JAIPURIA
INSTITUTE OF MANAGEMENT
LUCKNOW NOIDA JAIPUR INDORE

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M) / PGDM (SM)
V TRIMESTER (Batch 2019-21)
END TERM EXAMINATION, JANUARY 2021
Set – I

Course Name	Human Resource Analytics		Course Code	HR504
Max. Time	2 Hours		Max. Marks	40 MM

Instructions:
a. All the questions are compulsory and carry 10 marks each.
b. Q.1-3 to be done in <u>one single MS-Word file only</u> (Arial font size 11) while Q.4 to be done in MS-Excel.
c. Be precise and objective in your answers.

Q1. *Tubec* is a manufacturing company which has had a stellar performance in terms of profitability. The Promoter and the CEO want to maintain the same level of performance over the next 2 years. So they discussed this with their core strategic team. The CHRO recommended HR Analytics to them and said we need a really good HRA professional to help on this. The company does not know much about HR Analytics, but the CHRO is trying to catch up. You've been hired as an HR Analytics expert in the consulting role. You are required to provide CHRO and top management with some sample questions and answers that HR Analytics can help them achieve their goals. They also want to understand the foundations of HR Analytics and want you to communicate the necessity of it to the board.

Using *LAMP Framework* with the below discussion points, elaborate, how will you communicate your ideas and plans to the top management and the CHRO, meeting their objectives?

Discussion Points:
a. Descriptive HR Analytics
b. Predictive HR Analytics
c. Prescriptive HR Analytics
d. HR Metrics for HR Functions/Processes and Workforce
e. HR & Its BP Role in Bottomline of the Organization

Q2. A washing soap company which operates in Delhi/NCR, and has Sales Executives in several districts (as mentioned in the table below). Before the COVID-19 situation, the company was doing well and had a huge sales team working in the Delhi/NCR. During the COVID-19 a lot of requests were received by management from these sales team members for allowing them to shift to their hometowns. The management agreed to accept formal requests and also communicated that if the requests are within specific limits and does not affect the operations in the territories, they would allow the transfers.

Data of Trainee Sales Executives movement in a FMCG Co. (12 months)							
ABC Ltd.	**Trainee Sales Executives (TSEs)**	No. of TSEs	GZB	NOI	FBD	GGM	DEL	Exit
Jan-20	Ghaziabad (GZB)	350	0.6	0.15	0.2	-	-	0.05
	Noida (NOI)	360	0.1	0.8	0.05	-	-	0.05
	Faridabad (FBD)	320	0.05	0.05	0.6	0.1	0.1	0.1
	Gurugram (GGM)	200	-	-	-	0.8		0.2
	Delhi (DEL)	150	-	-	-	0.2	0.6	0.2
	Total	1380	?	?	?	?	?	?

The above table is about pre-COVID situation staff strength and the requests received and the probabilities. Predict envisaged sales team strength for Jan 2021 (in the transition matrix) for each of the territories if the management accepts transfers. Please use step-wise solution for the above given data.

Q.3 DATALYTICS has the following historical HR data. They want to use HR metrics to describe the health of HR functions/processes and their efficiency levels. Apply relevant HR metrics, reflect on the findings w.r.t. benchmarks and suggest corrective measures.

Particulars	Benchmark
• The company has over 1000 employees at its Faridabad office. For the month of Nov., the number of employees absent recorded were 550. It had 1003 active employees on Nov. 1, 2020 while this number got reduced to 453 at the end of Nov., 2020. The co. was open for 30 working days in the month of Nov. Measure the Absence Rate.	2%
• The total revenue of the company was INR50,00,000, while operating expenses were INR6,00,000. The CTC of employees was estimated at INR5,00,000 while benefits paid to them added upto INR50,000. Measure ROI on Human Capital.	7
• The company received 240 applications from a head-hunting firm. From those, only 120 candidates could qualify to Screening Calls. Then, 30 were given a Sales Assignment. Next, only 15 were invited to Prelim. Interview out of which 05 went through to Final Interview and finally 01 candidate received the offer. Measure Yield Ratios.	Min. & Max. Conversion Yield
• Out of its 1050 employees (1000 FTE). Jaya, the company's HR Manager is concerned over the pressure on HR to perform, resulting in high workload than there are people to bear it. The current HR team consists out of 15 people (13 FTE) and Jaya wants to make a case for more HR hiring budget. Measure HR to Emp. Rate to help her benchmark and request for more manpower to HR team.	2-3%

Q.4 Consider, you are Manager HR at iCall Services, Noida (Service Partner for outbound process of Airtel). At iCall, there are two types of customer care executives:
a. CCE-Hindi and
b. CCE-English

CCE-Hindi takes Rs.280 per/hr and handles 2 calls in an hour. CCE-English takes Rs.420 per/hr and handles only 1 call in an hour. After a thorough research, you have calculated that your company cannot pay more than Rs.1,75,000 per/hr to all CCE-Hindi and CCE-English accounted together. Further, 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 Rs.630 and CCE-English for Rs.700.

