



SOMAIYA

VIDYAVIHAR UNIVERSITY



Somaiya School of Humanities and Social Science

QUESTION PAPERS

BRANCH: Bachelor of Science - Psychology	SEM: II
ATKT	JUN-2025

Sr. No.	Subject	Available
1.	231U78C201 – Physiological Psychology (A/B)	✓
2.	231U78I201 – Theatre & Folk Media (A/B)	✓
3.	231U78K201 – Inferential Statistics (A/B)	✓
4.	231U78C201 231U78C202 Psychology of Adolescent and Young Adult (A/B)	
5.	231U78I216 Industrial and Organizational psychology	
6.		
7.		
8.		
9.		
10.		



LIBRARY



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April 2025		
Examination: End Semester Examination (UG Programmes)		
Programme code: 78	Class: FY	Semester: II
Programme: B.Sc. Psychology		
Name of the Constituent College: S K Somaiya		Name of the Department: Psychology
Course Code: 231U78C201	Name of the Course: Physiological Psychology	
Duration: 2 Hr.	Maximum Marks: 60	
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO
Q1 a)	Explain the role of Acetylcholine and Serotonin in neurotransmission	8	CO1
b)	Explain the steps in Action potential	7	CO1
	OR		
c)	Describe the somatic and autonomic nervous system	8	CO2
d)	Explain the Hemisphere associated with creativity	7	CO2
Q 2 a)	Explain how endocrine gland disorders disrupt normal hormonal balance by causing excessive or insufficient hormone production.	8	CO3
b)	Describe how the endocrine system differs from the nervous system in terms of communication and regulation.	7	CO3
	OR		
c)	Motivation as an explanation for complex behaviour	8	CO4
d)	Explain sexual response cycle	7	CO4
Q 3 a)	Describe reuptake and enzymes involved in Synapse cleaning	8	CO1
b)	Explain the Split-Brain Research	7	CO2
	OR		
c)	Describe how the pineal gland influences sleep and circadian rhythms	7	CO3
d)	Explain different types of sexual behavior	8	CO4
Q4	Write short notes (any 3)		
a)	Role of GABA	5	CO1
b)	Left Hemisphere	5	CO2
c)	Pancreas Gland	5	CO3
d)	Type of sleep	5	CO4
e)	Circadian rhythm disruptions	5	CO4



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April 2025		
Examination: End Semester Examination (UG/PG Programmes)		
Programme code: 78	Class:	Semester: II/IV/VI
Programme: B.Sc. Psychology	FY/SY/TY	
Name of the Constituent College: S K Somaiya	Name of the Department: Psychology	
Course Code: 231U78C201	Name of the Course: Physiological Psychology	
Duration: 2 Hr.	Maximum Marks: 60	
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO
Q1 a)	Explain the mechanism behind an action potential and its role in neural communication.	8	CO1
b)	Explain how myelin contributes to the efficient functioning of neurons.	7	CO1
	OR		
c)	Explain how hemispheric specialization contributes to the brain's plasticity and adaptability	8	CO2
d)	Describe brain Lateralization in detail	7	CO2
Q 2 a)	Explain abnormalities of major endocrine glands	8	CO3
b)	Describe Pituitary Gland	7	CO3
	OR		
c)	Explain the brain structures that regulate sleep and dreaming, and how they function.	8	CO4
d)	How do various types of sexual orientation manifest in people?	7	CO4
Q 3 a)	Describe how the synapse clears neurotransmitters after a signal has been transmitted.	8	CO1
b)	Explain neuroplasticity and neurogenesis	7	CO2
	OR		
c)	Explain Adrenal and Thyroid endocrine glands	7	CO3
d)	Explain Hunger as a motivation	8	CO4
Q4	Write short notes (any 3)		
a)	Neurotransmission at the synapse.	5	CO1
b)	The Central Nervous System Damage	5	CO2
e)	Explain in detail the gonads (ovaries and testes)	5	CO3
c)	Different types of Sexual Orientation	5	CO4
d)	The Peripheral Nervous System	5	CO2



