भाग-1

3322355

M

नामांकन संख्या

अनुक्रमांक (अंकों में)

अनुक्रमांक (शब्दों में)

परीक्षार्थी का पूरा नाम ..... हस्ताक्षर .....

कक्ष निरीक्षक का नाम .....

परीक्षार्थी द्वारा सम्पूर्ण विवरण भर लिए गये हैं।

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..... वर्ष 20 ..... भाग/सेमेस्टर .....
(Name of Exam) (Year 20.....) (Part / Semester)

विषय ..... प्रश्न-पत्र/पाठ्यक्रम..... पेपर कोड नं. .....
(Subject) (Paper /Course) (Paper Code No.)

परीक्षा का दिन..... दिनांक .....
(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											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

प्राप्तांक

(शब्दों में)	अंकों में

जाँचकर्ता के हस्ताक्षर एवं तिथि

परीक्षक के हस्ताक्षर एवं तिथि

2018- भाग-3

R

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आवश्यक निर्देशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

(परीक्षार्थी द्वारा भरा जाए)

परीक्षा का नाम..... भाग/सेमेस्टर .....

विषय .....

प्रश्न पत्र ..... दिनांक .....

परीक्षार्थी का अनुक्रमांक (Roll Number)

उत्तर-पुस्तिका क्रमांक

KM-I-01-

कालेज कोड

(परीक्षार्थी की श्रेणी)

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

नामांकन संख्या (Enrollment Number)

M

पेपर कोड

परीक्षार्थी का पूरा नाम

कक्ष निरीक्षक का नाम

Section 'A'

Q-1 Hypothesis

→ Hypothesis testing was introduced by Ronald Fisher, Karl-Pearson's & Pearson's son.

→ Hypthesis testing is a stastical method that is used to define anatomy of stastical method.

→ Hypothesis is a various types.

① Null hypothesis

→ Null hypothesis is the alternative hypothesis.

→ Null hypothesis is denoted by H_0: $\mu_1 = \mu_2$ that is show that there is no difference b/w the two hypothesis.

② Alternative hypothesis →

Alternative hypothesis is the hypothesis that show that the result of real value of testing.

Q-2. Genetic Disorders → Genetic Disorders are the result of error in Genes - As a Disease arises Genetic Disorders are called Genetic Disorders.

- Genetic Disease is passed by the Genes one Generation to the next generation.

1. Haemophelia
2. Colour Blindness.

⇒ Haemophelia & Colour Blindness In the Genetic Disorder.

⇒ In Colour Blindness – Red & Green Colour not identified.

Q-3 Gene Bank →

Gene Bank Defined as the Collection of Sequence Database of DNA & RNA.

→ In Bioinformatics Sequence Data Base is the Biological Collection of genetic material.

→ So Sequence Database Work with the Collaboration of Gene Bank of Bank Japan, DNA Data EMBL.

→ Gene Bank is also Biological Collection of Data.

→ Gene Bank Collect the Data & Defined & give information to other Laboratory like EMBL, DDBJ etc.

Q 4

http : → Hyper text transfer protocol.

⇒ When we log in any site it come in starting at the Website.

⇒ http is the tranfer protocol.

Q.5 DDBJ → DNA Data Bank of Japan.

→ It Collect the DNA Sequence.

→ DDBJ is the Biological Collection of Data in Bioinformatics.

→ DDBJ work With the Collaboration of EMBL (European Molecular Biology Laboratory.

Section 'B'

Ans Swiss Port → Swiss Port

Work with the Collaboration of EMBL & Data Bank of Bioinformatics.

→ If provide the higher level of manipulation with the Collaboration of with Data.

→ it work with the Top EMBL is the computed annovated Work

- Similar format to EMBL.
- Swiss port is the collect of protein sequence.
- Different types of protin sequence are collected by the Swiss port & identified the sequence.
- It is also called the Library of Protin sequence.

9. Swiss port recived files by the SRS.

⇒ SRS is the software that help to swiss port to recieved different protein sequences.

Features of Swiss port

① Annotation

② Mimimal Redydency.

