THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Effects of Training and Development on Firm Performance: A Research Work based on Some Selected Organizations

Md. Rakeullah Chowdhury
Lecturer, Department of Business and Economics, Metropolitan University, Sylhet, Bangladesh
Md. Mehedul Islam Sabuj
Lecturer, Department of Marketing
Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh
Md. Main Uddin Ahammed
Lecturer, Department of Finance & Banking
Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh

Abstract:
Training and Development programs directly and indirectly impact the business growth. A strategic decision about these programs will help an organization to gain and sustain competitive advantages. In this study we tried to show the relationship between training & development programs and firm performance as well as the extent of this relationship. We also identified various training programs undertaken by different organizations. Training and development programs were divided into three subcategories such as learning opportunities, training design and employee performance. These subcategories were considered as independent variables and firm performance as dependent variable. Primary data were collected by using questionnaire method and secondary data were from various journals, newspapers, articles and research works. Various questions are selected on the basis of dependent and independent variables to make the questionnaire. The questionnaire was close-ended and divided into two parts. One part contained yes-no questions which helped to identify the current training and development programs undertaken by firms and the other part contained questions with Likert Scale which helped to find out the relationship between dependent and independent variables. 150 respondents filled out our questionnaire and after that the data were analyzed. To analyze data, we have used SPSS (Statistical Package for Social Science) and Microsoft Excel 2007. Various statistical tools such as frequency, correlation, graph, hypotheses, regression etc. have been used for this study. After analyzing data, we found that most of the organizations undertake various types of training and development programs for their employees but some advanced level trainings are quite uncommon. We also found that there has a positive correlation between training and development and firm performance. Finally, we recommend organizations to handle various training and development programs keenly so that their performance increase and they can sustain successfully for the long run.

Keywords: Training and development, firm performance, employee performance, competitive advantages

1. Introduction

Efficient workforce is most valuable resource of an organization. It helps the organization to achieve competitive advantages in the market place by beating competitors. To make the workforce efficient no other tools are effective except training. Without giving proper training to the current and new employees, firms cannot make them productive and thus the firm cannot be profitable. As we know human being is the core of a business and human being can be converted into human resources by learning which is possible through training in an organization. Training makes employees knowledgeable and capable of doing their jobs in a right way. If an employee accomplishes his/her tasks in a right way at the right time, then he/she will be the most significant for the improvement of firm performance. So, an organization's human resource training and development (T&D) system is a key mechanism in ensuring the knowledge, skills and attitudes necessary to achieve organizational goals and create competitive advantage (Peteraf 1993).

Training is a learning process which is directed toward the possession of particular knowledge and skills for the purpose of accomplishment of an occupation or particular task. To make this learning process more effective and efficient organizations have follow some principles. According to Bryn Leslie (1990), there are four main requirements for learning to take place. The first is motivation. There is an old saying that a horse can be led to the river but cannot be made to drink. People learn if they accept the need for training and commit to it. If their motivation is weak, for instance if they doubt their ability to learn, no matter how well their training is designed and implemented, its effectiveness will be limited. The second requirement is cue. Through training the learner recognizes relevant cues and associates them with desired responses. The third one is response. Training should be immediately followed with positive reinforcement to enable the learner feel the response. The reinforcement should be positive, timely and

consistent. Finally, feedback – the information the learner receives indicating the quality of his response is the feedback. It should be made available as quickly as possible to ensure possible effective learning.

Globalization makes the world small. Now businessmen can conduct their business in every country of the world through free trade economics due to globalization. There have two types of effect of this situation. One, various international organizations are entering into the local market and are making the market highly competitive. Two, various local organizations are entering into international markets and are fighting with the organizations of other countries. Whatever the situations, companies have to compete with various high performed organizations. To compete with various local and international organizations, organizations need highly efficient employees and high-efficient employees are possible only through training and development programs. In recent years' trade unions, employers and policy makers have emphasized the importance of skill upgrading of workers and lifelong learning in order to cope with increased pressures induced by technological change and globalization (e.g.; European Commission, 2007).

2. Literature Review

The training and development play a very important role in developing firm performance. It creates value to the organization by improving the skill of the workforce. It also motivates people to work spontaneously. Various researches have recognized the importance of training and development in enhancing firm performance. Fairfield-Sonn (1987) said that training is very important factor in enhancing competitive advantage. Training makes a worker comfortable to work in an unfavorable condition. It is seen as a useful means of coping with changes fostered by technological innovation, market competition, organizational structuring, and demographic shifts (Knoke and Kalleberg, 1994). Effective training plays a vital role in building and maintaining capabilities, both on individual and organizational level, and thus it helps to cope with in the process of organizational change (Valle et al., 2000). Moreover, it enhances the retention capacity of talented workforce, hence decreasing the unintentional job rotation and turnover of the workers (Jones and Wright, 1992; Shaw et al., 1998).