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April 2025		
Examination: End Semester Examination (UG Programmes)		
Programme code: 78 Programme: BSc Psychology	Class: FY	Semester: II
Name of the Constituent College: S K Somaiya	Name of the Department: Psychology	
Course Code:231U78I201	Name of the Course: Theatre and Folk Media	
Duration : 2 Hr.	Maximum Marks : 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.	Case Study/Application-Based Question	Max. Marks	CO
Q1	<p>A psychologist wants to use theatre to address substance abuse and addiction in rural India.</p> <p>(Choose any 2 Folk media of your choice)</p> <ul style="list-style-type: none">How can folk theatre be adapted to deliver behavioral change messages effectively?Evaluate the advantages and limitations of using folk art in psychological awareness programs.Propose a script outline for a short folk play on addiction recovery.	15	3
Q 2	<p>Answer any one of the following:</p> <p>(a) Discuss the history of Indian theatre in detail and also discuss the different phases of Indian Theatre.</p> <p>(b) Discuss Theatre as a communication tool. State and explain the forms of communication in theatre.</p>	15	1 2
Q 3	<p>Answer any one of the following:</p> <p>(a) Discuss the challenges and threats to folk media.</p> <p>(b) Explain the differences between Asian Theatre vs Western Theatre and Traditional Audience vs Modern Audience.</p>	15	4 2
Q 4	<p>Write short notes: (Any 3)</p> <ol style="list-style-type: none">Difference between Folk Media and Mass Media.Natyashashtra.Contemporary Theatre.Components of Rasa theory.Explain any 2 Audience theories.	15	4 1 2 1 2



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April 2025		
Examination: End Semester Examination (UG Programmes)		
Programme code: 78 Programme: BSc Psychology	Class: FY	Semester: II
Name of the Constituent College: S K Somaiya	Name of the Department: Psychology	
Course Code:231U78I201	Name of the Course: Theatre and Folk Media	
Duration : 2 Hr.	Maximum Marks : 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.	Case Study/Application-Based Question	Max. Marks	CO
Q1	<p>A university psychology department wants to educate rural communities about stress management and emotional resilience. (Choose any 2 Folk media of your choice)</p> <ul style="list-style-type: none">How can folk media be used to educate people about stress and emotional well-being?Compare the impact of live folk performances versus recorded video content for this purpose.Suggest an innovative way to integrate digital media with folk storytelling for wider reach.	15	3
Q 2	<p>Answer any one of the following:</p> <p>(a) Discuss entire Natyashashtra in detail along with the Rasa theory.</p> <p>(b) Explain the differences between folk media and mass media in terms of communication, engagement, and effectiveness.</p>	15	1 2
Q 3	<p>Answer any one of the following:</p> <p>(a) Strengthening folk media (Means and Ways).</p> <p>(b) Explain the 4 Audience theories in detail.</p>	15	4 2
Q 4	<p>Write short notes: (Any 3)</p> <ol style="list-style-type: none">Role of traditional media in social change.Rasas (Any 5 rasas with their dominant emotion).Difference between traditional audience and modern audience.Opportunities for Theatre in New Media.Contemporary Theatre.	15	4 1 2 1 2



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April 2025

Examination: End Semester Examination (UG/PG Programmes)

