

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2017
(Second Semester)

14 & TUO 6

Branch - BIOTECHNOLOGY

CLINICAL GENETICS

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10x2 = 20)

- 1 Define linkage.
- 2 What is the Mendel ratio?
- 3 Write about Klinefelter syndrome.
- 4 Define allele frequencies.
- 5 What are the symptoms for thalassemia?
- 6 Define sex linked inheritance,
- 7 Define OMIM.
- 8 What are the treatments for diabetes mellitus?
- 9 • What are the merits of mean?
- 10 Define correlation.

SECTION - B (25 Marks)

I . Answer ALL Questions

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ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Write a short note on gene mapping.
OR
b Give a short note on mitochondrial gene.
- 12 a Write a short on abnormal chromosome number.
OR
b Write a short note on abnormal chromosome structure.
- 13 a Define colour blindness. Explain it with example.
OR
b Give a short note on genomic imprinting.
- 14 a Write a short note on single cell inheritance in humans.
OR
b Write about twins for multifactor disease.
- 15 a Write a short note on measures of central tendency.
OR
b Write about Hardy Weinberg principle.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16. [Explain genetic linkage.
 - 17 Give a detailed note on mutation.
 - 18 Explain disorder of x linked inheritance*
 - 19 Explain diabetes mellitus.'
 - 20 Calculate median for following data.
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|-----|-------|-------|-------|-------|-------|---|
| X: | 0- 10 | 10-20 | 20-30 | 30-40 | 40-50 | * |
| F : | 2 | 5 | -6 | 4 | 8 | |