Staff training and development is a work activity that can make a very significant contribution to the overall effectiveness and profitability of an organization (Adeniyi, 1995). Competition in the global market place has increased the importance of training. Because competition compels an organization to reduce cost and provide better services. If an organization provides proper training to its workers, then workers efficiency will increase and the firm will be able to provide better services to its clients at lower cost than its competitors. Beardwell and Holden (1993) said that the recognition of the importance of training in recent years has been heavily influenced by the intensification of competition and the relative success of organizations where investment in employee development is considerably emphasized.

Efficiency and effectiveness are ingredients of performance apart from competitiveness and productivity and training is a way of increasing individual's performance (Cooke, 2000). So cook viewed the training as investments in human resources. Training is an integral part of organization and a never ending process. It should not be short time project. According to Tannenbaum & Yukl (1992); Wexley & Latham (1991) training must be viewed as a long term process, not just an infrequent and/or haphazard event. Assessments of employee and organizational needs as well as business strategies should be conducted and then used in selecting training methods and participants (Goldstein, 1991). Training programs that are consistent with employee and organizational goals and needs and fit with the business strategy will meet with greater success than those that are not (Wexley & Latham, 1991). So, effective training programs should satisfy the requirements of employees, environment and the objective of the organization.

3. Methodology

This research is basically descriptive in nature and based on both primary and secondary data.Primary data are the questionnaire given to concerned respondents and the secondary sources are related newspapers, journals, books, articles and publications. The study shows the relationship between dependent and independent variables as well as the current training and development programs undertaken by various organizations. There were three independent variables are Learning Opportunities, Training Design and Employee Performance and these independent variables affect the dependent variable (firm performance). We developed a questionnaire which contained two parts such as training programs undertaken by organizations and effect of training and development activities on firm performance. We presented the questionnaire to one hundred and fifty employees of various organizations to collect data. The population of study this is consists of employees of various private organizations basically the banking sector based on Dinajpur region in Bangladesh. We have collected data from 150 respondents through questionnaire and interview by using convenience and judgmental sampling technique. Our questionnaire has to part, one part is consisting of "yes-no" questions and the second part is consisting of five point Likert scale ranges from strongly disagree to strongly agree. We tested the data validity by using Cronbach's Alpha Coefficient. We have also analyzed data and tested hypothesis by using multiple regression, correlation and ANOVA analysis through SPSS (Statistical Package for Social Science).

4. Results and Discussions

4.1. Reliability and Validity Testing

The data reliability and validity is very important for any research. For this purpose, we have used Cronbach's alpha method to determine the reliability and validity of data. The scale ranges from 0 to1. The satisfactory level is required to be minimum 0.6 for the scale to be reliable (Cronbach, 1951). The results of data validity and reliability are given below.

Scales	Alpha Coefficient	Number of Items
Identification of Training Programs	.812	15
Learning Organization	.738	5
Training Design	.789	6
Employee Performance	.711	3

Table 1: Reliability Value of the Scale

From the Table 1, it is seen that the reliability value was estimated to be $\alpha=0.711$ to 0.812 between the scale. If we compare our reliability value with the standard value alpha of 0.6 advocated by Cronbach (1951) we find that the scales used by us are highly reliable for data analysis.

4.2. Training Programs Undertaken by Organizations
We have selected 15 types of training programs and keep another blank space for covering the others types of trainings provided by the organizations. But most of the respondents out of 150 respondents marked our given training programs. The given table is showing the condition of training and development programs undertaken by organizations.

Training Programs	Yes	No
New Employee Orientation (OrT)	96%	4%
New Equipment Operation (NEq)	83%	17%
Communication Skill Development (CSD)	76%	24%
Product or Service Knowledge (SKT)	94%	6%
Time Management (TMT)	57%	43%
Computer Systems (CST)	88%	12%
Customer Service (Cus)	89%	11%
Leadership (LD)	65%	35%
Problem Solving (PST)	84%	16%
Career Development (CD)	52%	48%
Presentation Skills (PSk)	64%	36%
Creativity (CT)	41%	59%
Managing Change (MCh)	54%	46%
Management and Supervision (MS)	91%	9%
Safety Measures (SM)	73%	27%

Table 2: Training and Development Programs Undertaken by Organizations
Source: Field survey

Most of the organizations are giving New Employee Orientation, New Equipment Operation, Product or Service Knowledge, Computer Systems, Customer Service, Problem Solving, Management and Supervision to the employees. The rates of responses on these trainings are above 80 percent. Creativity training is not given to employees in a normal situation. And others are averagely given to employees. A comparison of various training and development programs shown in the following figure:
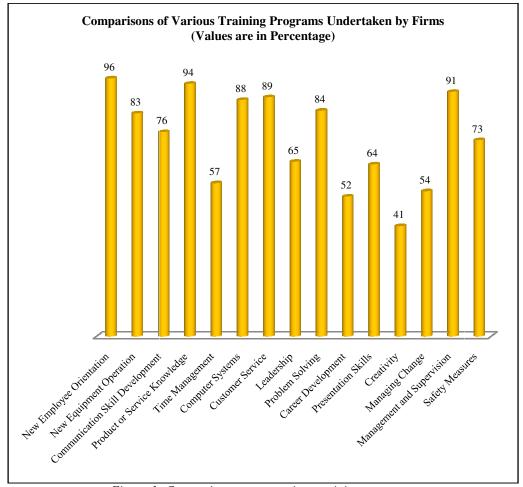
Figure 1: Comparison among various training programs

