FMS-WISDOM Banasthali Vidyapith

BBA LL.B. V/BBA V/BA V Semester: Handout for session July - Dec. 2019

Course Title: Personal Finance Estimated Contact Hrs: 56

Course Teacher/s: Prof. Harsh Purohit Class Timings: Kindly refer to the Time-Table

Suggested Readings:

- 1. Halan, M., (2018). Let's Talk Money: You've Worked Hard for it, Now Make it Work for You. (1 ed.) New Delhi: Harper Business
- 2. Mitra S. et al. (2018), Financial Planning (1 ed.) Sage Publications New Delhi
- 3. Mirashi, S., (2012). I Can Do-Financial Planning. (4 ed.) New Delhi: Academic Foundation
- 4. Proschool, IMS, (2015). Investment Planning (1ed.). New Delhi: Tata Mc-Graw Hill
- Gopinath, M. N. (2011). Banking Principles and Operations. (3 ed.). Mumbai: Snow white Publications.

Suggested E-Learning Material:

- 1. Kotak Securities (2019), *Knowledge Bank*, Retrieved from https://www.kotaksecurities.com/ksweb/Research/Knowledge-Bank/Investment-Knowlegde-Bank
- 2. Halan M. (2019), *Let's Talk Money With Monika Halan: Financial Planning Ideas*, Retrieved from https://www.bloombergquint.com/bqportfolio-videos/let-s-talk-money-with-monika-halan-financial-planning-ideas, Courtesy BloombergQuint
- 3. Pareek, N., et al. (2018, December 1). *Emerging Trends in Banking*. Under Banasthali-MHRD NRC, Retrieved from https://www.youtube.com/watch?v=gCBs313D46g:
- 4. Purohit, H. (2015, October 13), Banasthali Vidyapith Presents the Bhartiya Model of Financial Literacy (BMFL), retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2673446
- 5. RBI. (n.d.). *Financial Education and RBI*. Retrieved March 1, 2019, from rbi.org.in: https://rbi.org.in/financialeducation/home.aspx
- 6. Sud, R. (2017, June 13). Why India needs to work on financial literacy now more than ever. Retrieved March 1, 2019, from www.livemint.com: https://www.livemint.com/Opinion/f5xo11OSPqxGWUdaWKVb8J/Why-India-needs-to-work-on-financial-literacy-now-more-than.html

Innovative approach: Exercises listed at end of the doc, online videos, and special session by guest faculty.

Course Plan:

Unit I

Learning Objectives:

- i. To understand the concepts of personal finance.
- ii. To understand the relevance of time value, spending and personal financial advisory

Lecture No.	Topics to be Covered	Text. Book/Ref. Book
1-3	The advent of Personal Finance and financial goals	SR 1, 2
4-8	Bhartiya model of Financial Literacy (BMFL), Personal Financial Statements	SR 1, 2
9-10	Budgeting	SR 1, 2, 3
11-12	Spending money wisely	SR 1, 2, 3
13	Time Value of Money	SR 1, 2, 3
14-15	Careers in Personal Financial Advisory, Activity and Recap	SR 1, 2, 3, Internet

Unit II

Learning Objectives:

- i. To understand concept of investment avenues and choosing the right one
- ii. To understand the way to make investment portfolio

14-15	Investment Avenues	SR 1,2
16-18	Overview of Securities Markets	SR 1,2
19-22	Investment Options and their Nature	SR 1, 2 & Internet Resources
23-25	Investment Portfolio, Live Case Study from MINT and Recap	SR 1, 2 & MINT

Unit III

Learning Objectives:

- i. To understand basic banking products
- ii. To understand relevance of Mobile and Internet Banking

26-28	Bank & Banking Services	SR 5 & Internet Resources,
29-30	Loans	SR 5 & Internet Resources,
31-35	Mobile and Internet Banking, Live Case Study from MINT and Recap	SR 5, MINT & Internet Resources,

Unit IV

Learning Objectives:

- i. To understand fundamentals of risk management and insurance
- ii. To understand the process of insurance
- iii. To understand the deductions in respect of total income.