Programme code:	Class:	Semester:
Programme: B.SC Psychology	FYB.SC	II
Name of the Constituent College: S K Somaiya		Name of the Department: Psychology
Course Code:231U78K201	Name of the Course: Inferential Statistics	
Duration : 2 Hr.	Maximum Marks : 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO																																				
Q1	[A] A man buys 50 electric bulbs of Philips and 50 electric bulbs HMT. He finds that Philips bulbs given an average life of 1500 hours with standard deviation of 60 hours and HMT bulbs give an average life 1512 hours with an standard deviation of 80 hours. Is there is significant difference in the mean life of the two makes of bulbs? At 5% l.o.s	7M	Co 1																																				
	[B] From the data given below about the treatment of 250 patients suffering from a disease, state whether the new treatment is superior to the conventional treatment	8M	Co 2																																				
	<p style="text-align: center;">No. of patient</p> <table><tr><th>Treatment</th><th>Favourable</th><th>Not Favourable</th><th>Total</th></tr><tr><td>New</td><td>140</td><td>30</td><td>170</td></tr><tr><td>Conventional</td><td>60</td><td>20</td><td>80</td></tr><tr><td>Total</td><td>200</td><td>50</td><td>250</td></tr></table> <p>Find chi-sqaure at 5% l.o.s</p> <p style="text-align: center;">OR</p> <p>[C] Perform a Two-way Anova on the given data</p> <p style="text-align: center;">Treatment</p> <table><tr><th>Plot of land</th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>I</td><td>38</td><td>40</td><td>41</td><td>39</td></tr><tr><td>II</td><td>45</td><td>42</td><td>49</td><td>36</td></tr><tr><td>III</td><td>40</td><td>38</td><td>42</td><td>42</td></tr></table> <p>Use 5% l.o.s</p>	Treatment	Favourable	Not Favourable	Total	New	140	30	170	Conventional	60	20	80	Total	200	50	250	Plot of land	A	B	C	D	I	38	40	41	39	II	45	42	49	36	III	40	38	42	42	7M	Co 1
	Treatment	Favourable	Not Favourable	Total																																			
New	140	30	170																																				
Conventional	60	20	80																																				
Total	200	50	250																																				
Plot of land	A	B	C	D																																			
I	38	40	41	39																																			
II	45	42	49	36																																			
III	40	38	42	42																																			
[D] The Mean height obtained from a random sample of size 100 is 64 inches. The standard deviation of the distribution of height of the population is known to be 3 inches. Test the statement that the ,mean height of the population is 67 inches at 5% l.o.s	8M	Co 2																																					
Q 2	[A] For the set of 20 observations $\sum X=1452$, $\sum X^2=144280$, Mode=63.7 Find Karl Pearsons Coefficient of Skewness.	7M	Co 3																																				
	[B] Calculate the first four central moments	8M	Co 3																																				