4.3. Correlation between Dependent and Independent Variables

To find out the association or relationship between training & development and firm performance we calculate the correlation of our collected data. From the SPSS output, we have gotten the following table of correlation:

		Learning Opportunities	Training Design	Employee Performance	Firm Performance
Learning Opportunities	Pearson Correlation	1	.726[**]	.581[**]	.507[**]
	Sig. (2-tailed)		.000	.000	.000
	N	150	150	150	150
Training Design	Pearson Correlation	.726[**]	1	.702[**]	.537[**]
	Sig. (2-tailed)	.000		.000	.000
	N	150	150	150	150
Employee Performance	Pearson Correlation	.581[**]	.702[**]	1	.543[**]
	Sig. (2-tailed)	.000	.000		.000
	N	150	150	150	150
Firm Performance	Pearson Correlation	.507[**]	.537[**]	.543[**]	1
	Sig. (2-tailed)	.000	.000	.000	
	N	150	150	150	150
[**]. Correlation is significant at the 0.01 level (2-tailed).				Source: Field survey	

Table 3: Correlations between variables

From the above table we have seen that all the variables of training & development have positive correlation with firm performance. All the values are between 0-1. From the output, we can see that the correlation coefficient between learning opportunities and firm performance is 0.507 and the p-value for two-tailed test is less than 0.0005. From these figures we can conclude that there is a strong positive correlation between learning opportunities and firm performance at the significance level of 0.01. Correlation coefficient between training design and firm performance is 0.537 and the p-value for two-tailed test is less than 0.0005. From these figures we can conclude that there is a strong positive correlation between training design and firm performance at the significance level of 0.01. Again, correlation coefficient between employee performance and firm performance is 0.543 and the p-value for two-tailed test is less than 0.0005. From these figures we can conclude that there is a strong positive correlation between employee performance and firm performance at the significance level of 0.01

So we can conclude from correlation analysis that training and development has association with the firm performance and this association is positive.

4.4. Multiple Regression Analysis
In this study multiple regression analysis is used as a statistical technique to analyze linear relationship between a dependent variable and multiple independent variables. This is a way to recognize whether there is significant relationship between independent variable and dependent variables or not.

4.4.1. Hypothesis 1:
- H_0: There is no significant relationship between learning opportunities and firm performance.
- H_1: There is a significant relationship between learning opportunities and firm performance.

Model Summary[b]									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.567[a]	.321	.297	.78938	.321	13.619	5	144	.000
a. Predictors: (Constant Sufficient Training, Frequency of Training, Potential for Further Development, Supervisor's Encourage, Career Planning									
b. Dependent Variable: Firm Performance									

Table 4: Relationship between Firm Performance and Learning Opportunities

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.430	5	8.486	13.619	.000[a]
	Residual	89.730	144	.623		
	Total	132.160	149			
a. Predictors: (Constant), Sufficient Training, Frequency of Training, Potential for Further Development, Supervisor's Encourage, Career Planning						
b. Dependent Variable: Firm Performance						

Table 5: Analysis of Variance of Learning Opportunities

➢ Decision Rule: To reject the null hypothesis, the calculated p-value must be less than the significance level of 1% i.e. critical p-value
➢ Decision: As our confidence interval is 99%, the critical P-value is 0.01.
Here, Calculated P-value is 0.000(from SPSS Output) which is less than critical P-value.

So, at 99% confidence interval, the null hypothesis is rejected. Here the relationship between Firm Performance and Learning Opportunities was investigated using Pearson Correlation Coefficient for the respondents. The results in Table 4.5 and 4.6 indicates strong and positive relation between Firm Performance and Learning Opportunities exists among organizations (R Square=0.321, n=150, p<0.01).This means 32.1% of firm performance is determined by learning opportunities.

4.4.2. Hypothesis 2:
- H_0: There is no significant relationship between training design and firm performance.
- H_1: There is a significant relationship between training design and firm performance.

Model Summary[b]									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.574[a]	.330	.301	.78715	.330	11.716	6	143	.000
a. Predictors: (Constant), Overall Goals & Objectives, Identification of KSA, Motivation, Improve Organizational Commitment, Decrease Turnover, Increase Job Satisfaction									
b. Dependent Variable: Firm Performance									

Table 6: Relationship between Firm Performance and Training Design

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.557	6	7.259	11.716	.000[a]
	Residual	88.603	143	.620		
	Total	132.160	149			
a. Predictors: (Constant), Overall Goals & Objectives, Identification of KSA, Motivation, Improve Organizational Commitment, Decrease Turnover, Increase Job Satisfaction						
b. Dependent Variable: Firm Performance						

Table 7: Analysis of Variance of Training Design

- ➢ Decision Rule: To reject the null hypothesis, the calculated p-value must be less than the significance level of 1% i.e. critical p-value
- ➢ Decision: As our confidence interval is 99%, the critical P-value is 0.01.

