Code No. 14510/CBCS/BL

FACULTY OF ENGINEERING

B.E. II - Semester (CBCS) (Backlog) Examination, October 2021

Subject: Business Communication and Presentation Skills

Time: 2 Hours **Max. Marks: 70**

(Missing data, if any, may be suitably assumed)

PART – A

Note: Answer any five questions. **(5x2 = 10 Marks)**

I Choose the right option for the sentences given below.

1 In which channel of communication there will be development of team work?
(a) Diagonal communication
(b) Upward communication
(c) Horizontal communication
(d) Download communication

2 In which style of communication you are willing to negotiate and enter into a dialogue with
the other person.
(a) Grape wine communication
(b) Passive communication
(c) Aggressive communication
(d) Assertive communication

II Choose the right option for the sentences given below.

1 Our secret desires and ambitions which we do not reveal to anyone come under which
pane of Johari window.
(a) Open area
(b) Blind area
(c) Hidden area
(d) Unknown area

2 For effective email we should not
(a) Violate the rules of grammar
(b) Send attachment sensibly
(c) Write the subject clearly
(d) Proof read carefully

III Choose the right option for the sentences given below.

1 Which of the following is a feature of technical communication?
(a) Subjective information
(b) Objective information
(c) General vocabulary
(d) Not always structured

2 Which of the following is not a good feature of GD?
(a) Equal participation
(b) Effective communication
(c) In depth discussion
(d) Dominating others.

..2..

IV State whether the following statement is true or false.

(1) Logically organized and structure communication is a part of technical communication.

(2) Undiscovered talent comes under known area of Johari window.

V State whether the following statement is true or false.

(1) One asserts oneself in aggressive communication.

(2) Organising things help us in managing time.

VI Match the following

A	B
1. By establishing rapport with the person	a. Letter of adjustment
2. Reply to letter of complaint	b. Assertive communication
3. Assert oneself and negotiate with others	c. We can persuade any person
4. Brevity	d. Concise and exact use of words

VII What is email etiquette?

VIII Write about Assertive communication.

IX What are the features of a good GD?

X Write about minutes of the meeting.

PART – B

Note: Answer any four questions. (4x15 = 60 Marks)

XI Write about the channels of communication.

XII Write about the organizational GD.

XIII Explain “Johari window” the model of interpersonal relationship development.

XIV Write the elements (structure) of a formal report.

XV What is Teamwork? What are persuasion techniques?

XVI Write a letter to Blaze and Sons, 11, Central Road, Chennai 600 002, complaining about the receipt of the damaged copies of the book you ordered for.

XVII What is the importance of business communication? What is time management?

****

Code No. 15288/AICTE

FACULTY OF ENGINEERING
B.E. II - Semester (AICTE) (Main) Examination, October 2021

Subject: Engineering Physics/Physics

Time: 2 Hours **Max. Marks: 70**

Note: (i) First question is compulsory and answer any three questions from the remaining six questions.
(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
(iii) Missing data, if any, may be suitably assumed.

Answer any four questions. **(4 x 4 = 16 Marks)**

1 (a) Define space lattice and unit cell.
(b) Distinguish between spontaneous and stimulated emission.
(c) What are soft and hard magnetic materials?
(d) Distinguish between conduction current and displacement current.
(e) Explain the differences between intrinsic and extrinsic semiconductors.
(f) What are point defects? Give their classification.
(g) Mention the drawbacks of free electron theory of metals.

Answer any three questions **(3x18 = 54 Marks)**

2 (a) Define Miller Indices. Deduce the expression for Interplanar spacing for a cubic crystal system.
(b) What are Schottky defects? Obtain an expression for concentration of Schottky defects in ionic crystals.

3 (a) Explain in detail about Kronig-Penny model and based on this explain classification of solids.
(b) Define dielectric constant. Determine the dielectric constant of a given material by using capacitance bridge method.

4 (a) Obtain the expressions for energy of a particle in a 1-D box with the help of Schrodinger equation.
(b) Write the Maxwell's equations in both differential and integral forms. Give relationship between D,E and P.

5 (a) What are domains? Based on domain theory explain the hysteresis curve of a ferromagnetic material.
(b) Explain the general properties of superconductors.

6 (a) What are Einstein's co-efficients? Deuce the relationship between the Einstein's coefficients.
(b) Explain the principle of light propagation through an optical fibre and deduce an expression for acceptance angle and numerical aperture.

7 (a) Explain Bragg's law. Describe the powder method to calculate the lattice constant of a given crystal.
(b) Define dielectric polarization and derive an equation for electronic polarizability in dielectric materials.

****

Code No. 15013/AICTE/BL

FACULTY OF ENGINEERING

B.E. II - Semester (AICTE) (Backlog) Examination, October 2021

Subject: Physics

Time: 2 Hours **Max. Marks: 70**

(Missing data, if any, may be suitably assumed)

PART – A

Note: Answer any five questions. **(5x2 = 10 Marks)**

1 Draw a plane in cubic system with miller indices <101>.
2 Find the spacing between <321> planes in SCC of Lattice Constant 4.2 A°.
3 Explain the concept of a hole in a semiconductor.
4 Define Dielectric constant and Dielectric polarization.
5 Find the de-Broglies wave length of oxygen Molecule in your examination Hall which is at 27˚C.
6 Define conduction and Displacement currents.
7 Explain Ferrimagnetism.
8 Define critical current in a superconductor.
9 Explain population inversion in a Laser production.
10 Explain about Numerical Aperture.

PART – B

Note: Answer any four questions. **(4x15 = 60 Marks)**

11 Derive an equation for concentration of “Frenkel” defects in ionic crystals.

12 Define Hall Effect and derive an equation for Hall coefficient.

13 Find the Energy of particle in a1-D box with help of schrodinger equation.

14 Explain abut Type-I, Type-II and High T_c superconductors.

15 Discuss the production mechanism of He-Ne Laser.

16 Explain different crystal systems with neat diagrams.

17 Derive a plane wave equation in Electro magnetism.

****