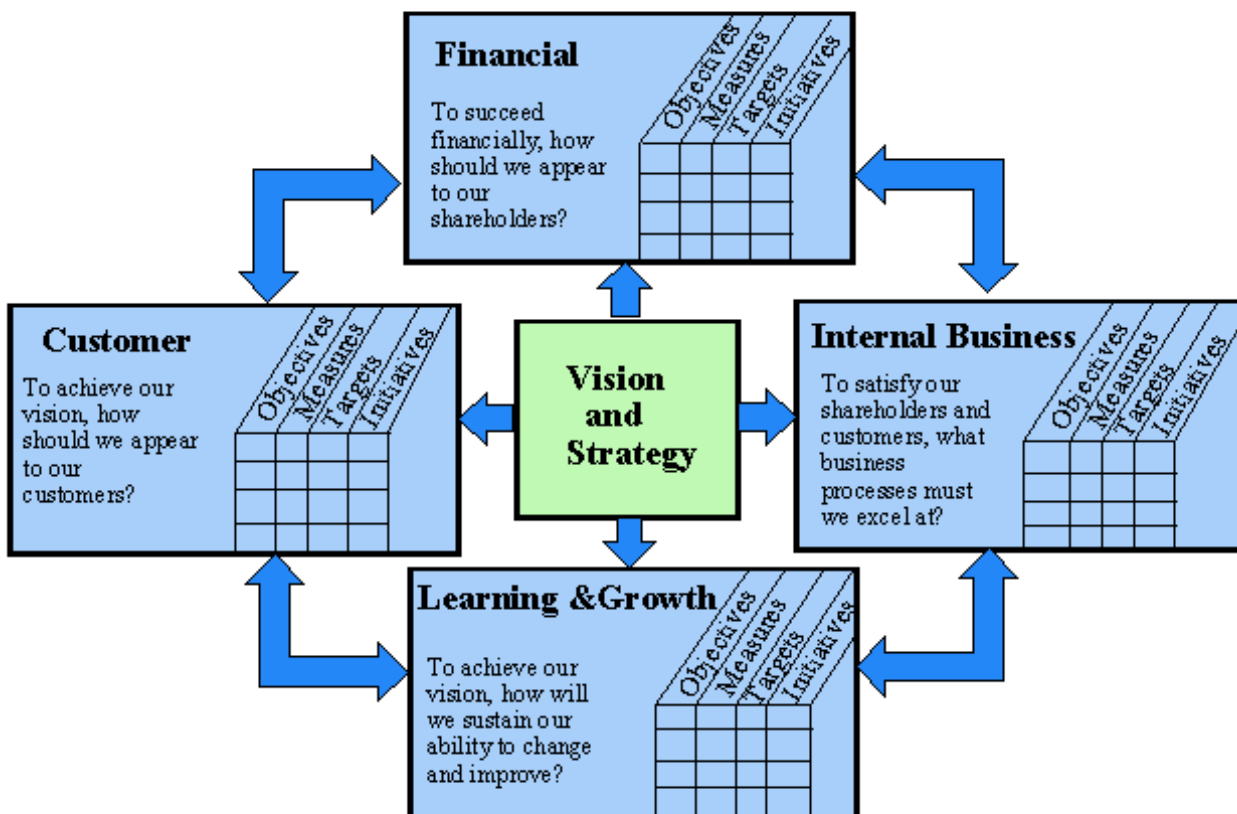HRIS data   Other HR data   Business data

7(a) What are the data visualisation tools?

Data visualization tools provide data visualization designers with an easier way to create visual representations of large data sets. When dealing with data sets that include hundreds of thousands or millions of data points, automating the process of creating a visualization, at least in part, makes a designer's job significantly easier.

These data visualizations can then be used for a variety of purposes: dashboards, annual reports, sales and marketing materials, investor slide decks, and virtually anywhere else information needs to be interpreted immediately.

7(b) Illustrate how a HR scorecard is developed in an organization also design a scorecard for talent management function.

Balanced Scorecard Framework*

Financial

To succeed financially, how should we appear to our shareholders?

Objectives Measures Targets Initiatives

Customer

To achieve our vision, how should we appear to our customers?

Objectives Measures Targets Initiatives

Vision and Strategy

Internal Business

To satisfy our shareholders and customers, what business processes must we excel at?

Objectives Measures Targets Initiatives

Learning & Growth

To achieve our vision, how will we sustain our ability to change and improve?

Objectives Measures Targets Initiatives

* Adapted from Kaplan & Norton 1996. *The Balanced Scorecard*. Harvard Business School Press: 9. Original from HBR Jan/Feb 1996, p. 76.

7(c). Write a note on
Big data

Big Data is a collection of data that is huge in volume, yet growing exponentially with time. It is a data with so large size and complexity that none of traditional data management tools can store it or process it efficiently. Big data is also a data but with huge size.

HCM:21 frame work model:

The HCM: 21 model is a framework for analysing data at an organizational level. It can consist in. key information from financial statements, market researches, production reports or interviews. All. the organization's functions provide different data that needs to be assessed and more, it needs to be.

8 Case study

8   CASE STUDY :

Toyota today is criddled with quality problems. Quality was one of prime USP of this company. The problem evaluated to such a critical level that the company had to recall and most 9 million cars worldwide. Obviously, this lead to significant lowering of the brand value of the company, and drop in sales. John Sullivan (2010) attributes such failure of Toyoter to poor HRM function of the company. Sullivan added that while hull design flow contributed to this catastrophe, the root course of the problem was human error. Human error at times caused for factors which could be beyond the control of employees. It cascades for the actions of the senior management. People at operations level may have inadequate and poor job training.

Toyota's poor HR practices, which Sullivan classified under eight categories, attributed to such mechanical failure, causing recalling of their supplies. Such HR practices are, rewards and recognition, training, hiring, performance management process, corporate culture, leadership development and succession, retention and risk assessment. In all there HR practices, the company failed to integrate with business goals. Moreover, HR decisions were not backed with data, rather it were in accordance with existing system and standards hence systemic failure of management contributed to quality problems and subsequent recalling of cars, resulting several, Billion – dollar loss to the company. It clearly indicates company lacked data–driven HR decisions.

Questions :
a. Identity the major problem of the company?   (05 Marks)
b. Do you thick HR managers failed to foresee quality problems?   (05 Marks)
c. Do you think Toyota could make a difference with HR analytics?   (05 Marks)
d. If yes, substantiate your answer?   (05 Marks)