

**VPM's**  
**DR VN BRIMS, Thane**  
**Programme: MMS (2013-15)**  
**Third Semester Examination October/November 2014**

<b>Subject</b> MMS III HR		<b>Human Resource Planning and Audit (HRPA 03)</b>	
<b>Roll No.</b>		<b>Marks</b>	<b>60 Marks</b>
<b>Total No. of Questions</b>	<b>7</b>	<b>Duration</b>	<b>3 Hours</b>
<b>Total No. of printed pages</b>	<b>4</b>	<b>Date</b>	05-11-2014

**Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.**

**Q1) 20 Marks (Compulsory)**

ABC Ltd. has the following manpower data for their maintenance division for the Assistant Manager level for the past 5 years.

**Classification of work**

<b>Job Category</b>	<b>Hours per job</b>
Related to meters	2
Related to installation	4.5
Related to maintenance	3.5

**Forecast of jobs in a day for different years, Assume 8 hours, Leave Allowance of 10%, Fatigue Allowance of 10%.**

<b>Job category</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Meters	50	55	56	50	51
Installation	30	34	38	25	40
Maintenance	25	20	25	22	30

<b>Year</b>	<b>Weightage</b>
2009	0.50
2010	0.75
2011	2.25
2012	2.50
2013	4.00

Forecast manpower requirement of Assistant Managers in 2014 using a weighted moving average method. Assuming the forecasted manpower requirement is taken care off by the HR Department and you have the past data of movements of employees in different designations, find out the internal supply of employees across all level in 2015 by Markov method.

<b>Particulars</b>	<b>MT</b>	<b>AM</b>	<b>M</b>	<b>SM</b>
No. of employees	100	Data obtained from moving average method	10	4
Employee Turnover Rates	30%	20%	10%	5%
New recruitments as a % of total recruitments	85%	10%	5%	0%
Percentage demoted to previous level	0%	5%	2%	1%
Percentage promoted to next levels	60%	30%	10%	0%

Assuming 85 joined on 1st April 2015.

**Attempt Any FOUR from the Remaining SIX Questions**

**Q2) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

a) With the help of the workload analysis method, find out the number of employees required in the Human Resource department of XYZ Ltd. Assume Man hours per day to be 6 hours, Leave Allowance of 10%, Fatigue Allowance of 15%. Details of the activities are as follows:

Sr. No.	Job Category	Minutes per Job	Jobs per day
1	Joining formalities	60	20
2	Filing of papers	30	50
3	Small projects	60	10
4	MIS preparation	90	80

b) Through the Markov's Chain model, find out the number of senior managers in the organization in the year 2013. Below given details are for the year 2012. New joinees in the year 2012 are 100 and in the year 2013 are 125.

Particulars	MT	AM	M	SM
No. of employees	60	180	50	20
Emp. Turnover rates	22%	30%	10%	4%
New recruits as % of total recruitments	95%	5%	-	-
Percentage promoted to next levels (p.a.)	78%	5%	2%	-

c) You have been appointed as an external consultant to develop Manpower Planning of an insurance company. What factors would you recommend them to consider for effective Manpower Planning?

**Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

a) An Airline Company keeps on standby certain pilots so that they can be called for as an when there is an emergency or turn offs by the rostered pilots to cater to the flying duties. Previous years experience indicated the daily demand of pilots is as follows:

<b>No. of days in the year</b>	20	80	70	40	10	30	50
<b>No. Of pilots required</b>	5	10	18	25	33	42	50

Random no's are: 1435, 1689, 1657, 9822, 0476, 6687, 7954, 0335, 5546, 6742, 8745, 0358, 9756, 2464, 1354

Using the middle two digits of the random numbers, generate the demand for the next fifteen days

b) Godrej has the following manpower data for their healthcare division for the past 6 years. You have been asked to forecast their manpower requirements in 2014 using a 6-period moving average method.

P.T.O

Year	Manpower level/Data (in nos)
2009	500
2010	600
2011	800
2012	1000
2013	1100
2014	1300

c) What is HRP? Explain the HRP process in details.



**Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) State benefits and objectives of HRP, requisites for successful HRP and barriers to HRP
- b) State in detail the factors that affect HRP with examples
- c) With the help of below mentioned details of different grades of tellers in 2009, where the Company has projected the transition across the department for next 5 years.

	Executive/ E1	Sr. Executive/ E2	Officer/O1	Assistant Manager/A1
<b>No. of Tellers</b>	220	180	115	90
<b>Employee Resigned</b>	50%	30%	15%	8%
<b>Employee Superannuated</b>	0%	0%	5%	2%
<b>% promoted to next level</b>	20%	20%	10%	5%
<b>Percentage of new recruits</b>	60%	20%	10%	10%

An estimated new recruit in 2010 is 150 new employees. Using Markov Anaysis find out the supply of internal tellers across all grades in 2010.

**Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) During the last 5 years, the average percentage of eligible managers who got promotion and who resigned from different managerial ranks in a company is given in the tabular representation below. Assume that most resignations happened only after the promotion tables were published. The current distributions of officers in the 3 ranks were 125 Assistant Managers, 75 Deputy Managers and 50 Managers. To maintain its current distribution of managers in different ranks constant, how many fresh managers it must recruit in different ranks next year?

Ranks	% got promotion	%who quit the company
<b>AM</b>	40	20
<b>DM</b>	30	30
<b>M</b>	10	30

- b) State different supply forecasting methods. Also state the logic behind Monte Carlo simulation.
- c) State the different demand forecasting methods with examples.

**Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What is HR Audit? State its scope and Checklist.
- b) State the Labour Turn Over Index and Stability Index in Waste Analysis.
- c) As an HR Manager in a national bank you have access to historical data about branch activity and employment across India from 2001 to 2009. These two variables develop a productivity ratio in terms of how many customers each teller is able to serve per year. You are asked to make a quick and rough estimate of teller projections for the bank using this information and are expected to apply a regression analysis.  
The bank is expecting a 5% annual growth rate in their number of customers from 2009-2012. This is due to an aggressive marketing technique and the launch of a high interest banking incentive for customers who leave their existing bank to join yours. As well because of plans to launch a training and orientation program targeted at all employees the bank also expects an annual increase in productivity over the next 2 years.



Using this information and the chart with data provided below, predict the organization's demand for tellers in 2010 when 7Lakhs customers are to be served.

Year	No. of customers in 1000	No. of tellers
01	650	580
02	690	610
03	640	575
04	585	550
05	550	515
06	605	560
07	625	570
08	659	590
09	680	605
10	700	?

**Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

a) A call centre out of Halifax, Nova Scotia is currently in the process of conducting an HR planning exercise. They have estimated employee flow throughout the organization and have mapped this information onto the following Markov matrix:

	A	B	C	D	Exits
A. Shift Manager (n=6)	0.70	0.05	0.00	0.00	0.25
B. Department supervisor (n=18)	0.13	0.82	0.03	0.00	0.02
C. Team Leader (n= 105)	0.05	0.20	0.62	0.05	0.08
D. Customer Service Representatives (n= 590)	0.00	0.00	0.22	0.54	0.24

1. Outline employee movement projections and the supply estimates for each level for next year.
2. What trends in the predicted workforce movement should be highlighted as potentially problematic?

b) Following data is estimated to be the transition pattern for 2013 for a retail company where numbers of employees at different grades are Store Managers (SM) - 15, Assistant Store Manager (ASM) - 36, Section heads (SH) - 94, Departmental heads (DH) - 288, Sales executive (SE) -1440 of which 3 SM, 2 ASM, 14 SH, 46 DH and 288 SE left the company. Find out the forecasted supply across different grades in 2014, where new recruit is 100 of which 90% is at Sales Executive level and 5% is at Department heads, 3% at Section heads and 2% at assistant store managers' level.

2013-14	SM	ASM	SH	DH	SE
SM	80%				
ASM	11%	83%			
SH		11%	66%	8%	
DH			10%	72%	2%
SE				6%	74%

c) Different between Nominal group technique and Delphi technique of Demand forecasting.