

# School of Aeronautics (Neemrana)

Practical Question Paper For Internal / External Assessment / Back / Re-Back Examination -  
Credit 1 or 50 marks / Credit 1.5 or 75 marks / Credit 2 or 100 marks / Credit 2.5 or 125 marks /  
Old Scheme / AME

## Guidelines for Practical Examination

### 1. (Credit-1 / 50 marks)

University Practical Examination of 50 marks, is divided into two parts of assessment i.e. Internal Assessment (30 marks) and External Assessment (20 marks). Internal Assessment (30 marks) are further sub divided into two parts i.e. Project Assessment (10 marks) and Internal Practical Assessment (20 marks). These 20 marks are further divided into three Mid Terms, i.e. Mid Term I (5 marks), Mid Term II (7 marks) and Mid Term III (8 marks). For the sake of convenience in assessment, multiplication factor of 10 is used to design the grading sheets, i.e. of 50, 70 and 80 marks respectively for Mid Term I, II and III.

### 2. (Credit-1.5 / 75 marks)

University Practical Examination of 75 marks, is divided into two parts of assessment i.e. Internal Assessment (45 marks) and External Assessment (30 marks). Internal Assessment (45 marks) are further sub divided into two parts i.e. Project Assessment (15 marks) and Internal Practical Assessment (30 marks). These 30 marks are further divided into three Mid Terms, i.e. Mid Term I (7.5 marks), Mid Term II (10.5 marks) and Mid Term III (12 marks). For the sake of convenience in assessment, multiplication factor of 10 is used to design the grading sheets, i.e. of 75, 105 and 120 marks respectively for Mid Term I, II and III.

### 3. (Credit-2 / 100 marks)

University Practical Examination of 100 marks, is divided into two parts of assessment i.e. Internal Assessment (60 marks) and External Assessment (40 marks). Internal Assessment (60 marks) are further sub divided into two parts i.e. Project Assessment (20 marks) and Internal Practical Assessment (40 marks). These 40 marks are further divided into three mid terms, i.e. Mid Term I (10 marks), Mid Term II (14 marks) and Mid Term III (16 marks). For the sake of convenience in assessment, multiplication factor of 10 is used to design the grading sheets, i.e. of 100, 140 and 160 marks respectively for Mid Term I, II and III.

### 4. (Credit-2.5 / 125 marks)

University Practical Examination of 125 marks, is divided into two parts of assessment i.e. Internal Assessment (75 marks) and External Assessment (50 marks). Internal Assessment (75 marks) are further sub divided into two parts i.e. Project Assessment (25 marks) and Internal Practical Assessment (50 marks). These 50 marks are further divided into three mid terms, i.e. Mid Term I (12.5 marks), Mid Term II (17.5 marks) and Mid Term III (20 marks). For the sake of convenience in assessment, multiplication factor of 10 is used to design the grading sheets, i.e. of 125, 175 and 200 marks respectively for Mid Term I, II and III.

### 5. AME Fortnightly / Cumulative Fortnightly Practical Examination (30 Marks)

AME Fortnightly / Cumulative Fortnightly Practical Examination will be of 30 marks for each practical examination. Out of these 30 marks, 10 marks are for skill test, 4 marks for procedure writing, 10 marks for viva questions, 3 marks for practical record and 3 marks for log book writing. For practicals without skill marks division will be, 4 marks for procedure writing, 20 marks for viva questions, 3 marks for practical record and 3 marks for log book writing.

### 6. AME Semester Examination (70 Marks, Sem 1 to 3 for Practicals with skill and Sem 1 to 4 without skill)

AME Semester Practical Examination will be of 70 marks for each practical examination. Out of these 70 marks, 20 marks are for skill test, 10 marks for procedure writing, 9 marks for basic viva questions, 9 marks for advance viva questions, 6 marks for practical record, 6 marks for log book writing and 10 marks for project. For practicals without skill marks division will be, 20 marks for procedure writing, 30 marks for viva questions, 5 marks for practical record, 5 marks for log book writing and 10 marks for project.

