(b) (i) Derive the mean and variance of the Poisson distribution.

(ii) State some real life examples of Poisson distribution. 7+3

(c) (i) Clearly explain the terms level of significance and power of the test.

(ii) Find the values of test-statistic for testing $H_o: \mu = 18.2$; $H_1: \mu > 18.2$; given $\delta=2.1$; $n=15; \bar{x} = 18.83$ 6+4

(d) Write some important properties of a standard normal variable. Assume the mean height of soldiers to be 68.22 inches with a variance of 10.8 sq. inches. How many soldiers in a regiment of 1000 would you expect to be over 6 ft. tall? (Given that the area under the standard normal curve between $x=0$ and $x=0.35$ is 0.1368 and between $x=0$ and $x=1.15$ is 0.3749). 5+5

UG/3rd Sem/ECO(H)/T/19

2019

B.Sc.

3rd Semester Examination

ECONOMICS

(Honours)

Paper - SEC 1-T

Full Marks : 40 Time : 3 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

DATA ANALYSIS

Group-A

1. Answer any *five* from the following questions : 5×2=10

   (a) Distinguish between complete enumeration and sample survey. 2

   (b) What are attributes? Give suitable examples. 2

(c) Distinguish between continuous and discrete variables. 2

(d) What are the different types of sampling process? 2

(e) Name the organization which publishes foreign trade statistics. 2

(f) Write the full forms of these Govt. wings : 2

(i) CSO (ii) NEETI AYOG

(g) What do you mean by NIC? 2

(h) Write different publications of RBI. 2

Group-B

2. Answer any *four* from the following questions : 4×5=20

(a) What is dispersion? What are the different measures of dispersion? 2+3

(b) How do you construct a pie diagram? Explain the steps only.

(c) What are the main sources of monetary data in our country? Are they primary or secondary in nature? 5

(d) Find the missing frequency, the mean and median from the following table : 5

Class interval	Frequency
80-99	19
100-119	50
120-139	?
140-159	62
160-179	7

Given the mode = 131.81

(e) Distinguish between the methods of simple random sampling with replacement (SRSWR) and without replacement (SRSWOR). 5

(f) What are the logic behind the transformation of data into logarithmic format. 5

Group-C

3. Answer any *one* from the following questions : 1×10=10

(a) Name different sources of Indian data. Discuss any one of them in detail. 4+6

(b) Draw an ideal table. What are its different component? How do you interpret the table, which is cross section in nature. 5+3+2

Contemporary Economic Issues

Group-A

1. Answer any *five* from the following questions : 5×2=10

(a) What is meant by "double taxation" of savings? 2

(b) Explain the concept of horizontal equity under the ability to pay principle of taxation. 2

(c) Distinguish between non-rivalry and non-excludability property of a public good. 2

(d) What are the merits of the value added tax? 2

(e) How does an internally held public debt differ from an external public debt? 2

(f) Distinguish between cyclical deficit and structural deficit. 2

(g) What is "spite-effect"? 2

(h) What are the problems of taxing capital gain? 2

Group-B

2. Answer any *four* from the following questions : 4×5=20

(a) Under what conditions the value of Balanced Budget Multiplier is more than one or equal to one? 5

(b) Do you support the traditional argument that the income tax connot be shiffed? Discuss. 5

(c) Clearly show and explain the position of Lindahl equilibrium. 5

(d) Analyse the effect of savings a proportional income tax and equal yield expenditure tax upon. 5

(e) What do you mean by progressive system of taxation? 5

(f) Define budget. Explain the concept of Zero-base budgeting. 2+3=5

Group-C

3. Answer any *one* from the following questions : $1 \times 10 = 10$

(a) Do you think that an indirect tax necessarily imposes an excess burden as compared with a direct tax? Give reasons for your answer. 10

(b) Do you support the Ricardian view of government debt? Explain with arguments. 10