Here, Calculated P-value is 0.000(from SPSS Output) which is less than critical P-value.

So, at 99% confidence interval, the null hypothesis is rejected. Here the relationship between Firm Performance and Training Design was investigated using Pearson Correlation Coefficient for the respondents. The results in Table 4.8 and 4.9 indicates strong and positive relation between Firm Performance and Training Design exists among organizations (R Square=0.330, n=150, p<0.01).This means 33% of firm performance is determined by training design.

4.4.3. Hypothesis 3
- • H_0: There is no significant relationship between employee performance and firm performance.
- • H_1: There is a significant relationship between employee performance and firm performance.

Model Summary[b]									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.752[a]	.565	.557	.62716	.565	63.334	3	146	.000
a. Predictors: (Constant), Reduce Expenses by Expert Manpower, Improve Profitability, Training Are Properly Monitored and Evaluated									
b. Dependent Variable: Firm Performance									

Table 8: Relationship between Firm Performance and Employee Performance

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.734	3	24.911	63.334	.000[a]
	Residual	57.426	146	.393		
	Total	132.160	149			
a. Predictors: (Constant), Reduce Expenses by Expert Manpower, Improve Profitability, Training Are Properly Monitored and Evaluated						
b. Dependent Variable: Firm Performance						

Table 9: Analysis of Variance of Employee Performance

- ➢ Decision Rule: To reject the null hypothesis, the calculated p-value must be less than the significance level of 1% i.e. critical p-value
- ➢ Decision: As our confidence interval is 99%, the critical P-value is 0.01.

Here, Calculated P-value is 0.000(from SPSS Output) which is less than critical P-value.

So, at 99% confidence interval, the null hypothesis is rejected. Here the relationship between Firm Performance and Employee Performance was investigated using Pearson Correlation Coefficient for the respondents. The results in Table 4.11 and 4.12 indicates strong and positive relation between Firm Performance and Employee Performance exists among organizations (R Square=0.565, n=150, p<0.01).This means 56.50% of firm performance is determined by employee performance.

5. Findings
In this paper, we have investigated the impacts of training on firm performance. It is difficult to find strong evidence of training investments justified in terms of improved firm performance. Therefore, we conducted this study in order to understand the relationship between training and firm performance, and to determine the extent to which human resource training policies directly enhance firm performance. Major findings from our study are as follows:

   i.   From the result of previous chapters, we have seen that most of the organizations have taken various training and development programs in order to improve the performance of the employees as well as the firms. Almost hundred percent of the organizations is giving training to the employees.

   ii.   Training and development programs have positive relationship with the performance level of the firm. That means when an organization initiates an effective training program, then the outcomes of the organizations is automatically improves, and when it gives less importance in training, then the outcomes decreases.

   iii.   The relationship between training and development and firm performance is very significant.

6. Recommendations
In this research we review various materials related to the variables used in this research and at the end we also proved our hypotheses. In the light of all this research and all the material which is being used to conduct this research and all the literature review we came to the decision that there should have sufficient training programs in every organization. We recommend that all organizations should provide training to their employees. We already have discussed that training and development have advantages not only for employee but the ultimate benefit is for the organization itself. If the performance of the employee is not good, it will affect the whole organization. However, some specific recommendations from our study are as follows:

   i.   Organizations have to provide advance level trainings such as creativity training, career development training to the employees. From our research we have found that these trainings are not available in many organizations. Availability of these trainings will help an organization to create expert manpower and as a result the firm performance will increase.

   ii.   Organization should provide more and more learning opportunities to its employees. Though we found that most of the organizations provide this, but it has a great impact on the firm performance, so we have to make it more available. If the learning opportunities can be increased by providing training more repeatedly, identifying employees' potential, encouraging for learning, helping in career planning and so on, then the organization can get competitive advantages which will improve the performance level.

   iii.   Organizations should design the training by identifying the knowledge, skills and ability of the employees as well as by identifying the training needs properly.

   iv.   Training design should be in such a way that it can motivate employees to learn and apply and also increase the job satisfaction of the employees.

   v.   Firm performance is very closely related with the employee performance. So, organizations should arrange trainings to increase the performance level of employees as well as their productivity. Proper monitoring and evaluation of training programs can increase the employee performance.

   vi.   Finally, the findings of this study suggests that the Human Resource Department should be more strategic about training and development as the training and development programs are the most crucial investment for the organizations and it plays a vital role to the success of firms.