Write a linear programming model to measure and prescribe required number of CCE- Hindi and CCE- English representatives with an objective to maximize the billed revenue for your organization, using MS-Solver.

![JAIPURIA INSTITUTE OF MANAGEMENT LUCKNOW NOIDA JAIPUR INDORE]

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M) / PGDM (SM)
V TRIMESTER (Batch 2019-21)
END TERM EXAMINATION, JANUARY 2021
Set – II

Course Name	**Human Resource Analytics**	Course Code	**HR504**
Max. Time	**2 Hours**	Max. Marks	**40 MM**

Instructions:
a. All the questions are compulsory and carry 10 marks each.
b. All answers to be written in <u>one single MS-Word file only</u> (Arial font size 11).
c. Be precise and objective in your answers.

Q.1 HR today has experienced a strategic shift from attendance sheet to balance sheet. In line with the statement, explain how HR Scorecard can be used in HR Analytics and thus become a key partner in business? Also, develop a HR Scorecard for measuring the performance of an HR Manager whose key deliverables involve: Recruitment, Learning & Development and Performance Management.

Q.2 Despite the growing need of HR Analytics at organizations, HRBP role has not truly flourished yet. Keeping the various challenges in mind, show how a tweaked McKinsey 7s Model can help in implementing HR Analytics at contemporary organizations, with suitable examples?

Q.3 HR Manager of the *Value-Cart* has collected the following HR data of various functions and processes. Apply the relevant HR metrics, reflect on the findings w.r.t. benchmarks and suggest corrective measures.

Particulars	Benchmark
• In the beginning of August the co. had 500 employees while the number of active employees on payroll were 450 at the end of the August month. Employees who left during the month, were 35 in numbers. Measure Employee Turnover Rate.	5%
• Co.'s HR dept. incurred following expenses: Stationery INR2,000, Vehicles & Petrol INR5,000, Mobilephone Bills INR1,000, Salaries INR1,00,000 and Miscellaneous INR2,000. The monthly budget of the dept. was INR1,00,000 with an additional cushion of INR5000. Measure HR Expense Factor.	Budget
• In a major recruitment drive *Value-Cart* hired 100 Delivery Service Executives (DSEs) for its Noida hub. The cost that they incurred in the drive were; Advertising INR 3000, Agency INR 5000 (upon successful probation of new-hires), Employee referrals INR 1000, Recruiters Incentives INR 1000. Measure Cost Per Hire.	INR 80-100
• A safety program for training 25 safety staff at *Value-Cart*, cost the company INR 2,50,000. One year later there had been a small decrease in accidents, saving the company a total of INR 1,00,000. Measure Return on Training Investment.	ROTI Benchmark

.4 Flipkart is an Indian e-commerce firm. It is hiring for System Engineers. But before doing so, HR has to predict the potential value of candidates. HR 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	Coefficient	P-value
Intercept	-200362.64	0.001
Relevant Experience	-20819.62	0.066
Cost To Company	2.53	0.006
Analytical Skill Score	4781.36	0.584
Communication Skill Score	27301.15	0.024
Programming Skill Score	17920.35	0.018

Considering the results at 95% confidence level;

a. Explain, which independent variable(s) have significant relations with Employee Value that can lead to good hiring as a consequence.
b. Predict employee value of a candidate who has applied for the post of IT Engineer with 3 yrs. of experience, demanding salary of $56,000. The candidate was given: Analytical Skill Score(7), Communication Skill Score(6) and Programming Skill Score(7) during interview process.
c. Predict employee value of another candidate who has applied for the same post with 5 yrs. of experience, demanding salary of $60,000. The candidate was given: Analytical Skill Score(6), Communication Skill Score(4) and Programming Skill Score(9) during interview process.
d. Decide which of the two candidates should be selected and why? Can there be some other considerations besides "VALUE", which may improve/change your decision?