

Geetapal

परीक्षार्थी का पूरा नाम

Azmi

Azmi

कक्ष निरीक्षक का नाम

परीक्षार्थी द्वारा सम्पूर्ण विवरण भर लिए गये है।



R

2018-

भाग-2

M.Sc. Internal

# चौधरी चरण सिंह विश्वविद्यालय, मेरठ Ch. Charan Singh University, Meerut

निम्नलिखित विवरण परीक्षार्थी द्वारा स्वयं भरा जाए (To be filled by the Examinee)

परीक्षा का नाम M.Sc वर्ष 19-20 भाग/सेमेस्टर II sem  
 (Name of Exam) (Year 20.....) (Part / Semester)  
 विषय Zoology प्रश्न-पत्र/पाठ्यक्रम Biostatistics H-2063  
 (Subject) (Paper / Course) (Paper Code No.)  
 परीक्षा का दिन Wednesday दिनांक 1/5/19  
 (Day of Examination) (Date)

प्राप्तांक एवं पूर्णांक परीक्षकों द्वारा भरे जायें

पूर्णांक (Max. Marks)

प्रश्नों की क्रम संख्या	a/I	b/II	c/III	d/IV	e/V	f/VI	g/VII	h/VIII	i/IX	j/X	योग
1	1/2	1	1	1							3 1/2
2	2	2 1/2									4 1/2
3	1	3 1/2									7 1/2
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

Geeta pal

15 1/2 = 16

प्राप्तांक (शब्दों में)	अंकों में



# चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आवश्यक निदेशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

परीक्षा का नाम M.Sc भाग/सेमेस्टर II sem  
 विषय Zoology  
 प्रश्न पत्र Biostatistics दिनांक 1/5/19  
 परीक्षार्थी का अनुक्रमांक (Roll Number) उत्तर-पुस्तिका क्रमांक

M	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
D	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
E	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
F	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
G	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
H	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
I	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
J	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
K															
L															
P															
S															
T															
U															
V															
W															

(परीक्षार्थी की श्रेणी)

- संस्थागत
- व्यक्तिगत
- बैक पेपर
- अंक सुधार
- भूतपूर्व
- एकल विषय

नामांकन संख्या (Enrollment Number)

M	1	5	5	3	0	8	1	2							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

KM-I-01-

कालेज कोड

6	1	8			
0	0	0			
1	1	1			
2	2	2			
3	3	3			
4	4	4			
5	5	5			
6	6	6			
7	7	7			
8	8	8			
9	9	9			

पेपर कोड

H-2063

परीक्षार्थी का पूरा नाम

Geetapal

कक्ष निरीक्षक का नाम

Azmi

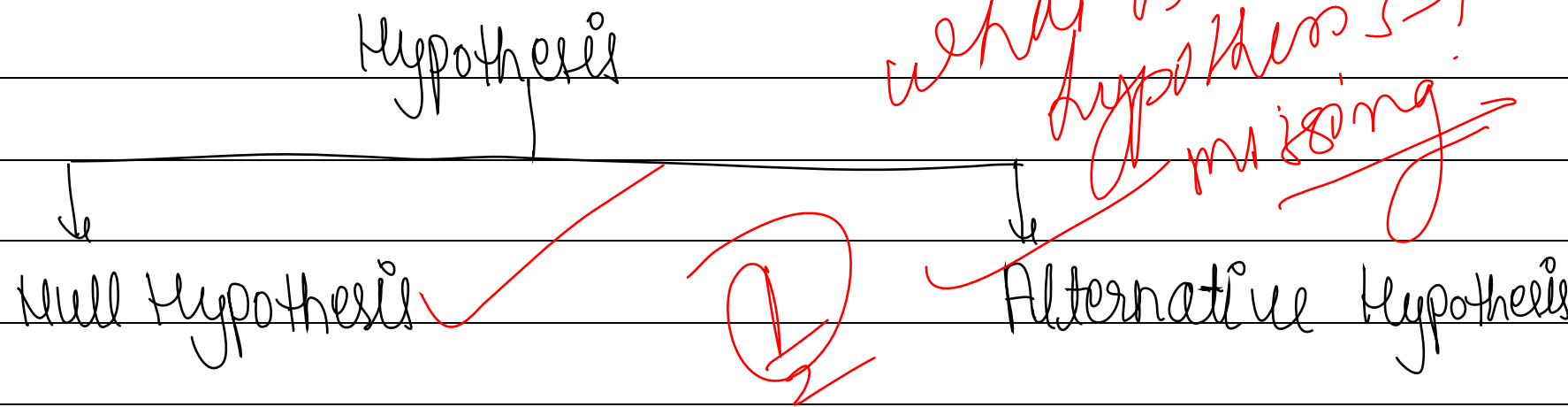
# Section-A

Q1. Hypothesis

Ans Summary

- Definition
- Introduction
- Types of Hypothesis
  - Type-I
  - Type-II Error
- T-Test
- Z-Test
- $\chi^2$ -Test