7. Conclusion
Training and development program plays a pivotal role in making the human resource of an organization valuable. It helps to adjust with any type of changes in the environment. When an organization initiates training and development programs for its employees it benefits from various ways. It helps to reduce time, reduce cost, achieve target properly within time, utilize technology efficiently etc. So each organization should initiate long run training and development program for its employees. There are various dimensions of training program. Most of the organizations conduct lower level and insufficient training to their employees. They donot initiate advanced level training for their employees. Since training and development programs helps firm to achieve competitive advantages by improving its performance each and every organization should initiate sufficient training and development programs ranging from lower level to advance level. Before initiating training and development programs each and every organization should consider workers' capabilities, organizational objectives and market conditions.

8. References

i. Adeniyi, O.I. (1995).Staff training and development in Ejiogu, A; Achumba, I. Asika (eds). Reading in Organizational Behaviour in Nigeria, Lagos. Maltho use Press Ltd, pp. 159-167.

ii. Beardwell, N. and Holden, B. (1993).Managing for Success, 2nd ed. England, Prentice Hall Publisher.

iii. Bryan, Leslie A. (1990). An Ounce of Prevention for Workplace Accidents, Training and Development Journal, NY: USA Vol. 44, No.7.

iv. Cooke F L., (2000). Human Resource Strategy to improve Organizational Performance: A route for British firms, Working Paper No 9 EWERC, Manchester School of Management.

v. Cronbach, L.J., (1951). Coefficient alpha and the internal structure of tests, Psychometrika, Vol.6, No.3, pp.297 334.

vi. European Commission (2007). Strengthening Continuing Vocational Training at the Initiative of the Enterprise. Employment in Europe 2007, Officce for official publications of the European Communities, Luxembourg.

vii. Fairfield-Sonn, J. W., (1987). A strategic process model for small business training and development, Journal of Small Business Management, 25(1), pp. 11-18.

viii. Goldstein I. L., (1991).Training in work organizations. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychologists Press, Palo Alto CA: Consulting Psychologists Press,pp. 507-619.

ix. Jones, G.R., Wright, P.M. (1992). An economic approach to conceptualizing the utility of human resource management practices, in Rowland, K. and Ferris, G. (Eds), Research in Personnel and HRM, Vol. 10.

x. Knoke, D., A. L. Kalleberg (1994). Job training in U.S. organizations, American Sociological Review, 59(4), pp. 537-546.

xi. Peteraf, M.A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View, Strategic Management Journal, 14, 3, pp. 179–192.

xii. Shaw J.D., Delery, J.E., Jenkins, G.D. and Gupta N. (1998). An organization-level analysis of voluntary and involuntary turnover, Academy of Management Journal, Vol. 41 No. 5,pp. 511 25.

xiii. Tannenbaum S. L., Yukl G., (1992). Training and development in work organizations, Annual Review of Psychology, pp. 399-441.

xiv. Valle R., Martı´n F., Romero P.M. and Dolan S. (2000). Business strategy, work processes and human resource training: are they congruent, Journal of Organizational Behavior, Vol. 21, pp. 283-97.

xv. Wexley K. N., Latham G. P.(1991). Developing and training human resources in organizations (2nd ed.), New York: HarperCollins.

APPENDIX I: Questionnaire

Dear Respondent,
We are conducting a research work titled "Effects of Training and Development on Firm Performance". Your kind assistance in answering this questionnaire is very important for the result of this study. The information and responses gathered will strictly be used for academic purposes only and will be kept as confidential. Finally, your kind cooperation in completing this survey is very much appreciated.

Thank You

Please fill up your personal details:
1. Name ……………………………………………………..
2. Designation ……………………………………………
3. Name of Your Organization ………………………………...
4. Gender ……………………………………………………
5. Branch ……………………………………………………
6. Mobile No …………………………………….....................

Section A: Questions for the Training and Development Programs Undertaken by your Organization

1.	New Employee Orientation (OrT)	Yes	No
2.	New Equipment Operation (NEq)	Yes	No
3.	Communication Skill Development (CSD)	Yes	No
4.	Product or Service Knowledge (SKT)	Yes	No
5.	Time Management (TMT)	Yes	No
6.	Computer Systems (CST)	Yes	No
7.	Customer Service (Cus)	Yes	No
8.	Leadership (LD)	Yes	No
9.	Problem Solving (PST)	Yes	No
10.	Career Development (CD)	Yes	No
11.	Presentation Skills (PSk)	Yes	No
12.	Creativity (CT)	Yes	No
13.	Managing Change (MCh)	Yes	No
14.	Management and Supervision (MS)	Yes	No
15.	Safety Measures (SM)	Yes	No
16.	Others: … … … … … … … … … … … … … … … …		

Section B: Please answer by considering the following factors:

