

6. Torsion test of a rod on torsion testing machine.
7. Stiffness test on spring testing machine.
8. Study of two stroke and four stroke engine model.
9. Fatigue test on fatigue testing machine.
10. Deflection on bending of simple supported and cantilever beams.
11. Determination of COP of vapour absorption system.
12. Determination of COP of vapour compression refrigeration system.
13. Study of steam boilers model.

Study of domestic refrigerator

Books & References

1. Basic and Applied Thermodynamics-P. K. Nag (Tata McGraw Hill)
2. Basic Thermodynamics- Cengel(Tata McGraw Hill).
3. Applied Thermodynamics-Onkar Singh (New Age International)
4. Elements of Materials science and Engineering-Van Vlash (Jhon Wiley & Sons)
5. Material Science-V. Raghvan (Prentice Hall India Limited)
6. Mechanical Measurement-G. Beckwith Thomas (Narosa Publishing House)
7. Mechanical Measurement – Sirohi (New Age Publications)
8. Strength of Materials-S. Ramamurtham (Dhanpat rai Publishing Co.)
9. Strength of Materials-R. K. Rajput (S. Chand)
10. Strength of Materials–R. K. Bansal (Lakshmi Publications)

BHM-101/151

PROFESSIONAL COMMUNICATION

Course category	: Humanities & Social Science (HSS)
Pre-requisite Subject	: NIL
Contact hours/week	: Lecture: 2, Tutorial: 0, Practical: 0
Number of Credits	: 2
Course Assessment methods	: Continuous assessment through tutorials, attendance, home assignments, quizzes, practical work, record, viva voce and Two Minor tests and One Major Theory & Practical Examination.
Course Objective	: The course aims: <ol style="list-style-type: none"> 1) To sensitize the students to understand the role& importance of communication for personal & professional success. 2) To enable learners to exhibit knowledge, skills, and judgment in and around human communication that

facilitates their ability to work collaboratively with others in an interpersonal environment.

- 3) To develop awareness and understanding of applying appropriate communication strategies resulting into the enhancement of learners' employability skills.

Course Outcomes: The students are expected to be able to demonstrate the following knowledge, skills and attitudes after completing this course.

- 1) Use of various facets of communication skills, such as, Reading, Writing, Listening and speaking skills.
- 2) To identify, formulate and solve the real life problems with positive attitude.
- 3) To inculcate the habit of learning and developing the communication and soft skills by practice.
- 4) To enhance effortless speaking and writing skills with the help of rich word power.
- 5) To develop personality by introducing and inculcating effective presentation strategies.
- 6) To focus on audio, visual aids for effective oral communication skills

Topic Covered

UNIT-I

VERBAL COMMUNICATION:

6

Received Pronunciation; how to activate passive vocabulary; Technical/non-technical and Business Presentations; questioning and answer skills; soft skills for professionals; role of body postures, movements, gestures, facial expressions, dress in effective communication; Information/ Desk/ Front Office/ Telephone conversation; how to face an interview/press conference; Group discussions, debates, elocution.

UNIT-II

READING COMPREHENSION

6

Skimming and Scanning; factual and inferential comprehension; prediction; guessing meaning of words from context; word reference; use and interpretation of visuals and graphics in technical writing.

UNIT-III

WRITTEN COMMUNICATION:

6

Note Making and Note Taking; summarizing; invitation, advertisement, agenda, notice and memos; official and commercial letters; job application; resume and curriculum vitae; utility, technical, project and enquiry reports; paragraph writing: General – Specific, Problem – Solution, Process – Description, Data – Comment.

UNIT-IV

SHORT ESSAYS:

6

Description and Argument; comparison and contrast; illustration; using graphics in writing: tables and charts, diagrams and flow charts, maps and plans, graphs; how to write research paper; skills of editing and revising; skills of referencing; what is a bibliography and how to prepare it.

Textbooks:

- 1) Bansal, R.K. & Harrison J.B., (1972)*Spoken English*, Orient Longman, India.
- 2) Chauhan, Narender Kr. & Singh, Sudhir N., (2013) *Formal Letters*, Pankaj Publication International, New Delhi.
- 3) Chhabra T.N., (2019) *Business Communication*, Sun India Publication, New Delhi.

- 4) Dixon Robert J., (1986)*Complete Course in English*, Prentice Hall of India, New Delhi.
- 5) Jones, Daniel.(2012) *Cambridge English Pronouncing Dictionary*, 18thEdition, Paperback, CUP, India.
- 6) Lewis, Norman, (2015) *Word Power Made Easy*, Penguin India.
- 7) Sethi J. & Jindal, (1993)*Handbook of Pronunciation of English Words* - D.V.A, Prentice Hall of India, New Delhi.
- 8) Sharma R.C. & Mohan Krishna, (2017)*Business Correspondence and Report Writing*, Tata McGraw Hill.
- 9) Thomson, A. J. & and Martinet A. V., (1997)*A Practical English Grammar*,Paperback,Ed. IVth, Oxford.