# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

# **BSc DEGREE EXAMINATION MAY 2025**

(Sixth Semester)

#### Branch - STATISTICS

### MAJOR ELECTIVE COURSE- II : DEMOGRAPHIC METHODS

	Time: Three Hours		Maximum: 50 Marks					
		SECTION-A (5 Marks)						
		Answer ALL questions						
	ALL qu	estions carry EQUAL marks	$(5 \times 1 = 5)$					
	TD 1 4 15 41							
1.	Demography studies the							
	(i) Vital statistics							
	(iii) Census	(iv) Sample						
2.	Fertility refers to							
	(i) Fecundity							
	(iii) Occurrence of birth							
3.	Infant Mortality serves as a	ne of the best indices to general	of a analaty					
٠,		(ii) Birth	of a society.					
	(iii) Healthiness	• •						
		,						
4.	is a powerful to	ol for measuring the probability	of life and death for various					
	age sector.							
	(i) Life table	• •						
	(iii) Registration Method	(iv) Population						
5.	is an exercise of	f calculating the future values of	given population.					
		(ii) Census	9 <b>f</b> • <b>f</b> •					
	(iii) Migration	(iv) Population Projection						
		SECTION-B (15 Marks)						
		Answer ALL Questions						
	ALL (	Questions Carry EQUAL Marks	$(5 \times 3 = 15)$					
_ \	D: (4 !16 )	6.0						
o. a)	Bring out the special feature							
L١	OR							
ъ)	Narrate the difference between	en Registration and Census meth	ioa.					
7. a)	Explain about Fertility.	1						
,		OR						
b)	State about Reproduction rat	tes and its types.						
8. a)	Outline about Crude death ra	ate along with its merits and dem	erits.					
		OR						
b)	Describe Infant Mortality rat	te.	<b>a</b> .					
			Cont					

9. a) Analyse about Life tables.

OR

- b) Sketch about Migration.
- 10. a) State about Population Projection.

OR

b) Explain Inter-Census Estimate.

## SECTION-C (30 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

 $(5 \times 6 = 30)$ 

11. a) Enumerate Source of demographic data.

ΩR

b) Outline the uses of Vital Statistics.

12. a) Compute the specific fertility rate, GFR, and TFR along with Gross reproduction rate from the data given below

from the data given below		<del>,</del> <del></del>			05.00	40.44	45-49
Age group (Years)	15-19	20-24	25-29	30-34	35-39	40-44	43-47
		20	18	15	12	6	4
No. of women (in 1000's)		ļ	2000	1500	500	120	10
No. of live births	800	2400	2000	1300			

It is given that out of 7330, the number of female births was 4000.

OR

- b) Outline about the types of reproduction rates.
- 13. a) Highlight the methods of measurement of Mortality.

OR

b) Compute the crude and standardised death rates of the two populations A and B from

following data.	A		В		
Age group	Population	Death	Population	Death	
Deless 6	15,000	360	40,000	1,000	
Below 5	20,000	400	52,000	1,040	
5-30		L	8,000	240	
Above 30	10,000	280	<del></del>	2,280	
Total	45,000	1,040	1,00,000	2,200	

14. a) Highlight the uses of Lifetable.

OR

b) Fill in the blanks in the portion of life table given below:

Age (in years)		d <sub>x</sub>	p <sub>x</sub>	qx	L <sub>x</sub>	T <sub>x</sub>	e <sub>x</sub> <sup>0</sup>
Age (in years)	93832	1293	?	. ?	?	3699301	30.42
10	?	1210		<u> </u>	-		<u>.</u>

15. a) Summarise the three methods of calculating the Population Projection Estimates.

OR

b) Discover the derivation for Logistic curve.

Z-Z-Z

**END**