1= Strongly Disagree   2= Disagree   3= Neutral   4= Agree   5= Strongly Agree

Learning opportunities							
Q1	Your organization has provided sufficient training for fresher's	1	2	3	4	5
Q2	Trainings are conducted more frequently in your organization	1	2	3	4	5
Q3	Training has offered you the opportunity to identify any potential you have for further development	1	2	3	4	5
Q4	When employees arrive from training, supervisors encourage them to share what they have learned with other employees	1	2	3	4	5
Q5	Your organization has learning environment that links employees to career planning	1	2	3	4	5
Training Design							
Q6	You know the overall goals and objectives of the organization by different training programs	1	2	3	4	5
Q7	Your company considers job skills, knowledge and ability to determine the training needs of the employees	1	2	3	4	5
Q8	You are motivated by and satisfied with the training program of your organization	1	2	3	4	5
Q9	You think training has helped improve organizational commitment of employees	1	2	3	4	5
Q10	Your organization has a training and development policy which decreases labor turnover	1	2	3	4	5
Q11	You think training has helped to improve your job satisfaction	1	2	3	4	5
Employee Performance							
Q12	Training and Development program helped to reduce expenses by creating expertise manpower	1	2	3	4	5
Q13	You think training has helped improve the organization's productivity	1	2	3	4	5
Q14	The results of trainings are properly monitored and evaluated	1	2	3	4	5
Firm Performance							
Q15	You think training has helped improve the organization's profitability	1	2	3	4	5

APPENDIX II: Raw Data of Questionnaire Section B

Sl. No.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	2.00	4.00	5.00	5.00	5.00	5.00
2	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	3.00	5.00	5.00	3.00	5.00	5.00	5.00
3	5.00	4.00	5.00	3.00	4.00	4.00	4.00	5.00	5.00	3.00	4.00	4.00	4.00	4.00	3.00
4	5.00	5.00	5.00	4.00	5.00	4.00	4.00	3.00	5.00	4.00	3.00	3.00	5.00	5.00	3.00
5	5.00	4.00	5.00	4.00	5.00	3.00	4.00	4.00	5.00	4.00	5.00	3.00	4.00	4.00	3.00
6	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00
7	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00
8	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
9	3.00	5.00	5.00	5.00	5.00	4.00	4.00	3.00	5.00	3.00	3.00	4.00	2.00	2.00	4.00
10	5.00	4.00	5.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	3.00	5.00	5.00	4.00
11	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
12	4.00	5.00	3.00	3.00	4.00	3.00	4.00	4.00	5.00	3.00	5.00	4.00	5.00	5.00	5.00
13	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00
14	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	3.00	4.00	5.00	5.00
15	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
16	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
17	4.00	4.00	5.00	5.00	4.00	4.00	3.00	5.00	5.00	4.00	4.00	3.00	4.00	5.00	5.00
18	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
19	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
20	5.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	3.00	5.00	5.00	5.00
21	4.00	5.00	4.00	3.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	3.00	2.00	3.00	4.00
22	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	3.00	5.00	5.00	3.00
23	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00
24	4.00	5.00	3.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	3.00
25	4.00	3.00	5.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00
26	5.00	4.00	4.00	3.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	3.00	3.00	4.00
27	5.00	4.00	4.00	3.00	5.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	3.00	3.00
28	5.00	5.00	5.00	5.00	2.00	5.00	4.00	4.00	4.00	2.00	4.00	5.00	5.00	5.00	5.00
29	5.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	3.00	3.00	5.00	3.00	4.00	4.00	4.00
30	5.00	5.00	4.00	3.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00
31	5.00	4.00	3.00	3.00	5.00	3.00	3.00	3.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
32	3.00	4.00	3.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	2.00	3.00	4.00	4.00
33	3.00	2.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00
34	2.00	1.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
35	4.00	4.00	4.00	4.00	5.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	5.00
36	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	3.00
37	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00
38	5.00	5.00	4.00	4.00	4.00	3.00	3.00	4.00	5.00	5.00	5.00	4.00	3.00	4.00	4.00
39	4.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00
40	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	3.00	3.00	4.00	4.00
41	3.00	4.00	2.00	3.00	4.00	3.00	4.00	2.00	4.00	2.00	4.00	2.00	3.00	4.00	4.00
42	4.00	4.00	3.00	5.00	5.00	4.00	3.00	3.00	5.00	3.00	5.00	4.00	5.00	5.00	4.00
43	5.00	4.00	5.00	4.00	4.00	3.00	3.00	3.00	4.00	4.00	5.00	2.00	3.00	4.00	4.00
44	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	3.00	3.00	5.00	5.00
45	5.00	4.00	4.00	4.00	3.00	5.00	4.00	4.00	3.00	3.00	4.00	2.00	5.00	5.00	4.00
46	4.00	4.00	4.00	4.00	3.00	4.00	3.00	2.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00
47	5.00	5.00	5.00	4.00	5.00	5.00	4.00	3.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
48	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	3.00	4.00	4.00	4.00	4.00	3.00
49	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00
50	5.00	5.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00
51	5.00	5.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00
52	4.00	5.00	5.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	3.00	5.00	5.00	3.00
53	5.00	5.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00	4.00
54	4.00	4.00	3.00	4.00	4.00	3.00	3.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00

