ADMISSION GUIDE

Faculty of Information Technology
Department of Computer Science & IT

Admission Office
The University of Lahore, Pakistan (UAN: +92-42-111-865-865)
1-km, Raiwind Road Lahore. Ph:042-35963421
1-km Defense Road, Off Raiwind Road, Near Bhoptian Chowk Lahore, Ph:042-35321456-60
Web: www.uol.edu.pk Email: admissions@uol.edu.pk
# BRIEF PROGRAMS INFORMATION - ADMISSION FALL 2017

<table>
<thead>
<tr>
<th>Program Name:</th>
<th>Bachelor of Science in Computer Science (BSCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Duration:</strong></td>
<td>Full-Time, 4 Years</td>
</tr>
</tbody>
</table>
| **Entry Requirements:** | Intermediate F.Sc(Pre-Engineering) / ICS / I.Com, A-Leve,
| | ls, DAE(Computer, Electronics, Electrical, Instrumentation, Telecom or equivalent) (Minimum 50% marks) |
| **Credit Hours:** | 134 |
| **Location:** | Defence Road Campus |
| **Recognized by:** | Higher Education Commission (HEC) |
| **Timing:** | 08:00 am – 05:00 pm |

<table>
<thead>
<tr>
<th>Program Name:</th>
<th>Master of Science in Computer Science (MSCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Duration:</strong></td>
<td>Full-Time, 2 Years</td>
</tr>
<tr>
<td><strong>Entry Requirements:</strong></td>
<td>BS 4 years degree program in CS or relevant fields (minimum 130 credit hours) from HEC recognized University/Institute</td>
</tr>
<tr>
<td></td>
<td>MCS/M.Sc-IT, M.Sc-Computer Science or equivalent examination in a relevant field from HEC recognized University/Institute</td>
</tr>
<tr>
<td></td>
<td>16 years engineering graduates in a relevant field (min 130 credit hours) from HEC recognized University/Institute</td>
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<tr>
<td></td>
<td>Minimum of 2.50 CGPA (out of 4.00) for semester system. In case of percentage/annual system, minimum 60% aggregate</td>
</tr>
<tr>
<td><strong>Credit Hours:</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>Location:</strong></td>
<td>Defence Road Campus</td>
</tr>
<tr>
<td><strong>Recognized by:</strong></td>
<td>Higher Education Commission (HEC)</td>
</tr>
<tr>
<td><strong>Timing:</strong></td>
<td>06:00 pm – 09:00 pm</td>
</tr>
</tbody>
</table>
Program Name: Doctor of Philosophy in Computer Science (PhD Computer Science)

Program Duration: Full Time – Minimum 3 Years

Entry Requirements: MS/M.Phil (18 years of education) or equivalent degree in the relevant field from HEC recognized University/Institute. CGPA 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System)

Subject Test:

a. GRE subject test with at least 60 Percentile.
b. A University Committee consisting of at least 3 Ph.D faculty members in the subject area and approved by the HEC will conduct the Test at par with GRE Subject Test and qualifying score for this will be 70% score.

Credit Hours: Course Work: 18; Research Thesis: 30; Total= 48

Location: Defence Road Campus

Recognized by: Higher Education Commission (HEC)

Instructions for Applicants

How to apply

The applicants are encouraged to read the following information carefully before filling up the Admission Form on online admission portal (please visit our website for online admission form http://admissions.uol.edu.pk/)

For Obtaining Prospectus and Voucher# from university Admission Office: Payment of Rs.1500/-

For Obtaining Prospectus and Voucher# through courier: Bank draft amount Rs. 1700/- from any bank in favor of “The University of Lahore” and send it through courier 02 days before admission closing date, failing which your draft will not be acceptable. Please mention your mailing address and contact information clearly.

Office hours: Monday to Friday (8:00am to 5:00pm) - Saturday & Sunday (9:00am to 3:00pm)

The Online Admission Form must be filled according to the steps given below. The applicant either male or female, who fulfills the requirements prescribed by the University and conditions mentioned in the prospectus, is eligible to apply for admission.

1. An applicant can apply in three degree programs at a time. However, he or she will not be charged for extra choice.
2. Original scan or attested copies of the following documents are required to be uploaded on online admission Form:
   a) 01 recent blue background passport size photograph
   b) All academic documents i.e (Matric, Inter, Bachelor and Master Degrees or IBCC /HEC equivalent)
   c) Applicants CNIC card or Form B or Father CNIC
   d) For more details please visit: [http://admissions.uol.edu.pk/](http://admissions.uol.edu.pk/)

3. Don’t upload/attach Domicile, Character and Hope Certificate while filling the Online Admission Form.

4. In case, an applicant does not have certified copies of the required documents, the same may be attested by University Admission Officer on submission of the original documents.

5. In order to get admission in any degree program, the applicants are required to qualify UOL Entrance Test, Interview or both.