	<table><tr><td>X values</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr><tr><td>Frequency</td><td>2</td><td>9</td><td>25</td><td>35</td><td>20</td><td>8</td><td>1</td></tr></table>	X values	11	12	13	14	15	16	17	Frequency	2	9	25	35	20	8	1																				
X values	11	12	13	14	15	16	17																														
Frequency	2	9	25	35	20	8	1																														
	<p style="text-align: center;">OR</p> <p>[C] Derive Raw and Central Moments</p> <p>[D] State and Prove Bayes Theorem</p>	7M 8M	Co 3 Co 3																																		
Q 3	<p>[A] Find Unbiased Estimator of Exponential Distribution</p> <p>[B] Following is the probability distribution, Find values of k, E(X) and V(X)</p> <table><tr><td>X</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr><tr><td>Probabilit y</td><td>k</td><td>2k</td><td>K+0.05</td><td>2k+0.05</td><td>2k</td><td>K</td></tr></table> <p style="text-align: center;">OR</p> <p>[C] A family has 2 Children. Find the probability that both children are girls if it is known that i) one of the children is girl ii) the older child is a girl</p> <p>[D] Four jobs I,II,III,IV,V are to be processed on three Machines A,B and C in the order ABC</p> <p style="text-align: center;">Processing Time (Hrs)</p> <table><tr><td>Jobs</td><td>Machine A</td><td>Machine B</td><td>Machine C</td></tr><tr><td>I</td><td>14</td><td>6</td><td>24</td></tr><tr><td>II</td><td>17</td><td>8</td><td>14</td></tr><tr><td>III</td><td>18</td><td>10</td><td>14</td></tr><tr><td>IV</td><td>23</td><td>9</td><td>9</td></tr></table>	X	-2	-1	0	1	2	3	Probabilit y	k	2k	K+0.05	2k+0.05	2k	K	Jobs	Machine A	Machine B	Machine C	I	14	6	24	II	17	8	14	III	18	10	14	IV	23	9	9	7M 8M 7M 8M	Co 4 Co 4 Co 4 Co 4
X	-2	-1	0	1	2	3																															
Probabilit y	k	2k	K+0.05	2k+0.05	2k	K																															
Jobs	Machine A	Machine B	Machine C																																		
I	14	6	24																																		
II	17	8	14																																		
III	18	10	14																																		
IV	23	9	9																																		
Q.4	Answer any 3 out of 5	15 M																																			
	<p>[A] A Small project consist of following activities</p> <table><tr><td>Activity</td><td>Preceding Activity</td><td>Time(days)</td></tr><tr><td>A</td><td>-</td><td>20</td></tr><tr><td>B</td><td>A</td><td>25</td></tr><tr><td>C</td><td>A</td><td>5</td></tr><tr><td>D</td><td>B</td><td>15</td></tr><tr><td>E</td><td>C</td><td>30</td></tr><tr><td>F</td><td>D</td><td>35</td></tr><tr><td>G</td><td>E</td><td>5</td></tr><tr><td>H</td><td>F,G</td><td>2</td></tr></table> <p>i) Draw Network diagram and find critical path and project completion time</p> <p>ii) Find EST,EFT</p> <p>[B] suppose we have the following data on the consumer preference of a</p>	Activity	Preceding Activity	Time(days)	A	-	20	B	A	25	C	A	5	D	B	15	E	C	30	F	D	35	G	E	5	H	F,G	2		Co 1 Co 2							
Activity	Preceding Activity	Time(days)																																			
A	-	20																																			
B	A	25																																			
C	A	5																																			
D	B	15																																			
E	C	30																																			
F	D	35																																			
G	E	5																																			
H	F,G	2																																			

new product collected from the people living in north and south India use test statistics at 5% l.o.s



Co 3

	South india	North india	Total
Number of consumers who prefer present product	4	51	55
Number of consumer who prefer new product	14	38	52
total	18	89	107

[C] Three Time estimate are given for each activity of following project.

Activity	a	m	b
1-2	6	6	24
1-3	6	12	18
1-4	12	12	30
2-5	6	6	6
3-5	12	30	48
4-6	12	30	42
5-6	18	30	54

i) Tabulate expected time and variance of all activities

ii) Draw network diagram and total project completion time

[D] for the following game matrix, determine saddle point using Principles of Dominance.

Player Y

Player X	I	II	III
I	14	22	14
II	16	-20	-18
III	20	36	24

Find Optimal strategies for both the players

[E] it is observed that 3% of apples in consignment are bad. Find the probability that, in a consignment of 200 apples, the number of bad apple is
i) less than 2 ii) only 2 ($e^{-6}=0.0025$)