### 7. AME Semester Examination (70 Marks, Sem 4 for Practicals)

AME Semester Practical Examination will be of 70 marks for each practical examination. Out of these 70 marks, 20 marks are for skill test, 5 marks for procedure writing, 15 marks for layover viva questions, 10 marks for laboratory viva questions, 5 marks for practical record, 5 marks for log book writing and 10 marks for project.

### 8. Special Practical Examination (12.5 Marks in SODECA For Credit System and 25 Marks in DECA For Old Scheme)

## NOTE

- FACULTY MEMBERS, PLEASE ENSURE TO WRITE VIVA QUESTIONS OF EACH PRACTICALS SEPARATELY. MIN NUMBER OF VIVA QUESTIONS PER PRACTICAL IS 20 DIFFERENT QUESTIONS.
- PLEASE ATTACH A SEPERATE SHEET IN DESIRED EXEL FORMAT FOR VIVA QUESTIONS. FORMAT OF EXCEL CAN BE DOWNLOADED FROM [www.soapalam.com](http://www.soapalam.com).

FOR EXTERNAL EXAMINATION THERE IS NO MULTIPLICATION FACTOR.

## Question Paper & Student Details

Mid Term / Fortnightly / Sem*	Back / Re-Back Examination	Date of Submission of QP	12/12/2020
Name of Faculty*	Sidhartha Sondh	Date of Examination*	16/12/2020
Subject*	1FY2 - 20-Engineering Physics Lab (New) (Credit-1)	Course*	B.Tech (Aeronautical Engineering)
Batch*	Back / Re-Back Students	Semester*	Semester : 1
Email Id of Faculty:*	sidharthasondh@soaneemrana.org	Phone Number of Faculty*	963 455 7511

Student Name		Student Reg No.	
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## Practical Questions

Question : 1*	To determine the wave length of monochromatic light with the help of Michelson's interferometer		
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Lesson Plan*	1	Topic*	Michelson's interferometer	Source*	Lab Manual
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Question : 2	To determine the wave length of sodium light by Newton's Ring.		
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Lesson Plan	3	Topic	Newton's Ring	Source	Lab Manual
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Question : 3	To determine the wave length of prominent lines of mercury by plane diffraction grating with the help of spectrometer		
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Lesson Plan	5	Topic	Spectrometer	Source	Lab Manual
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Question : 4

Determination of band gap using a P-N junction diode.

Lesson Plan

7

Topic

P-N junction diode

Source

Lab Manual

Question : 5

To determine the dispersive power of material of a prism with the help of spectrometer.

Lesson Plan

9

Topic

Prism

Source

Lab Manual

Question : 6

To study the charge and discharge of a condenser and hence determine the same constant (both current and voltage graphs are to be plotted).

Lesson Plan

11

Topic

Condenser

Source

Lab Manual

Question : 7

To determine the coherence length and coherence time of laser using He - Ne laser.

Lesson Plan

13

Topic

He - Ne laser

Source

Lab Manual

Question : 8

To measure the numerical aperture of an optical fiber.

Lesson Plan

15

Topic

Optical fiber

Source

Lab Manual

Question : 9

To study the Hall Effect and determine the Hall Voltage and Hall coefficients.

Lesson Plan

17

Topic

Hall Effect

Source

Lab Manual

Question : 10

Lesson Plan

Topic

Source

Question : 11

Lesson Plan

Topic

Source

Question : 12

Lesson Plan

Topic

Source

## Viva Questions

For Practicals Up to 3

Viva Question :

Add more

For practicals 4 to 6

Viva Question :

Add more

For practicals 7 to 9

Viva Question :

Add more

For practicals 10 to 12

Viva Question :

Add more

**Upload Scanned Document In Case of Numerical or Diagram for any of the above question**

Mention question number with relevant fig / numerical / equations.  
Max 150 KB

Choose files or drag here

**Upload Excel Sheet For Viva Questions As Per Prescribed Format.**

Mention question number with relevant fig / numerical / equations.  
Max 150 KB

Choose files or drag here

**I have scrutinized the question paper. There is no spelling mistake or any type of irrelevant question.**