36	Risk Management	SR 3
37-39	Insurance, Life Insurance	SR 1, 5 and Internet Resources
40-41	General Insurance	SR 1, 5 and Internet Resources
42-44	Estate Planning and Recap	SR 1, 6, MINT and Internet Resources

Unit V

Learning Objectives:

- i. To understand the calculation of total income of individual and tax liability
- ii. To understand the concept of TDS and advance tax payment
- iii. To understand various types of assessment

45-48	Retirement Planning	SR 1, 2, 3
49-51	Heads of Income	SR 1, 4 and Internet Resources
52-53	Tax Planning	SR 1, 4 and Internet Resources
54	Role of RBI and other agencies	Internet Resources
55-56	Live Case Study from MINT and Recap	MINT and Internet Resources

Video Lectures:

Other related videos will be used for some of the topics during classroom discussions.

Case Studies: Refer to MINT newspaper for cases in Personal Finance, to be specified in classroom.

Component	Weight (%)	Tentative Date(s)	Syllabus	Remarks
Semester Exam	60	To be announced by Vidyapith	Complete Syllabus.	-
Periodicals 1	10	To be announced by Vidyapith	Unit 1 and some topics of Unit 2	-
Periodical 2	10	To be announced by Vidyapith	Unit 3 and some topics of Unit 2	-
Internal 1	10	Deadline: 12 August, 2019.	Assignment Topics will be announced by 15 July, 2019 in the class.	-
Internal 2	10	Deadline: 5 October, 2019.	Topics will be announced by 11 September, 2019 in the class.	

Learning Outcomes:

Upon completion of the course student will be able to:

- Understand the requirements of Personal Financial Plan can develop and implement a budget.
- Use retirement planning calculators and other financial calculators.
- Understand Proactive and reactive ways to deal with Investment frauds and low quality financial services.

EXERCISES

- 1. Knowing if study of Personal Finance is worth. 2. Budgeting and Documentation at different stages of Life. (Student/Just joined job/Housewife//Mid-life stage/Retirement stage).
- 3. Making Financial Plan and Statements. 4. Relative relevance of principles of successful investing. 5. Risk and return features of Investment Avenues.
- 6. I have money. Where should I invest? 7. Which services are provided by the Banks? 8. How well my Bank provides the Banking services.
- 9. Mobile Banking: Taking Care 10. Internet Banking: Taking Care 11. How to select a L. I. policy. 12. How to select a Mediclaim policy.

13. How to select a Vehicle insurance policy. 14. Personal Finances cases for Financial Newspapers. 15. Cases: How to do tax planning 16. How to file I.T. Return.

(Signature of the Teacher/s; with Date)

(Signature of the H.O.D.; with Date)

BANASTHALI VIDYAPITH DEPARTMENT OF BIOSCIENCE AND BIOTECHNOLOGY B.Sc. VI SEMESTER (Botany)

COURSE HANDOUT

Date: 16 Dec 2018

Course No. and Title: 6.1, Genetics and Genetic Engineering

Course Incharge: Prof. Nilima Kumari

Time Table: All classes in Jeev Mandir 322C

Wednesday 11:05 pm -12:00 pm Thursday 11:05 pm -12:00 pm Friday 11:05 pm -12:00 pm Saturday 11:05 pm -12:00 pm Sunday 11:05 pm -12:00 pm Monday 11:05 pm -12:00 pm

Objectives and scope of the course: The objective of this course is to develop understanding towards the mechanism of heredity and variation along with the manipulation of genes in the organisms for wider applications in agriculture, medicines and research.

Teaching/ learning process: Blackboard teaching providing concepts, understanding and explanations of the course contents.

Course outcome, its importance and utility: The students will be able to explain the principles of genetics, its approaches and methodology at the molecular, cellular, organismal and population levels. They can apply this knowledge to experimental methods relevant to genetics, recombinant DNA technology, genetic breeding experiments, gene expression analysis etc. and for better understanding of other advanced courses in biological sciences. This course being one of the basic course will help the students to perform better in various competitive examinations and research. The students will be better equipped for employment in pharmacy, agri-biotechnology, genetic counselling services and environmental management based industries.