Co 4

Co 4

Co 3



April 2025		
Examination: End Semester Examination (UG/PG Programmes)		
Programme code: Programme: B.sc Psychology	Class: FYB.SC	Semester: II
Name of the Constituent College: S K Somaiya	Name of the Department: Psychology	
Course Code:231U78201	Name of the Course: Inferential Statistics	
Duration : 2 Hr.	Maximum Marks : 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO																			
Q1	[A] A survey of 10000 TV sets revealed that the life in hours of TV picture tubes normally distributed with mean of 1000 hrs and standard deviation of 100 hrs i) How many picture tubes lasted more than 800 hrs? ii) How many lasted between 1000hrs and 1100 hrs? iii) Find the percentage of tubes with life between 800 hrs and 1000 hrs?	7M	Co 1																			
	[B] Following is the probability distribution of number of smart phones sold in a shop per day	8M	Co 1																			
	<table><tr><td>Number</td><td>Probability</td></tr><tr><td>0</td><td>K</td></tr><tr><td>1</td><td>0.3</td></tr><tr><td>2</td><td>0.15</td></tr><tr><td>3</td><td>0.15</td></tr><tr><td>4</td><td>0.1</td></tr><tr><td>5</td><td>2k</td></tr></table>	Number	Probability	0	K	1	0.3	2	0.15	3	0.15	4	0.1	5	2k							
	Number	Probability																				
0	K																					
1	0.3																					
2	0.15																					
3	0.15																					
4	0.1																					
5	2k																					
Find k, average number of smart phones sold per day and its variance																						
	OR																					
	[C] Derive All Four Raw and Central moments	7M	Co 2																			
	[D] For Two events A and B if $P(A)=0.8$ and $P(A \cup B)=0.9$, Find $P(B)$ if A and B are i) Independent ii) Mutually exclusive	8M	Co 2																			
Q 2	[A] The specimen of copper wires drawn from a large lot have the following breaking strength (in kg weight) 578,572,570,568,572,578,570,572,596,544 Test whether the mean breaking strength of the lot may be taken to be 578kg weight test at 5% l.o.s	7M	Co 3																			
	[B] A oil company has explored three different areas for possible oil reserves. The results of the test were as given below	8M	Co 3																			
	Area																					
	<table><tr><td></td><td>A</td><td>B</td><td>C</td><td>Total</td></tr><tr><td>Strikes</td><td>7</td><td>10</td><td>8</td><td>25</td></tr><tr><td>Dry holes</td><td>10</td><td>18</td><td>9</td><td>37</td></tr><tr><td>Total</td><td>17</td><td>28</td><td>17</td><td>62</td></tr></table>		A	B	C	Total	Strikes	7	10	8	25	Dry holes	10	18	9	37	Total	17	28	17	62	
	A	B	C	Total																		
Strikes	7	10	8	25																		
Dry holes	10	18	9	37																		
Total	17	28	17	62																		
	There is significant difference between strikes and dry holes at 5 % l.o.s																					
	OR																					



1-2	4
1-3	6
1-5	13
2-3	5
2-4	20
4-6	10
3-6	6
5-6	16

- Draw the Network diagram and identify the critical path
- Find EST,EFT,LST,LFT for each activity

[D] You are given the following details for a project with 8 activities:

Activity	a	m	b
1-2	4	6	8
2-3	5	7	15
2-4	4	8	12
3-5	10	18	26
4-6	8	9	16
5-7	4	8	12
6-7	1	2	3
7-8	6	7	8

- Draw the network diagram
- Find expected time of project completion along with standard deviation
- What is the probability of the project completing in 55 days?

[E] For frequency distribution Bowleys coefficient of skewness is 0.6. the sum of first and third quartile is 100 and median is 38. Find two quartile

Co 4

Co 2

(A)

Bsc Psy

Sem II


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April 2025		
Examination: End Semester Examination (UG/PG Programmes)		
Programme code: 78	Class:	Semester: II/IV/VI
Programme: B.Sc. Psychology	FY/SY/TY	
Name of the Constituent College: S K Somaiya		Name of the Department: Psychology
Course Code: 231U78C202	Name of the Course: Psychology of Adolescent and Young Adult	
Duration: 2 Hr.	Maximum Marks: 60	
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO
Q1 a)	Summarize how information processing approaches explain adolescent cognitive development.	8	CO1
b)	Analyze the factors that affect adolescent school performance.	7	CO1
	OR		
c)	Discuss what it means to be popular and unpopular in adolescence and how adolescents respond to peer pressure.	8	CO2
d)	Discuss the challenges ethnic and minority groups face in identity formation in adolescence.	7	CO2
Q 2 a)	Describe how cognitive development continues in young adulthood.	8	CO3
b)	Summarize the effects of stress and what can be done about it.	7	CO3
	OR		
c)	Explain how young adults respond to the need for intimacy and friendship	8	CO4
d)	Describe how the arrival of children affects a relationship in early adulthood.	7	CO4
Q 3 a)	Describe dangers adolescent sexual practices present and how these dangers can be avoided.	8	CO1
b)	Identify the dangers adolescents face as they deal with the stresses of their age.	7	CO2
	OR		
c)	Describe who attends college today and how the college population is changing.	7	CO3
d)	Differentiate the different kinds of love.	8	CO4
Q4	Write short notes on (any 3)		
a)	Alcohol use and abuse in adolescence	5	CO1
b)	Marcia's categories of adolescent identity.	5	CO2
c)	Sternberg's triarchic theory of intelligence	5	CO3
d)	Role of religion and spirituality in adolescence.	5	CO4
e)	Culture and autonomy in adolescence	5	CO2



