**DR. Hasan Murad School of Management**

**Sample entry test for Ph.D. Statistics**

**Part A:**

**Mathematical Section**

**Answer to be provided on the ANSWER SHEET by filling the appropriate option.**

1. $R^{2}=0.95, TSS=1234, $then $RSS=$

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (a) | Information not sufficient | (b) | 67.1 | (c) | 61.7 | (d) | None of these |

1. The Unbiased Estimator of the variance of error term of the Regression Model is:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (a) | SSR |  | (b) | MSE | (c) | MSR | (d) | SSE |  |

1. Only two cumulants exist-----------------distribution.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (a) | Binomial | (b) | Exponential | (c) | Normal | (d) | Lognormal |

1. Changing the units of measurement of the Y variable will affect all but which one of the following?

|  |  |  |  |
| --- | --- | --- | --- |
| (a) | R squared for the regression | (b) | The estimated intercept parameter |
| (c) | The Total Sum of Squares for the regression | (d) | The estimated slope parameter |

**Part B:**

**ENGLISH SECTION**

**I: Sentence Completion**

1. The boy hurt playing football in the park.
2. Themselves
3. Themself
4. Theirselves
5. Himself
6. Himselves
7. I’d rather you to me like that in front of the customers.

A. Not speak

B. Didn’t speak

C. Weren’t speak

D. Not speaking

E. Will not speaking

**II: Identification of Sentence errors.**

Read each sentence carefully. If you find an error, select the underline part that is incorrect. Some sentences contain no error, in which case choose answer E.

**7.** I do not wish to make (A) a formal complaint, but I would have been better pleased (B) if you gave (C) the award to the person who (D) best deserved it, NO error (E).

A.

B.

C.

D.

E.

8. Ways to use the word or (C) a sentence to illustrate its (D) meaning. No error (E).

A.

B.

C.

D.

E.

**III: Sentence Correction**

Part of the given sentence is underlined. Choose the answer choice which is the best version of the underlined part. Choice A is unchanged. Select the version which is the most effective expression, correct grammar, clear and unambiguous.

9. In the fine print at the end of the document lies the clauses that make us liable for any expenses that result from civil unrest.

1. Lies the clauses that make us visible for any expenses that.
2. Lies the clauses that make us visible for any expenses which.
3. Lies the clause that make us visible for any expenses that.
4. Lie the clauses that make us visible for any expenses which.
5. Lie the clauses that make us visible for any expenses that.

10. In the engineering sector at the moment there are no jobs for those without experience, which makes it difficult for, we recent graduates to get started on our careers.

1. at the moment there are no jobs for those without experience, which makes it difficult for we
2. at the moment there are no jobs for those without experience, which makes it difficult for us.
3. there are no jobs for those without experience, a fact that makes it difficult for us.
4. there are no jobs for those without experience, which makes it difficult for us.
5. at the moment there are no jobs for those without experience, a fact makes it difficult for we.

**IV: Reading Comprehension**

**V:** Write an essay of not more than 300 words on any of the following Topics.