Course syllabus and lecture wise schedule:

Unit	Lecture	Topic	References:
	No.		T/Ch, R/Ch
	1	Overview of Syllabus	
Unit 1	2-4	Organisation of Eukaryotic chromosomes	T1/11, R1/2
	5-9	Bacterial Genetics	T1/14, R4/8
	10-14	Cell Cycle, Mitosis and Meiosis	R1/3
	15-16	Eugenics and Genetic Counselling	T1/31, T2/21

Unit 2	31-35	Mendel's Experiments: Laws of Inheritance, interaction	T1/2,3,4, T2/3,
		of factors (Modified dihybrid ratios)	R1/6
	36-43	Quantitative inheritance,	T1/5,
		Linkage,	T1/8, T2/8
		Crossing over,	T1/9
		Multiple alleles,	T1/6,7, T2/5
		Sex determination,	T1/24, T2/9
		Sex linked inheritance	T1/25, T2/11
	44-46	Extra chromosomal inheritance	T1/26, T2/15
Unit 3	47-50	Chromosomal aberrations- structural and numerical	T1/27,28,
			T2/13,14
	51-54	Mutations	T1/29, T2/12,
			R1/11
	17	Gene : Basic concept	T1/12
	55-58	Isolation of eukaryotic mRNA, cDNA synthesis and library	T3/2.8
	59-60	Genomic library	T3/2.8
Unit 4	18-19	Restriction enzymes	T1/36, R2/2.3
	20-24	Vectors – plasmids, phages, cosmids	T1/36, R2/2.4, R3/2
	25-26	Construction of recombinant DNA	T1/36, R5/20
	27-30	Screening and selection of recombinant clones	T1/36, R2/2.8
Unit 5	61-65	Isolation of DNA- plasmid, plant genomic DNA, phage DNA	R5/3
	66-69	General idea of Patents and Biosafety guidelines	T3/17,18
			R3/40
	70-73	Biotechnology: Definitions, Application of	T3/1, R3/1
		Biotechnology, Basic concept of Biotechnological process	
	74-75	Edible Vaccines	T3/9.14
Total lectures	75		

T: Text book, R: Reference book, Ch: Chapter

Text/Reference books:

Text Books:

T1: Elements of Genetics, Eleventh Revised Edition, 2008, Reprinted in 2011. Veerbala Rastogi. Kedarnath Ramnath. Total pages 623.

T2: Text Book of Genetics, Third Edition, 1970, Reprinted in 1972. R.C. Dalela. Jai Prakash Nath & Co. Total pages 356.

T3: Biotechnology, Fifth Revised Edition, 2012. Reprinted in 2013. B.D. Singh. Kalyani Publishers. Total pages 602.

Reference Books:

R1: Essentials of Genetics, 2010. Pragya Khanna. I.K. International Publishing House Pvt. Ltd. Total pages 467.

R2: Genetic Engineering Principles & Practice, 1996. Reprinted in 2004. Sandya Mitra. Macmillan India Ltd. Total pages 725.

R3: Elements of Biotechnology, Second Edition, 2010. P.K. Gupta. Rastogi Publication. Total Pages 468.

R4: Principles of Genetics, Eighth edition, 1984, Reprinted in 1991. Gardner, Simmons and Snustad. John Wiley & Sons Inc. Total pages 649.

R5: Gene cloning & DNA analysis, Sixth edition, 2010. T.A. Brown, Wiley Blackwell. Total pages 320.

Examination:

Continuous assessment	Semester End Examination	Total marks
30	60	90

The following components will constitute the continuous assessment:

Component	Marks	Schedule	Syllabus
Home assignment I	10	Jan 30, 2019	Topics shall be allotted in the class by 26 Dec. 2018
Periodical test I	10	Feb 2-4, 2019	Unit 1 and 4
Home assignment II	10	Mar 8, 2019	Topics shall be allotted in the class by 15 th Feb 2019
Periodical test II	10	Mar 16-19, 2019	Unit 2,3 and 4

Assignments submitted after the last date shall not be considered for evaluation.