- Hypothesis are two types



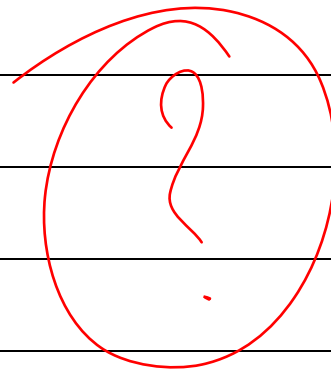
Q2-1 Two Genetic disorders

- (1) Colourblindness ✓
- (2) Haemophilia ✓

Q3 → GenBank → GenBank is a Gene stored in GenBank.

- GenBank is a 1981 in Gene Bank.
- They are National Institute of Genetics (NIG).
- And the International nucleotides of proteins.
- They are EMBL (European Molecular Biology Laboratory)
- GenBank is NCBI | GenBank or NCBI | EMBL.

Q4 → full form of http →



Q5) DDBJ →

Ans) It is full form of (DNA Databank of Japan).

→ The DDBJ is began activities in earned in 1986.  
At the national Institute of Genetics (NIG).

→ DDBJ has been functioning International nucleotides  
sequence database with collaboration in EBI/EMBL  
or NCBI/GenBank.

## Section-B

Q7) Components of computer.

Ans) Summary

- Components of computer
- Input unit ✓
- CPU
- Output unit ✓
- Memory and storage unit
- Control unit ✓
- ALU (Arithmetic Logic unit)
- Arithmetic sector ✓
- Logic sector ✓

- Input unit → Input unit is data stored in computer and the mobile and Input devices and forms by the stored data. Example - Keyboard?



- CPU → (Central processing unit) is full form of CPU.

→ Central processing unit is a brain of computer.

### (3) Output unit →

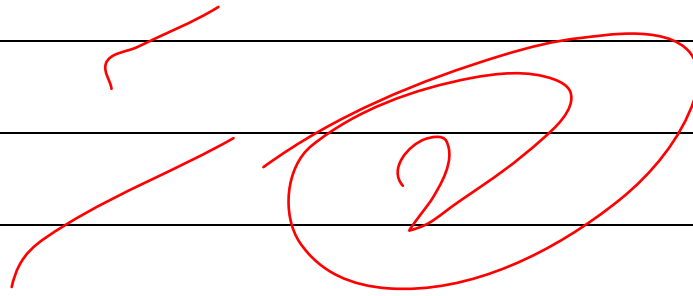
- This unit is out area is control by the output device and the change of server of the computer device.

Ex → ?  
~~Monitor~~  
 printer.

- ALU → (Arithmetic Logic unit)

- Arithmetic Logic unit are two types.

- (1) Arithmetic sector
- (2) Logic sector



Q83

Data Swiss port ->

Ans

Summary ->

- > Introduction
- > Swiss port
- > It consists of two types

↓  
Swissport

↓  
Tr-EMBL

SWISS?