6. The selection of applicant shall be on merit, determined on the basis of marks obtained in the last examination, entry test / interview or both and such other criteria as University may determine.

7. Applicants awaiting final exam result or those who have appeared in supplementary exam are eligible to apply for admission. However, in such cases, they will be deprived of previous qualification weightage and will be purely evaluated on the basis of their test/interview score.

8. The applicants bearing O-Level, A-Level qualification or equivalent are required to submit their IBCC Equivalence Certificate in order to determine their eligibility. If an applicant fails to produce the same, he or she will not be given qualification weightage.

9. The UOL offers female hostel. The rent per room is Rs. 12,000 /- per month approximate (Including 3 time meal).

10. The University transport is available throughout the Lahore City.

11. All admissions are granted on “Provisional” basis. It is the sole responsibility of the selected applicants to provide proof of their eligibility within 3 weeks of the declaration of the result failing which their admission will be cancelled.

12. Incomplete Admission Forms will be rejected. Documents once submitted are non-returnable.

13. For Foreign/International Applicants please visit our website:
   [http://www.uol.edu.pk/Services/StudentServices/InternationalStudentsAdvisory](http://www.uol.edu.pk/Services/StudentServices/InternationalStudentsAdvisory)

**Cautions:**

1. The applicants are strongly encouraged to take special care of the fee deadlines after getting admission otherwise he or she will be deprived of admission.

2. In order to avoid any inconvenience, please submit your Admission Form before the admission closing date.

3. The University is authorized to amend its rules including fee any time without prior intimation.

4. The University has not authorized any publisher or person for preparation of its Entrance Tests. So please beware of such elements.
Admission Cell 1
The University of Lahore
1-km, Raiwind Road, Lahore
Ph.: +92-42-35963421-28 Email: admissions@uol.edu.pk
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Sample Test
Bachelors Program
Session 2017-18

Department of Computer Science
&
Information Technology
SECTION 1 – English

Questions: 35
Time: 35 Minutes

Four (4) suggested options A, B, C & D are given of which ONLY one option is correct. Shade/Fill the corresponding choice on the Answer Sheet ONLY.

Comprehension

Read the following passages and answer the questions:

PASSAGE 1:

Modern economies do not differentiate between renewable and non-renewable materials, as its method is to measures everything by means of a money price. Thus, taking various alternatives fuels, like coal, oil, wood or water power: the only difference between them recognized by modern economics is relative cost per equivalent unit. The cheapest is automatically the one to be preferred, as to do otherwise would be irrational and ‘uneconomic’. From a Buddhist point of view of course this will not do, the essential difference between non-renewable fuels like coal and oil on the one hand and renewable fuels like wood and water power on the other cannot be simply overlooked.

<table>
<thead>
<tr>
<th>According to the passage, Buddhist economists are not in favor of measuring everything in terms of money.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Using non-renewable sources.</td>
</tr>
<tr>
<td>B. Using renewable.</td>
</tr>
<tr>
<td>C. Economic development.</td>
</tr>
<tr>
<td>D. Applying non-violence to every sphere of life.</td>
</tr>
</tbody>
</table>

In questions given below out of four alternatives, choose the one which can be substituted for the given word/sentence.

<table>
<thead>
<tr>
<th>A style in which a writer makes a display of his knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pedantic</td>
</tr>
<tr>
<td>B. Verbose</td>
</tr>
<tr>
<td>C. Pompous</td>
</tr>
<tr>
<td>D. Ornate</td>
</tr>
</tbody>
</table>

Read the each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence. The letter of that part is the answer. If there is no error, the answer is ‘D’. (Ignore the errors of punctuation, if any).

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. A lot of travel delay is caused.</td>
</tr>
<tr>
<td>B. Due to the inefficiency and lack of good management.</td>
</tr>
<tr>
<td>C. On behalf of the railways.</td>
</tr>
<tr>
<td>D. No error.</td>
</tr>
</tbody>
</table>

In the following questions choose the word which best expresses the SYNONYM of the given words.

<table>
<thead>
<tr>
<th>Elude</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Ask</td>
</tr>
<tr>
<td>B. Avoid</td>
</tr>
<tr>
<td>C. Accurate</td>
</tr>
<tr>
<td>D. Passion</td>
</tr>
</tbody>
</table>
6. *In the following questions choose the word which is the exact OPPOSITE of the given words.*

<table>
<thead>
<tr>
<th>Virtuous</th>
<th>B. Vulgar</th>
<th>C. Miserly</th>
<th>D. Insincere</th>
</tr>
</thead>
</table>

**SECTION 2 - Quantitative Mathematics**

Questions: 35  
Time: **35 Minutes**

Four (4) suggested options a, b, c & d are given of which ONLY one option is correct. Shade/fill the corresponding choice on the answer sheet ONLY.