3. Integration with other Database

4. Documentation

Q7.

Computer → A Device that Compukes cspically a programa-
ble electronic machine that
Performes high speed Math-
matical & logical operation
on that assembles, storage
Data etc.

Different types of Compukeres—

1. Super Computer.
2. Micro Computer.
3. Personal Computer.

Parts of Computer. → 2 types

of Components are found :-

1. Computer Hardware
2. Computer Software.

Computer Hardware →

Hardware is the physical part of the Computer. that Can we touch with our fingures.

⇒ Computer Hardware is the 3 types →

① Input Device
② Output Device
③ Storage Device.

Input Device

Input Device that get information in the Computer and the Input Device.

① Keyboard → it is used to type information & making files. Different keys are present at keyboard. Number key 1-10 present.

② Mouse → Mouse is the smallest part that move the cursor on monitor screen.

Output Device →

Output Device that get information out of the computer.

① Speaker → Speaker is the Output Device.

② Printer → Printer is the Output Device that give Information Out of the Computer

Storage Device → it is the Output & input are both. It store the Data so if is also known Storage Device

① Hard Disk
② CD
③ DVD (Digital video Disk
④ Pen drive.

→ 3. Computer Software is the part of the computer that say what to do. It see on Monitor Screen.
① MS Word ② MS Powerpoint etc.

Section C

Q10

Sequence Databas →

Sequence Database is the Collection of DNA & RNA Sequence. it is the folleting of in Data to Detect & analyzing Bioinformatics.

⇒ In other word we Define the Sequence Database is the Biological Collection of Data in Bioinformatics.

⇒ European Molecular Biology BLAST, Gene Bank, DDBJ are all the Collect Data.

⇒ Sequence Database is work with the Collabration of NIG. (National Institute of Genetics.

⇒ When we thought the Sequence Database the V 2 main function are arise in our mind. firstly Collection of Data & than Second function of DNA Sequences.

⇒ Types of Sequence Database →

① Generalised Database.
② Specilised Database.

Sequence Database

- Generalised Database
  1. EBTs
  2. STss
  3.
- Specilised Database.
  1. Protein Database
     (i) Swiss Prot
     2. PIR (Protein information Resources)
  2. Nucleotide Database.
     1. EMBL
     2. Gene Bank

Generalised Database →

① ESTs → Expressed Sequence text.

it Define the Sequence of DNA & RNA fragments.

② STSs → Sequence tagged Sites.

Specialised Database

① Protein Database. → that Define about the Protein sequence of DNA fragment. this are the 2 types —

① Swiss prot → Define in Section - B, Question — 8 Page No — 9.

② PIR → Protein Information Resource and Define the Sequence Database.

Nucleotide Database → ~~Here are the 2 types.~~

① EMBL → European Molecular Biology Laboratory

(3) Gene Bank → Define in Section A - Question No. - 3.

BLAST → Basic Local alignment Search tool. Blast is an algorithm for Define Sequence Database.

Q.11 Test Significance

3 types of test of Significance

① chi-square test (χ^2)

② t test → it is the mainly two types.

(i) Paired t test

(ii) Unpaired t - test

(3) ANOVA
(Analysis of Variance)

Chi - square test

Chi - square test used for the single Data.

→ When We have single Data of significance then We check by the chi-square test.

→ chi square test is Denoted by the (χ^2) test.

→ the formula for testing the chi-square test is the.

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

O = Observed Value.

E = Expected Value.

In this process in result two value - tabulated value & observed values.

- if T.V. > O.V. - Tabulated value more than the observed value we accept the hypothesis testing.

⇒ if T.V. < O.V. Tabulated value less than observed value we reject the hypothesis testing.

⇒ Pearson's chi-square published the test.

⇒ In the standered application of this test the observation are classified into mutually exclussive classes.

⇒ A chi-square test are often constructed from a sum square error.

⇒ Test Square test that follow chi-square test.

→ a chi - square test used for the assumption reject or accept the null hypothesis.

→ Null hypothesis Denoted by H0: $\mu_1 = \mu_2$ that show that there is no Difference in the two population.