- > Annotation



→ Decodination

→ Tr EMBL are two types

- SP - Tr EMBL
- REM - Tr EMBL

→ Conclusion

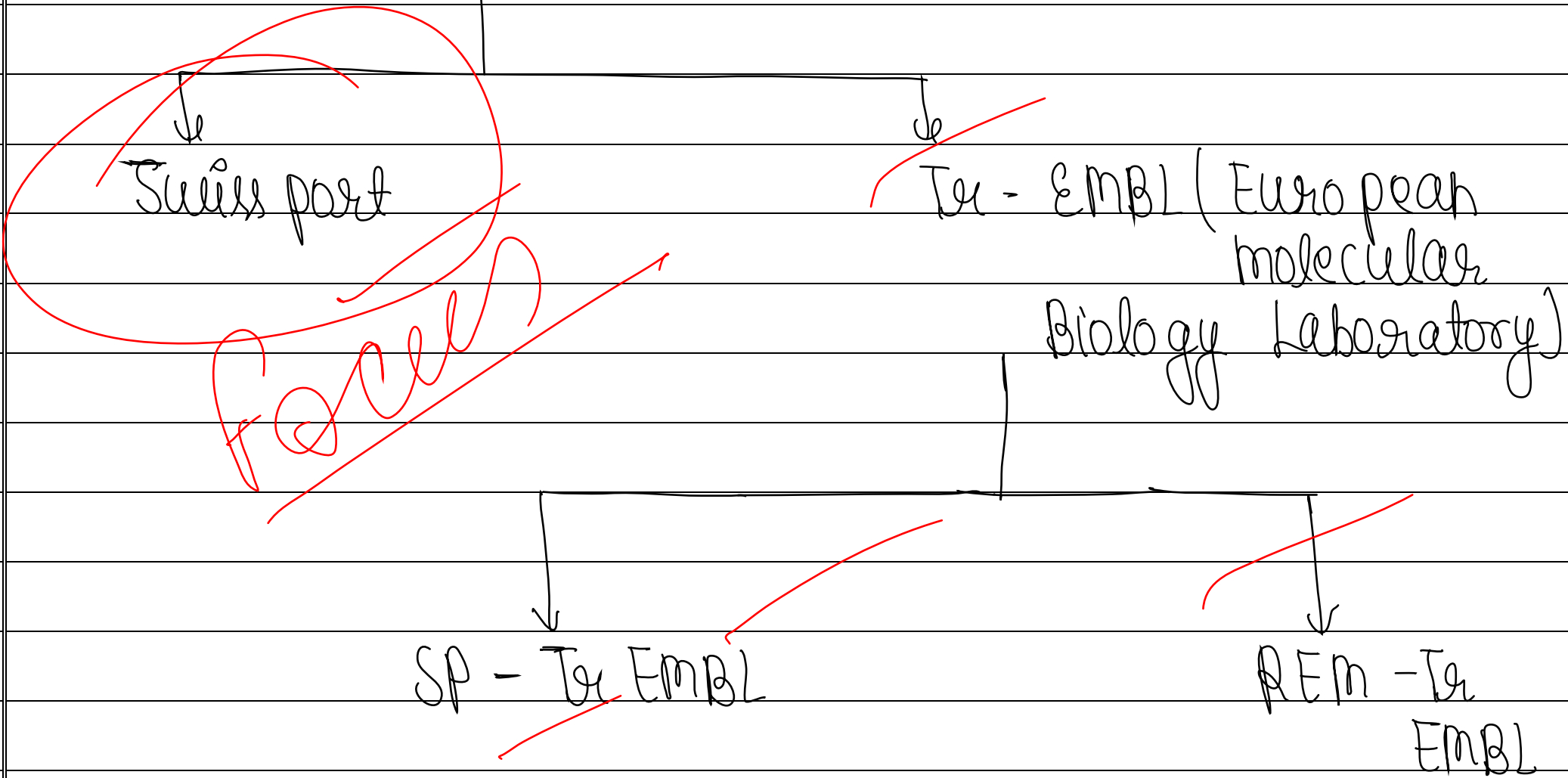
⇒ Swiss port is a ~~protein database sequence~~.

⇒ ~~protein database sequence~~ in EMBL (European Molecular Biology Laboratory) is ~~divided~~ by the ~~swiss port~~.

⇒ Swiss port is GenBank is ~~related~~ between the part of the ~~sequence databases~~.

⇒ And ~~protein sequence~~ databases are ~~swiss port~~.

It consists of two types



⇒ Annogation

⇒

Conclusion:-

Swiss prot are protein sequence database.  
and Tr-EMBL or GenBank.

⇒

They are very important part of protein data  
base.