55	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	5.00	4.00	3.00	3.00	5.00	4.00	3.00
56	3.00	3.00	2.00	2.00	3.00	4.00	3.00	4.00	5.00	3.00	5.00	3.00	3.00	3.00	2.00
57	4.00	4.00	4.00	3.00	4.00	3.00	4.00	3.00	3.00	2.00	4.00	3.00	4.00	5.00	4.00
58	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	3.00	4.00	3.00	4.00	4.00	4.00
59	5.00	5.00	5.00	3.00	5.00	3.00	5.00	5.00	4.00	1.00	5.00	1.00	3.00	4.00	4.00
60	5.00	4.00	4.00	5.00	5.00	3.00	5.00	5.00	3.00	3.00	3.00	5.00	4.00	4.00	3.00
61	1.00	1.00	3.00	3.00	1.00	2.00	4.00	3.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00
62	1.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00
63	5.00	5.00	4.00	4.00	5.00	4.00	4.00	3.00	4.00	3.00	4.00	2.00	3.00	4.00	4.00
64	4.00	4.00	3.00	2.00	4.00	2.00	4.00	4.00	4.00	3.00	4.00	1.00	3.00	4.00	3.00
65	3.00	4.00	3.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	2.00	4.00	3.00	3.00
66	5.00	4.00	2.00	1.00	3.00	2.00	4.00	4.00	4.00	3.00	3.00	3.00	4.00	3.00	4.00
67	5.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	4.00
68	4.00	5.00	5.00	3.00	3.00	3.00	5.00	4.00	5.00	3.00	4.00	4.00	5.00	4.00	3.00
69	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00
70	4.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	5.00	4.00	5.00	4.00	4.00
71	3.00	4.00	3.00	3.00	4.00	4.00	3.00	3.00	4.00	2.00	3.00	3.00	4.00	4.00	3.00
72	4.00	5.00	4.00	5.00	4.00	3.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	2.00
73	4.00	4.00	4.00	4.00	5.00	5.00	4.00	3.00	3.00	4.00	5.00	5.00	5.00	5.00	5.00
74	5.00	3.00	5.00	5.00	5.00	5.00	3.00	4.00	4.00	5.00	5.00	3.00	5.00	5.00	5.00
75	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00
76	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	2.00	4.00	5.00	5.00	5.00	5.00
77	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	3.00	5.00	5.00	3.00	5.00	5.00	5.00
78	5.00	4.00	5.00	3.00	4.00	4.00	4.00	5.00	5.00	3.00	4.00	4.00	4.00	4.00	3.00
79	5.00	5.00	5.00	4.00	5.00	4.00	4.00	3.00	5.00	4.00	3.00	3.00	5.00	5.00	3.00
80	5.00	4.00	5.00	4.00	5.00	3.00	4.00	4.00	5.00	4.00	5.00	3.00	4.00	4.00	3.00
81	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00
82	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00
83	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
84	3.00	5.00	5.00	5.00	5.00	4.00	4.00	3.00	5.00	3.00	3.00	4.00	2.00	2.00	4.00
85	5.00	4.00	5.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	3.00	5.00	5.00	4.00
86	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
87	4.00	5.00	3.00	3.00	4.00	3.00	4.00	4.00	5.00	3.00	5.00	4.00	5.00	5.00	5.00
88	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00
89	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	3.00	4.00	5.00	5.00
90	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
91	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
92	4.00	4.00	5.00	5.00	4.00	4.00	3.00	5.00	5.00	4.00	4.00	3.00	4.00	5.00	5.00
93	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
94	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
95	5.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	3.00	5.00	5.00	5.00
96	4.00	5.00	4.00	3.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	3.00	2.00	3.00	4.00
97	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	3.00	5.00	5.00	3.00
98	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00
99	4.00	5.00	3.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	3.00
100	4.00	3.00	5.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00
101	5.00	4.00	4.00	3.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	3.00	3.00	4.00
102	5.00	4.00	4.00	3.00	5.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	3.00	3.00
103	5.00	5.00	5.00	5.00	2.00	5.00	4.00	4.00	4.00	2.00	4.00	5.00	5.00	5.00	5.00
104	5.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	3.00	3.00	5.00	3.00	4.00	4.00	4.00
105	5.00	5.00	4.00	3.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00
106	5.00	4.00	3.00	3.00	5.00	3.00	3.00	3.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
107	3.00	4.00	3.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	2.00	3.00	4.00	4.00
108	3.00	2.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00
109	2.00	1.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
110	4.00	4.00	4.00	4.00	5.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	5.00
111	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	3.00
112	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00

