

# ADMISSION GUIDE

## FALL 2021



THE  
UNIVERSITY OF  
LAHORE

## Department of Mechanical Engineering

**For Inquiry:**  
**Admission Office:**

**UAN: 042 111 865 865**

1-Km Defence Road, Off Raiwind Road, Near Bhotatian Chowk Lahore.

Web: [www.uol.edu.pk](http://www.uol.edu.pk) Email: [admissions@uol.edu.pk](mailto:admissions@uol.edu.pk)

**Program Name:** BS IN MECHANICAL ENGINEERING (BSME)  
**Entry Requirements:** Minimum 60% F.Sc (Pre-Engg.)DAE (Mech.)/A-Levels  
**Program Duration:** 4 Years (08 semesters) 136 Credit Hours Fulltime, UOL Entry Test is Mandatory  
**Program Recognition:** Pakistan Engineering Council & HEC

**Program Name:** MS IN MECHANICAL ENGINEERING (MSME)  
**Entry Requirements:** 16 Years of Education, BS (Mechanical Engineering) with Minimum of 2.50/4.00 CGPA for semester system or 60% in Annual System from HEC/PEC recognized university. UOL Admission test and Interview with min. 50% score in each.  
**Program Duration:** 2 Years (04 semesters) 30 Credit Hours - Weekend

**Program Name:** PHD IN MECHANICAL ENGINEERING  
**Entry Requirements:** 18 Years of Education, MS/MPhil or Equivalent degree from HEC/PEC recognized university with minimum 3.00/4.00 CGPA in semester system or 60% marks in annual system. GRE, GAT or UOL admission test with 70% score. Statement of Purpose (SOP). Interview by Departmental Admission Committee (DAC).  
**Program Duration:** 3 Years - 78 Credit Hours - Weekend

### SAMPLE TEST BS LEVEL

<b>Section 1</b> Undergraduate	Time Allowed:30 Minutes Questions: 20	Choose the correct answer for each question and <b>encircle</b> the corresponding choice on answer sheet.
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### ENGLISH SECTION

#### Instructions

- 1) Indicate your choice by encircling the corresponding choice on the answer sheet.

#### PART -1 READING COMPREHENSION

**Directions:** Read the two passages and answer all the questions.

In late infancy, the baby takes an interest in games, songs and even books. Progress toward walking moves through standing, balancing, bouncing in place and walking with others. As soon as the baby walks well alone, it has passed from infancy into the active toddler stage.

- 1) A baby in a late infancy would be able to do all of the following EXCEPT
  - A. Makes any speech sound
  - B. Walk well alone
  - C. show interest in games

- D. intimate actions
- 2) Treponema palladium causes
- Syphilis
  - Gonorrhea
  - AIDS
  - Genital herpes

**PART -2 -VOCABULARY**

**Directions:** choose the answer which best explains the meaning of the word in bold type

- 1) Our Company has just **acquired** two new tractors.
- bought
  - purchased
  - stolen
  - obtained

**Directions:** choose the most appropriate synonym

- 1) Comprehend
- red
  - colorful
  - understand
  - sky

<b>Section 2</b> Undergraduate	Time: 30 Minutes Questions: 25	Choose the correct answer for each question and encircle the corresponding choice on answer sheet.
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**MATHEMATICS (Aptitude Section)**

**Instructions**

- Indicate your choice by encircling the corresponding choice on the answer sheet.
- You can solve each problem while deciding the best of the choices given, using any available space on the question booklet.

- 1) If  $5c + 3 = 3c + 5$ , what is the value of  $c$ ?
- 1
  - 0
  - 1
  - 3

- 2)  $5t^2 + 30t =$   
 $5t$
- 29t
  - t-6
  - t+6
  - 5-6t

- 3) If the selling price of model B is 60% more than the selling price of model A, what percent of the total sales do the sales of model a represent?
- 25%
  - 36%
  - 40%
  - None of the above

<b>Section 2</b>	Time: 30 Minutes	Choose the correct answer for each question and
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Undergraduate	Questions: 25	encircle the corresponding choice on answer sheet.
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### MATHEMATICS (Achievement Section)

#### Instructions

- 1) Indicate your choice by encircling the corresponding choice on the answer sheet.
  - 2) You can solve each problem while deciding the best of the choices given, using any available space on the question booklet.
- 1) The next term in the sequence is 3,9,19,33,51...is
    - A. 55
    - B. 63
    - C. 47
    - D. None of the above
  - 2) A square matrix A is symmetric if  $A = ?$ 
    - A.  $A^t$
    - B. A
    - C.  $-A$
    - D.  $A^{-1}$
  - 3) The point  $(a \cos \theta, b \sin \theta)$  always lies on
    - A. Circle
    - B. Hyperbola
    - C. Parabola
    - D. None of the above

<b>Section 4</b>	Time: 30 Minutes	Choose the correct answer for each question and encircle the corresponding choice on answer sheet.
Undergraduate	Questions: 30	

### PHYSICS (Aptitude Section)

#### Instructions

- 1) Indicate your choice by encircling the corresponding choice on the answer sheet.
  - 2) You can solve each problem while deciding the best of the choices given, using any available space on the question booklet.
- 1) An object with the greatest temperature will appear
    - A. Green
    - B. Blue
    - C. White
    - D. Orange Red
  - 2) The Unit of \_\_\_\_\_ is hertz
    - A. Frequency
    - B. Time Period
    - C. Wave Length
    - D. Sound

- 3) A 5 gm. bullet leaves the muzzle of a rifle with a speed of 320 m/s. What force (assumed constant) is exerted on the bullet while it is travelling down the 0.82 m long barrel of the rifle?
- A. 7.92 Newton
  - B. 8.14 Newton
  - C. 8.98 Newton
  - D. None of the above

<b>Section 4</b> Undergraduate	Time: 30 Minutes Questions: 30	Choose the correct answer for each question and encircle the corresponding choice on answer sheet.
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### PHYSICS (Achievement Section)

#### Instructions

- 1) Indicate your choice by encircling the corresponding choice on the answer sheet.
- 2) You can solve each problem while deciding the best of the choices given, using any available space on the question booklet.

- 1)  $A \times B = 0$ , then
  - A. They are parallel
  - B. Either A or B is null vector
  - C. The vectors are equal to each other
  - D. The vectors are opposite in direction
- 2) Find the rectangular components of velocity 10 m/sec when one of the component make angle of  $30^\circ$  with the resultant
  - A. 4, 3
  - B.  $5\sqrt{3}, 5$
  - C.  $\frac{5}{3}, 5$
  - D. None of them

### SAMPLE TEST MS LEVEL (Time Allowed: Two Hours)

**NOTE:** All questions are worth 1 mark each. Please do not write anything on the question paper. Extra sheet will be provided on demand for the Calculations. Return this document after entry test.

1. Frequency of Vibrations means the number of cycles per second.

**A. Yes**                      **B. No**

2. The ratio of the heat equivalent to one kW hour to the heat in fuel per B.P. hour is termed as brake thermal efficiency.

**A. Yes            B. No**

3. The hydraulic gradient line may be above or below the centre line of the pipe.

**A. True            B. False**

4. The number of rivets in shear shall be equal to the number of rivets in crushing.

**A. Correct        B. Incorrect**

5. The ability of a material to absorb energy in the plastic range is called.

**A. Resilience    B. creep        C. fatigue strength        D. toughness**

6.  $\sin 2x$  simplifies to

**A.  $2\sin x \cos x$     B.  $\sin x \cos 2x$         C.  $\sin x \cos x$         D.  $\sin 2x \cos x$**