⇒

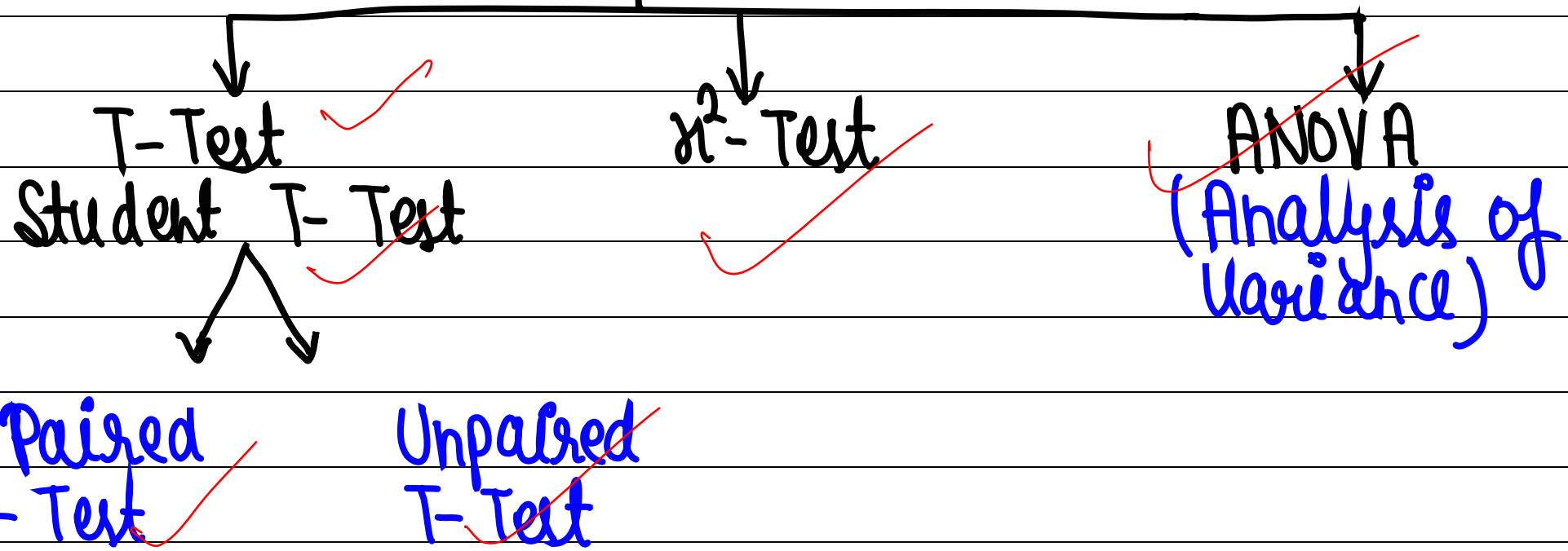
And the European Molecular Biology Laboratory  
and nucleotides Institute of GenBank present  
in Swiss prot.

### Section-C

Q11:

Types of Test of significance:-

# Test of significance



⇒ Any one in detail →

CHI-Square Test

- $\chi^2$ -Test is Introduced by Karl Pearson.
- $\chi^2$ -Test is sampling analysis for testing significance of population variance.
- $\chi^2$ -Test is non-parametric Test if can be used for Goodness of fit.
- $\chi^2$ -Test is use simple random sampling method.
- $\chi^2$ -Test is value lies bw 0 to 1.

$$\chi^2 = \frac{\sum (O-E)^2}{E}$$

$$\sum \frac{(O-E)^2}{E}$$

It is calculated  $\chi^2 > \text{tabulated } \chi^2$ .  
then

if can be used for  $\chi^2$  square significance.  
then

if can must be hypothesis may be rejected.

### Uses

- Goodness of fit
- It is independent of the attribute
- $\chi^2$ -Test is use for sampling analysis and population linkage.

use only be  
example

4

Q93

L-

Marks <i>G.I</i>	No. of student <i>f</i>	<i>c.f.</i>
0-10	10 ✓	10
10-20	15 ✓	25
20-30	5 ✓	30
30-40	8 ✓	38 <i>c</i>
<u>40-50</u>	12 ✓	<u>50</u> <i>f</i>
50-60	18 ✓	68
60-70	21 ✓	89
70-80	11 ✓	100

~~Median~~  
~~not~~  
~~mean~~

mean =

$$L + \frac{\left(\frac{n}{2} - c\right) f}{f}$$

$$L + \frac{\left(\frac{n}{2} - c\right) i}{f}$$

$$= \frac{40 + (50 - 38) \times 10}{50}$$



$$\text{mean} = \frac{40 + 12 \times 10}{50}$$

$$= \frac{40 + 120}{50}$$

$$= \frac{8 + 12}{10} = 96$$

$$\text{mode} = \frac{L + (F_m + f_1) \times i}{2F_m - F_1 - F_2}$$

$$= \frac{L + \frac{(f_m - f_1) \times i}{2f_m - f_1 - f_2}}{2F_m - F_1 - F_2}$$

$$= \frac{40 + \frac{(50 - 38) \times 10}{2 \times 50 - 38 - 68}}$$

$$= \frac{40 + 12 \times 10}{100 - 38 - 68}$$

$$= \frac{40+120}{100-106}$$

$$\text{Mode} = \frac{160}{6} = \boxed{26.6}$$

~~$$\text{Mode} = 3 \text{ median} - 2 \text{ mean}$$~~

~~$$26.6 = 3 \text{ median} - 2 \times 96$$~~

~~$$26.6 = 3 \text{ med} - 192$$~~

~~$$192 + 26.6 = 3 \text{ med}$$~~

~~$$165.4 = 3 \text{ m}$$~~

~~$$\frac{165.4}{3} = \text{median}$$~~

$$\text{median} = 55.1$$

But I calculated mean & go wrong way.

3

















