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April 2025			
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Programme code: 78		Class: FY	Semester: II
Programme: B.Sc. Psychology			
Name of the Constituent College: S K Somaiya		Name of the Department: Psychology	
Course Code: 231U78C202	Name of the Course: Psychology of Adolescent and Young Adult		
Duration: 2 Hr.	Maximum Marks: 60		
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary 3)			

Question No.		Max. Marks	CO
Q1 a)	Describe how cognitive development proceeds during adolescence according to Piaget.	8	CO1
b)	Describe how adolescent egocentrism affects thinking and behavior	7	CO1
	OR		
c)	Describe the functions and characteristics of dating during adolescence	8	CO2
d)	Describe what family relationships are like during adolescence	7	CO2
Q 2 a)	Compare and contrast Perry's and Schaie's approaches to cognitive development in young adulthood.	8	CO3
b)	Explain how intelligence is defined today and how life events cause cognitive growth in young adults	7	CO3
	OR		
c)	Describe how gender affects work choices and the work environment.	8	CO4
d)	Explain how infant attachment styles are related to romantic relationships as adults.	7	CO4
Q3 a)	Describe the physical changes in female adolescent's experience as the body reaches puberty	8	CO1
b)	Explain how relationships with peers change during adolescence.	7	CO2
	OR		
c)	Describe the challenges people with physical disabilities face in early adulthood	7	CO3
d)	Compare gay and lesbian parents to heterosexual parents.	8	CO4
Q4	Write short notes on (any 3)		
a)	Nutritional needs and concerns of adolescents	5	CO1
b)	4 stages of Marcia's categories of adolescent identity.	5	CO2
c)	The origin of Stress	5	CO3
d)	Role of careers in the lives of young adults	5	CO4
e)	Elements of a job bring satisfaction	5	CO4



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April 2025		
Examination: End Semester Examination (UG Programmes)		
Programme code: Programme:	Class: FY	Semester: II
Name of the Constituent College: S K Somaiya		Name of the Department: Psychology
Course Code: 231UV216	Name of the Course: Industrial and Organizational Psychology	
Duration: 2 Hr.	Maximum Marks: 60	
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO
Q1 a)	Describe the emergence & importance of I/O as a field of psychology	8	CO1
b)	List out and explain the approaches to Collecting Job Analysis Information	7	CO1
	OR		
c)	Explain the importance of Job Appraisal in workplaces	8	CO2
d)	Define the Job Performance and methods to assess it	7	CO2
Q 2 a)	Describe need theories of motivation in detail	8	CO3
b)	Explain in detail Justice Theories of Work Motivation	7	CO3
	OR		
c)	Explain Importance Group and Team Concepts	8	CO4
d)	Describe in detail about leadership in the workplace setup	7	CO4
Q3 a)	Explain Job Analysis and describe Job-Oriented Approach	8	CO1
b)	Explain few subjective measures of Job Performance	7	CO2
	OR		
c)	Explain Action theory with examples	8	CO3
d)	Describe in detail about harassment at workplace	7	CO4
Q4	Write Short Notes (Any 3)		
a)	IO Psychology as a Profession	5	CO1
b)	Importance of job selection	5	CO2
c)	Control Theory	5	CO3
d)	Steps in team building at workplace	5	CO4
e)	The Person-Oriented Approach	5	CO1