NOTIFICATION

No. 03 /2022 Dated : 06 /01/2022

Subject : (I) Minor changes in the syllabi of the subjects of 1A1 Engineering Mathematics I, 1B1 Engineering Mathematics II, 1A2 Engineering Physics, 1A6 Engineering Physics - Lab., 1B2 Engineering Chemistry.

(II) Chances & Absorption for the Old Course of the subjects of B.E. Sem. I / II (Group A & B)

Refôce : Notification No. 111/2019 dtd. 31.08.2019.

It is notified for general information of all concerned that the authorities of the University have accepted to implement the minor changes in the syllabi of the subjects of B.E. Sem. I / II (Group A & B) and the chances & equivalence for the old course students to be implemented from the academic session 2021-2022 & onwards in phase wise manner as under :

(I) Minor changes in the syllabi of the subjects of 1A1 Engineering Mathematics I, 1B1 Engineering Mathematics II, 1A2 Engineering Physics, 1A6 Engineering Physics - Lab., 1B2 Engineering Chemistry :

(i) **1A1 Engineering Mathematics – I**: On SGBAU Gazette Part II P. No. 487, under the title 1A1 Engineering Mathematics ï I under sub title Section A of Unit I: **Differential Calculus:** in line 1, the words ñRolleôs Theorem, Mean Value Theoremò after the words óLeibnitzôs Theoryô **be deleted**.

(ii) **1B1 Engineering Mathematics – II**: On SGBAU Gazette Part II P. No. 494, under the title 1B1 Engineering Mathematics II, under sub title Section A of Unit III: **Integral Calculus:** in line 1, the words ñEvolutes and Involutesò after the words óand Gramma functionô **be deleted**.

(iii) **1A2 Engineering Physics :** On SGBAU Gazette Part II P. No. 488, under the title 1A2 Engineering Physics under sub title Section A of Unit II in line 2, the word ñonlyò after the word óPrincipleô **be deleted** and after the word óstatementô, the words ñ& its derivationò be added. In line No.4, the words ñtime independent Schrodinger equationò after the words óits significanceô **be deleted** and the words ñTime energy uncertainty relationò **be added** before the words óówave function and its significanceô.

(iv) **1A2 Engineering Physics - Lab:** On SGBAU Gazette Part II P. No. 489, under the title 1A6 Engineering Physics- Lab. **Practicals:** the words and signs ñ16) Experiment on the basis of Non Destructive Testingò **be substituted** by the signs & words ñ16) Determination of Numerical Aperture & Acceptance angle by using optical fiber kitò .

(v) **1B2 Engineering Chemistry**: On SGBAU Gazette Part II P. No. 495, under the sub title Section A ó**Industrial Material:' of Unit III,** the words ñceramics & refractories, Nanomaterialò after the words óand Applications ofô **be deleted.** Under the sub title **Section B** in Unit V, in line 6, the words **"**Conducting Polymers: Introduction, types of conducting polymer and their examples**."** before the words óand applicationsô **be deleted**. In Unit VI under the sub title **Spectrophotometric techniques**: in line 2 & 3, the words **"**Surface characterization technique**:** X-ray diffraction**"** before the word ótechniqueô **be deleted**.

(vi) The revised Course Objectives and Course Outcomes of the subject **1A2 Engineering Physics** and the Course Objectives and Course Outcomes of **1A6 Engineering Physics – Lab**. shall be as per **'Appendix – A'** appended with this Notification.

(II) Chances & Absorption for the Old Course of the subjects of B.E. Sem. I / II (Group A & B)

(i) **1A1 Engineering Mathematics – I**: Two (2) chances i.e. Winter-2021 & Summer-2022 and then from Winter - 2022 be absorbed into revised syllabus of 1A1 Engineering Mathematics ï I**.**

(ii) **1A2 Engineering Physics**: Two (2) chances i.e. Winter-2021 & Summer-2022 and then from Winter - 2022 be absorbed into revised syllabus of 1A2 Engineering Physics**.**

(iii) **1B2 Engineering Chemistry**: Two (2) chances i.e. winter-2021 & Summer-2022 and then from winter ï 2022 be absorbed into revised syllabus of 1B2 Engineering Chemistry**.**

Sd/-
(Dr.J.A.Tidke)
Registrar(I/c.)
Sant Gadge Baba Amravati University

Appendix - A

1A2 ENGINEERING PHYSICS

Aim : To enable the students to correlate the theoretical principles of fundamentals of modern aspects in Physics with application oriented studies of engineering**.**

Course Objectives: Students will be taught **:**

1. Conducting, semiconducting materials.
2. Physics of modern engineering materials.
3. Electromagnetic phenomenon and wave propagation.
4. Application of Quantum Physics to Optical & Electrical phenomena.
5. Application of LASERS and Fiber Optics in Engineering & Technology.
6. Application of Ultrasonic and acoustics.

Course Outcomes: At the end of Course, Students will be able to**:**

1. Gain the knowledge about semiconducting materials and new engineering materials, semiconducting devices and its applications.
2. Co-relate the theoretical principles and fundamentals of modern aspects in Physics.
3. Learn basics and application of Quantum Physics in areas of optical electromagnetic Phenomenon.
4. Implement the laws of optics and application ï oriented studies like Lasers and fiber optics communication.
5. Know the fundamentals of Optic Fibers.
6. Explain the application of fundamentals of acoustics and Ultrasonics.

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1A6 ENGINEERING PHYSICS – Lab.

Course Objectives: Students will be taught **:**

1. Characteristics of semiconducting diodes.
2. To enhance the basic knowledge of electromagnetic phenomenon and cathode ray oscilloscope.
3. To study the phenomenon of Diffraction.
4. To understand the phenomenon of Interference.
5. study of Optical phenomenon.

Course Outcomes: At the end of Course, Students will be able to **:**

1. Recognize and study the characteristics of semiconducting devices and its applications.
2. Apply the fundamentals of electric and magnetic fields to understand the functioning of Cathode Ray Oscilloscope and Hall effect.
3. Learn the interference phenomenon and its applications.
4. Employ the phenomenon of Diffraction and its applications.
5. Co-relate the principles of Optics with the practical knowledge.

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