**How many ways can the letter in the word YOUSAF be ordered?**

- A. 720
- B. 24
- C. 25
- D. 6

**SECTION 3 - Analytical & Logical Abilities**

Questions: 25  
Time: **25 Minutes**

Four (4) suggested options a, b, c & d are given of which ONLY one option is correct. Shade/fill the corresponding choice on the answer sheet ONLY.

**Dan is Joshua’s son and Guy’s brother. Margaret is Guy’s mother and Judy’s daughter. Which of the statements below are true?**

- A. Judy is Dan’s mother-in-law
- B. Margaret is Dan’s mother
- C. Judy is Joshua’s grandmother
- D. None of the above

**SECTION 4 - Computer Fundamentals**

Questions: 25  
Time: **25 Minutes**

Four (4) suggested options a, b, c & d are given of which ONLY one option is correct. Shade/fill the corresponding choice on the answer sheet ONLY.

**Set of rules for exchange of data from one computer to another is called**

- A. Data communication
- B. Communication Protocols
- C. Communication Modes
- D. Bus Topology

**The output quality of a printer is measured by:**

- A. Dot per inch
- B. Dot per sq. inch
- C. Dots printed per unit time
D. All of above
Sample Test
MSCS/PhD Program
Session 2017-18

Department of Computer Science
&
Information Technology

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The University of Lahore, Pakistan
Sample Questions for MSCS Admission Test

Q 1- If A, B and C are Boolean Variables, which of the following is (are) true?

1- \( A \land (B \lor C) = (A \land B) \lor (A \land C) \)
2- \( A \lor (B \land C) = (A \lor B) \land (A \lor C) \)
3- \( (A \land B) \lor C = C \lor (B \land A) \)

(A) 1 only
(B) 2 only
(C) 1 and 2 only
(D) 2 and 3 only
(E) 1, 2 and 3

Q 2- Four processes P1, P2, P3 and P4 are scheduled to use a single processor. The following table shows the arrival time and duration of each of the four processes.

<table>
<thead>
<tr>
<th>Process</th>
<th>Arrival Time (seconds)</th>
<th>Duration (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>P3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>P4</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

If the system uses a preemptive shortest-job-first scheduling algorithm, what is the average waiting time for the four processes, in seconds?

(A) 2
(B) 3
(C) 4
(D) 5
(E) 6

Q 3- What is the postfix expression for the infix expression \( a + b \ast c - d \)

(A) abc+*d-
(B) abc*+d-
(C) ab*c+-d
(D) ab*c+-d
(E) None of these
Q 4- What is the sequence of multiplexing techniques with respect to following statements: (i) a user sends at low rate all the time, (ii) a user is allowed to transmit over the entire frequency spectrum all the time, and (iii) a user sends at higher rate a fraction of the time?

(A) CDM, TDM, FDM
(B) FDM, TDM, CDM
(C) FDM, CDM, TDM
(D) TDM, CDM, FDM
(E) None of these

Q 5- If $x$ is a string, then $x^R$ denotes the reversal of $x$. If $x$ and $y$ are strings, then $(xy)^R =$

(A) $xy^R$
(B) $yx^R$
(C) $y^Rx$
(D) $x^Ry^R$
(E) $y^Rx^R$

Q 6- What is the output of the following program??

```c
#include<stdio.h>
main()
{
    int x = 65, * p = &x;
    void * q=p;
    char * r=q;
    printf("%c", * r);
}
```

(A) Garbage character
(B) A
(C) 65
(D) Compile error
(E) None of these

Q 7- The figure below represents a nondeterministic finite automaton with accepting state D. Which of the following strings does the automaton accept?

(A) 001
(B) 1101
Q 8- Given that

B(x) means “x is a bear”
F(x) means “x is a fish”, and
E(x, y) means “x eats y”,

What is the best English translation of

\[ \forall x [F(x) \rightarrow \forall y (E(y, x) \rightarrow B(y))] \]

(A) All fish eat bears
(B) Every fish is eaten by some bear
(C) Bears eat only fish
(D) Every bear eats fish
(E) Only bears eat fish

Q 9- What is the maximum number of IP addresses on a local subnet that uses the 255.255.255.248 subnet mask?

(A) 14
(B) 4
(C) 8
(D) 16
Q 10- Consider the following table in a relational database

<table>
<thead>
<tr>
<th>Last Name</th>
<th>Rank</th>
<th>Room</th>
<th>Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>Manager</td>
<td>234</td>
<td>Morning</td>
</tr>
<tr>
<td>Jones</td>
<td>Custodian</td>
<td>33</td>
<td>Afternoon</td>
</tr>
<tr>
<td>Smith</td>
<td>Custodian</td>
<td>33</td>
<td>Evening</td>
</tr>
<tr>
<td>Doe</td>
<td>Clerical</td>
<td>222</td>
<td>Morning</td>
</tr>
</tbody>
</table>

According to the data shown in the table, which of the following could be a candidate key of the table?

(A) \{Last Name\}
(B) \{Room\}
(C) \{Shift\}
(D) \{Rank, Room\}
(E) \{Room, Shift\}