113	5.00	5.00	4.00	4.00	4.00	3.00	3.00	4.00	5.00	5.00	5.00	4.00	3.00	4.00	4.00
114	4.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00
115	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	3.00	3.00	4.00	4.00
116	3.00	4.00	2.00	3.00	4.00	3.00	4.00	2.00	4.00	2.00	4.00	2.00	3.00	4.00	4.00
117	4.00	4.00	3.00	5.00	5.00	4.00	3.00	3.00	5.00	3.00	5.00	4.00	5.00	5.00	4.00
118	5.00	4.00	5.00	4.00	4.00	3.00	3.00	3.00	4.00	4.00	5.00	2.00	3.00	4.00	4.00
119	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	3.00	3.00	5.00	5.00
120	5.00	4.00	4.00	4.00	3.00	5.00	4.00	4.00	3.00	3.00	4.00	2.00	5.00	5.00	4.00
121	4.00	4.00	4.00	4.00	3.00	4.00	3.00	2.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00
122	5.00	5.00	5.00	4.00	5.00	5.00	4.00	3.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
123	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	3.00	4.00	4.00	4.00	4.00	3.00
124	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00
125	5.00	5.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00
126	5.00	5.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00
127	4.00	5.00	5.00	4.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	3.00	5.00	5.00	3.00
128	5.00	5.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00	4.00
129	4.00	4.00	3.00	4.00	4.00	3.00	3.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00
130	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	5.00	4.00	3.00	3.00	5.00	4.00	3.00
131	3.00	3.00	2.00	2.00	3.00	4.00	3.00	4.00	5.00	3.00	5.00	3.00	3.00	3.00	2.00
132	4.00	4.00	4.00	3.00	4.00	3.00	4.00	3.00	3.00	2.00	4.00	3.00	4.00	5.00	4.00
133	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	3.00	4.00	3.00	4.00	4.00	4.00
134	5.00	5.00	5.00	3.00	5.00	3.00	5.00	5.00	4.00	1.00	5.00	1.00	3.00	4.00	4.00
135	5.00	4.00	4.00	5.00	5.00	3.00	5.00	5.00	3.00	3.00	3.00	5.00	4.00	4.00	3.00
136	1.00	1.00	3.00	3.00	1.00	2.00	4.00	3.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00
137	1.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00
138	5.00	5.00	4.00	4.00	5.00	4.00	4.00	3.00	4.00	3.00	4.00	2.00	3.00	4.00	4.00
139	4.00	4.00	3.00	2.00	4.00	2.00	4.00	4.00	4.00	3.00	4.00	1.00	3.00	4.00	3.00
140	3.00	4.00	3.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	2.00	4.00	3.00	3.00
141	5.00	4.00	2.00	1.00	3.00	2.00	4.00	4.00	4.00	3.00	3.00	3.00	4.00	3.00	4.00
142	5.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	4.00
143	4.00	5.00	5.00	3.00	3.00	3.00	5.00	4.00	5.00	3.00	4.00	4.00	5.00	4.00	3.00
144	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00
145	4.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	5.00	4.00	5.00	4.00	4.00
146	3.00	4.00	3.00	3.00	4.00	4.00	3.00	3.00	4.00	2.00	3.00	3.00	4.00	4.00	3.00
147	4.00	5.00	4.00	5.00	4.00	3.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	2.00
148	4.00	4.00	4.00	4.00	5.00	5.00	4.00	3.00	3.00	4.00	5.00	5.00	5.00	5.00	5.00
149	5.00	3.00	5.00	5.00	5.00	5.00	3.00	4.00	4.00	5.00	5.00	3.00	5.00	5.00	5.00
150	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00

APPENDIX III: Raw data of Questionnaire Section A

Sl. No.	OrT	NEq	CSD	SKT	TMT	CST	Cus	LD	PST	CD	PSk	CT	MCh	MS	SM
1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00
3	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
4	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
5	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00
6	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	2.00
7	2.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
8	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
9	1.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00
10	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
11	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00
12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
13	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
14	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
17	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
18	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
19	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
21	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
22	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00
23	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
24	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00	1.00
25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
26	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
27	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
28	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00
29	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
31	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
32	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
33	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
34	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
35	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
36	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
37	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
38	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
39	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	2.00
40	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
41	2.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00
42	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00
43	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
44	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
45	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	2.00
46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
47	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
48	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
49	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
51	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
52	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
53	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
54	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00

55	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
56	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
57	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
58	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
59	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
60	2.00	1.00	2.00	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
61	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
62	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00
63	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00
64	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	2.00
65	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	2.00
66	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
67	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00
68	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00
69	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
70	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
71	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00
72	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
74	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00
78	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
79	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
80	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00
81	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	2.00
82	2.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00
83	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
84	1.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00
85	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00
87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
88	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
89	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
92	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
93	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
96	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
97	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00
98	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
99	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00	1.00
100	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
101	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
102	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
103	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00
104	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
105	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
106	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
107	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
108	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
109	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
110	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
111	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
112	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00

113	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
114	1.00	1.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	1.00	2.00
115	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
116	2.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00
117	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00
118	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
119	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
120	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	2.00
121	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
122	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
123	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
124	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
125	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
126	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
127	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
128	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
129	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
130	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
131	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
132	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
133	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
134	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00
135	2.00	1.00	2.00	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
136	1.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
137	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00
138	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00
139	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	2.00
140	1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	2.00
141	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
142	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00
143	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	2.00
144	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
145	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00
146	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	1.00	2.00
147	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
148	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
149	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00
150	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00