

You can purchase textbooks, no need to buy all reference books. Difference in editions is okay. No need to buy textbooks for all labs. No need to buy the highlighted ones, but there is no harm in buying either.

BOOKS (First Year)

1. Thermodynamics

a. (TEXTBOOK)

- i. Claus Borgnakke, Richard E. Sonntag, Borgnakke's Fundamentals of Thermodynamics, SI Version, Wiley India ed, ISBN: 9788126598199

b. (REFERENCE BOOK)

- i. Çengel Y.A. and Boles M.A., "Thermodynamics: an engineering approach", Tata McGraw- Hill, 2010, 6th ed. Booklet on Thermodynamic Tables, Figures & Charts Notes EDD – 2007

Buy the latest data book in Semester II

2. Technical Report Writing (TRW)

a. (TEXTBOOK)

- i. Mohan, R. C. & Krishna, S. (2016). Business correspondence and report writing: A practical approach to business & technical communication (Fifth). New Delhi: McGraw Hill Education (India) Private Limited.

b. (REFERENCE BOOKS)

- i. Armer, T. (2011). Cambridge English for scientists (J. Day (ed.)). Cambridge: Cambridge University Press.
- ii. Hewings, M. (2012). Cambridge academic English: An integrated skills course for EAP (Upper Intermediate) (South Asia). Cambridge: Cambridge University Press.
- iii. Levrai, P., & Bolster, A. (2015). Academic presenting and presentations (Student's Book). A Linguabooks Publication.
- iv. Raman, M., & Sharma, S. (2015). Technical communication: Principles and practice (Third). New Delhi: Oxford University Press.
- v. Sharma, R. C., Mohan, K., & Nirban, V. S. (2020). Business correspondence and report writing: A practical approach to business and technical communication (Sixth). New Delhi: McGraw Hill Education (India) Private Limited.

3. GENERAL BIOLOGY

a. (TEXTBOOK)

Simon, E.J. et. al. Campbell Essential Biology with Physiology (5th edition). Noida: Pearson India Education Services Pvt. Ltd., 2016.

b. (REFERENCE BOOKS)

- Recommended
- i. Enger, E.D., Ross, F.C. and David B. Bailey. Concepts in Biology (14th edition, BITS-Pilani Custom Edition 2012). New Delhi: Tata McGraw-Hill Publishing Company Ltd., 2012.
 - ii. Raven, P.H., et. al. Biology (9th edition). Singapore: McGraw-Hill Publishing Company Ltd., 2012.
 - iii. Starr, Cecie. Biology: Concepts and Applications (6th edition). India: Thomson Brooks/Cole, 2007

4. BIOLOGY LABORATORY

a. (REFERENCE BOOKS)

- i. Simon, E.J. et al: Campbell Essential Biology with Physiology (5th Edition, BITS Pilani custom edition). Noida: Perason India Education Services Pvt. Ltd., 2015

5. Workshop Practice

a. (TEXTBOOK)

- i. B S Nagendra Parashar and R K Mittal, Elements of Manufacturing Processes, Prentice Hall of India, 2006, 4th print.
- ii. Sangwan, K. S. et. al, Workshop Practice Manual, BITS Pilani.

Will be instructed by
IC in your first class

b. (REFERENCE BOOKS)

- i. Serope Kalpakjian and Steven R. Schmid, "Manufacturing Engineering and Technology," Pearson Education, 4th edition, 2005, New Delhi

6. Mathematics I (M1)

a. (TEXTBOOK)

- i. J. Hass, C. Heil and M. D. Weir: Thomas' Calculus, 14th Edition, Pearson Education, 2018.

b. (REFERENCE BOOKS)

- i. E. Kreyszig : Advanced Engineering Mathematics, 10th Edition John Wiley and Sons 2011.
- ii. T. M. Apostol : Calculus Vols I and II, 2nd Edition, John Wiley and Sons, 1967 and 1969.

7. Chemistry Laboratory

a. (REFERENCE BOOKS)

- i. Vogel's textbook of quantitative chemical analysis, Prentice Hall, 2000.

8. Computer Programming (CP)

a. (TEXTBOOK)

- i. Hanly, J.R. and E.B. Koffman. Problem Solving and Program Design in C(7/e). Pearson Education, 2013.

b. (REFERENCE BOOKS)

- i. Patt, Yale. Introduction to Computing Systems: From bits & gates to C & beyond (2/e). McGraw Hill Education, 2017. (The authors take a bottom-up approach to introduce computers and computing).
- ii. Forouzan, B.A. and Richard F. Gilberg . Computer science A structured programming approach using C (3/e). Cengage Learning, 2007. (The book gives a fairly comprehensive overview of C, with several example programs).
- iii. Gottfried, B.S. and Jitender Chhabra. Programming with C (Schaum's Outlines Series, 3/e). McGraw Hill Education, 2017. (Another beginner's book on C programming, with lots of drill exercises and programs).
- iv. Kernighan, B.W and Dennis Ritchie. The C Programming Language (2/e). Pearson Education India, 2015. (Considered the ultimate treatise on C, it conveys the philosophy and practice of C very tersely, but is pitched at an advanced beginner level).
- v. Das, S. Unix: Concepts and Applications (4/e). McGraw Hill Education, 2017. (Provides a great introduction to using Unix commands).
- vi. Das, Sumitabha. Computer Fundamentals and C Programming. New Delhi, India: McGraw Hill Education. (2018)

