B. Sc. DEGREE (C.B.C.S.S) EXAMINATION, OCTOBER 2018
(2016Admissions Supplementary/Improvement)
SEMESTER III - COMPLEMENTARY COURSE (PSYCHOLOGY)
PSY3B3 – STATISTICS

Time: Three Hours   **Maximum Marks: 80**

PART A

I. Answer all the questions. Each question carries 1 mark

1. Define Variables
2. Define grouped frequency table
3. Define measures of central tendency
4. What is coefficient of variation
5. Define Conditional probability
6. Define sample space
7. What is Quartile deviation
8. Define Random Variables.
9. Define mean of a random variable
10. Define pdf

(10x1=10)

PART B

II. Answer any eight questions. Each question carries 2 marks

11. Distinguish between discrete and continuous random variables
12. Explain the properties of Variance
13. State the multiplication theorem for two events
14. Define mutually exclusive and exhaustive events
15. Explain dispersion.
16. State the merits of mean
17. Distinguish between a histogram and a bar diagram.
18. Explain the different levels of measurement.
19. Distinguish between variables and attributes.
20. Define skewness and kurtosis
21. Define population and sampling.
22. Define qualitative and quantitative data.

(8x2=16)

PART C

III. Answer any six questions. Each question carries 4 marks

23. What are ogives and explain their construction.
24. Explain the measures of dispersion.
25. State the properties of expectation of a random variable

           P.T.O.

26. Explain the measure of central tendency.
27. Define pairwise independence, event, sigma field.
28. Explain axiomatic approach of probability
29. Explain Von Mises definition of probability.
30. Define statistical regularity.
31. Define frequency ratio.

(6x4=24)

PART D

III. Answer any two questions. Each question carries 15 marks

32. Draw the frequency polygon and the frequency curve for the following distribution.

variate	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200
Frequency	6	9	11	14	20	15	10	8	7

33. a)The average weight of 25 boys was 78.4kgs. it was later found that the weight of one boy was misread as 60kgs instead of the correct value 96kgs. Calculate the correct average.

    b)Define median and explain the formula for calculating it from a frequency table.

34. An individual is chosen such at random from the first 100 individuals. What is the probability that the individual chosen is divisible by 5 or 3.

35. If two dice are thrown what is the probability that the sum is greater than 8, neither 7 nor 11.

(2x15=30)

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