



**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**  
**PGDM (G/S/M) 2016-18 BATCH TRIMESTER- IV**  
**END-TERM EXAMINATION, SEPTEMBER, 2017 (SET-1)**

Course Name	Human Resource Analytics	Course Code	HR405
Max. Time	2 hours	Max. Marks	40 MM

**Instructions:**

- a. Write your answers legibly and precisely.
- b. Don't write anything on question paper except your roll number.

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**Q.1** HR today has experienced a strategic shift from attendance sheet to balance sheet. In line with the view, explain HR Analytics Value Chain in HR Decision Making with relevant business examples and diagramme. **(08 Marks)**

**Q.2** Despite the growing gamut of HR Analytics, reckon, how various challenges are bugging the efforts of organization in making HR, a business partner, with suitable examples? **(08 Marks)**

**Q.3** *Six Sigma Inc.* has the following HR data. After carefully analyzing the data and applying descriptive analytics tool "HR Metrics" calculate the following and reflect on the results;

- a. AR (Monthly)      b. ROTI **(08 Marks)**

-- *Six Sigma* has over 500 employees at its Gurgaon operations. For the month of October, the number of employees absent were recorded as 75. They had 450 active employees on October 1, 2010 while this number got reduced to 425 at the end of 31 October, 2010. *Six Sigma* was open for standard working days in the month of October.

-- A safety programme at *Six Sigma* for training 25 safety staff, costs the company \$25,000 to develop and implement. One year later there had been a small decrease in accidents, saving the company a total of \$10,000.

**Q.4** Consider, you are Chief Human Resource Management Officer (CHRO) at Excellent Telecaller Services Pvt. Ltd. situated at Noida. Your company is a vendor for Airtel Ltd. to handle customer related issues. In your company, there are two types of customer care executives;  
1. CCE-Hindi and 2. CCE-English

CCE-Hindi takes \$4 per hour and handles 2 calls in an hour. CCE-English takes \$6 per hour and handles only 1 call in an hour. After a thorough research, you have calculated that your company cannot pay more than \$2500 per hour to all CCE-Hindi and CCE-English accounted together. In addition, the maximum calls that are handled by CCE-Hindi and CCE-English is always less than equal to 1000. Further, each CCE-Hindi is billed for \$9 and CCE-English for \$10.

Write a linear programming model to calculate and prescribe required number of CCE- Hindi and CCE- English representatives, with an objective to maximize the billed revenue for your organization? **(08 Marks)**

**(Note: No need for calculation. Only write down the model.)**

**Q.5**

**Case: Matrix Solutions Pvt. Ltd.**

Matrix Solutions Pvt. Ltd. is an Indian IT firm. Being in the business for over a decade, off-late, it's finding tough to address increasing cases of poaching of some its best programmers over the past one year. IT and ITES firms, despite having signed a mutual anti-poaching treaty with each other, seem to be not keeping their words. Behind the curtain, the game of raiding is on, and on an average some good programmers are leaving with a very short notice without bothering about their notice periods as they are being poached with all their liabilities. The liabilities, be it, notice period pay or due project's incentives all are met by their new employers. The hard effort being put on hiring new programmers as replacements, is not yielding into anything good as this exercise of hiring and losing candidates to the hands of competitors, is affecting the projects delivery of clients like anything. The losses due to not meeting project deadline, breach of T&Cs of SLA's, is going up everymonth.

People Manager, Mr. Ved Vyas has been asked to pull his socks up to take the things in his stride before it's too late. Mr. Ved has been a seasoned HR professional throughout his life but has not addressed poaching issues much in the past. He has been advised by one of his close friends in HR fraternity to try HR Analytics to address this issue. He somehow, has agreed to the suggestion and now wants to use predictive analytics to gauge the new candidates' values for their long-term stay period at Matrix, who are applying afresh to the vacant positions due to attrition.

Matrix is all set to hire new IT Engineers with core competence of Programming. But before doing so, Mr. Ved has to predict the potential value of candidates. Mr. Ved conducted rigorous research with help of senior management team and identified five-possible predictor variables (independent variables) viz. Relevant Experience, Cost to Company, Analytical Skill Score, Communication Skill Score, Programming Skill Score assessed during recruitment process. Below table shows result of multiple linear regression among Employee Value as dependent variable and five independent variables.

Variable Name	Coefficients	p-value
Intercept	-210989.74	0.001
Relevant Experience	-20819.62	0.066
Cost To Company	1.13	0.006
Analytical Skill Score	4781.36	0.584
Communication Skill Score	21490.78	0.024
Programming Skill Score	17920.35	0.018

Considering above results at 95% confidence level;

- a. Help Mr. Ved in explaining which independent variable(s) have significant relations with Employee Value that can lead to good hiring as a consequence.
- b. How can Mr. Ved predict employee value of a candidate who have applied for the post of IT Engineer having experience of 3 years, demanding salary of \$ 56,000. Candidate was given skill score for analytical (7), communication (6) and programming skill (7) respectively during interview process.

**(08 Marks)**

**(Note: For calculations, you may use data given in coefficients column.)**