9. Mechanics Waves and Oscillations (MeOW)

a. (TEXTBOOK)

- i. An Introduction to Mechanics by Kleppner & Kolenkow, Tata McGraw-Hill Indian Edition, 1999 (Please note: Given problem numbers will be followed from this edition only)
- ii. Vibrations and waves, by A.P. French, CBS Publishers and Distributors, Inc., first Indian edition 1987.

b. (REFERENCE BOOKS)

- i. Physics, Vol.1, by Halliday, Resnick, & Krane, 5th Edition, John Wiley & Sons, Inc., 2002
- ii. The Physics of Waves and Oscillations by N K Bajaj, Tata McGraw-Hill 1984.

10. General Chemistry

a. (TEXTBOOK)

- i. P.W. Atkins and Julio de Paula, Elements of Physical Chemistry: 6th Edition, Oxford University Press, Oxford, reprinted in 2015.
- ii. T. W. Graham Solomons, Craig B. Fryhle, and Scott A. Snyder, Organic Chemistry, 12th Edition, John Wiley & Sons, Inc. New York, 2017

b. (REFERENCE BOOKS)

- i. J. D. Lee, Concise Inorganic Chemistry, 5th Edition, Blackwell Science, Oxford, 1999.
- ii. David Ball, Physical Chemistry, Brooks/Cole Thomson Learning, 2003.
- iii. J. E. Huheey, E. A. Keiter et al., Inorganic Chemistry: Principles of Structure and Reactivity, 4th Edition, Pearson Education, 1993.
- iv. R. T. Morrison and R. Boyd, 'Organic Chemistry', 6th Edition, PHI, New Delhi, 1992.

11. Mathematics II (M2)

a. (TEXTBOOK)

- i. Elementary Linear Algebra with Supplemental Applications by H. Anton and Chris Rorres, 11th Edition, 2014, John Wiley & Sons.
- ii. Complex Variables and Applications by R.V. Churchill and J.W. Brown, 8th Edition, 2014, McGraw-Hill.

b. (REFERENCE BOOKS)

- i. Elementary Linear Algebra by S. Andrilli and D. Hecker, 4th Edition, 2012, Elsevier.
- ii. Introductory Linear Algebra: An Applied First Course by Bernard Kolman and David R.Hill, 9th Edition, 2014, Prentice Hall.
- iii. Introduction to Linear Algebra with applications by J. Defranza and D. Gagliardi, 2012, McGraw-Hill Education.
- iv. A First Course in Complex Analysis with Applications by Dennis G. Zill & Patrick Shanahan, 2nd Edition, 2009, Jones & Bartlett.
- v. Complex Variables with Applications by A. D. Wunsch, 3rd Edition, 2004, Pearson Education

12. Engineering Graphics (EG)

a. (TEXTBOOK)

- i. D.M. Kulkarni, A.P. Rastogi and A. K. Sarkar., Engineering Graphics with AutoCAD, PHI Learning Private Limited, New Delhi.

b. (REFERENCE BOOKS)

- i. N.D. Bhatt, Engineering Drawing, Charotar Publishing House, Gujarat.

13. Electrical Sciences (ES)

a. (TEXTBOOK)

- i. Leonard S. Bobrow and Navneet Gupta, Foundations of Electrical Engineering, Oxford University Press, Asian Edition, 2015.

14. Probability and Statistics (PnS)

a. (TEXTBOOK)

- i. Devore, J. L., Probability & Statistics for Engineering and the Sciences, 8th Edition, Cengage Learning, 2012.

b. (REFERENCE BOOKS)

- i. Milton, J. S. and Arnold J. C., Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences, 4th Edition, Tata McGraw-Hill, 2007.
- ii. Walpole, R. E., Myers, R. H., Myers, S. L., Ye, K. E., Probability & Statistics for Engineers and Scientists, 9th Edition, Pearson Education, 2016.
- iii. Johnson, R. A., Miller Freund's Probability and Statistics for Engineers, 8th Edition, PHI, 2010.
- iv. Meyer, P. L., Introductory Probability and Statistical Applications, 2nd Edition, Addison-Wesley, 1970.
- v. Ross, S. M., Introduction to Probability Models, 11th Edition, Academic Press, 2014.

15. Physics Lab

a. (TEXTBOOK)

- i. Laboratory Manual prescribed by the college (available at S9).

Note -

- 1) These books are also available in the Library. In case you don't find them, you can go to the Library, take it, study and return before leaving.
- 2) There is also a Library Book Bank from where you can issue books you don't have for one semester. This will be done in the coming weeks.

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