5. Notices:

Notices concerning this course, if any, will be displayed on the Notice Board of the Bioscience and Biotechnology department.

Prof. Nilima Kumari (Course Incharge)

(Course Coordinator)

(Office/HOD)

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BANASTHALI VIDYAPITH

Department of Pharmacy

COURSE HANDOUT: B. Pharmacy VIIth Semester (July-December, 2019) Revision: 00

w.e.f. 11th July, 2019

Course No. & Title: BPH-7.2: Pharmaceutical Analysis-III

Course Incharge: Dr Rakesh Yadav

Time Table: All classes will be held at Department of Pharmacy (Vigyan Mandir) Room no. 21

Friday:

09:00-10:00 AM

Saturday:

09:00-10:00 AM

Monday:

09:00-10:00 AM

1. Scope & objective of the course:

This course is applicable to the seventh semester students of pharmacy department at Banasthali University, Banasthali. The objective of this course is to learn the theory, principle and instrumentation of various instruments for pharmaceutical analysis.

2. Text/Reference books:

Text books-

T1: Skoog, D. A.; Holler, F. J.; Crouch, S. R. Principle of Instrumental Analysis, 5th ed.; Saunders College Pub., 1998.

T2: Connors, K. A. A Textbook of Pharmaceutical Analysis, 3rd ed.; John Wiley & Sons, 2007

Reference books-

R1: Silverstein, R. M.; Webster, F. X. Spectrometric Identification of Organic Compounds; 6th ed.; John Wiley & Sons, New Delhi India, 2008.

R2: Kemp, W. Organic Spectroscopy; 3rd ed.; Palgrave, New York, 1991.

R3: Pavia, D. L.; Lampman, G. M.; Kriz, G. S. Introduction to spectroscopy; 3rd ed.; A division of Thomson Learning Inc., 2007.

3. Course plan:

Lecture No.	Syllabus	Ref./chap/ Sec.		
	Section-A			
1	Introductory class of the course			
2	Electromagnetic radiation (EMR): Definition, units,.	T 1 & T2		
3-4	Electromagnetic radiation (EMR): spectrum, absorption & emission of EMR by organic molecules.	T 1 & T2		
. 5	Ultraviolet spectrophotometry: Theory, instrumentation.	T 1 & T2		
6	Ultraviolet spectrophotometry: Solvent effects, Difference and derivative spectra.	T 1 & T2		
7-8	Ultraviolet spectrophotometry: Pharmaceutical applications (Conjugated dienes, trienes and polyenes; α,β -unsaturated carbonyl compounds).	T 1 & T2		
9-10	Nephelometry & turbidimetry: Theory, instrumentation, pharmaceutical application			
11-12	Infra-red spectroscopy: Theory, molecular vibrations.	T 1 & T2		
13-14	Infra-red spectroscopy: bands of organic functional groups (vibrational frequencies), factors affecting vibrational frequencies.			
15-16	Infra-red spectroscopy: instrumentation, sampling techniques, qualitative and quantitative (Beer's-Lambert law) applications in pharmaceutical analysis.	T 1 & T2		
	Section-B	77.77		
17-18	Nuclear (proton) magnetic resonance spectroscopy: NMR Phenomena.	T 1 & T2		



BANASTHALI VIDYAPITH

Department of Pharmacy COURSE HANDOUT: B. Pharmacy VIIth Semester

(July-December, 2019)

Revision: 00

w.e.f. 11th July, 2019

19	Nuclear (proton) magnetic resonance spectroscopy: theory.	T 1 & T2
20	Nuclear (proton) magnetic resonance spectroscopy: chemical shift and its measurement, factors influencing chemical shift.	T 1 & T2
21-22	Nuclear (proton) magnetic resonance spectroscopy: correlation data, solvents used, integrals.	T 1 & T2
23-25	Nuclear (proton) magnetic resonance spectroscopy: spin-spin coupling/splitting. Applications.	T 1 & T2
26	Mass spectrometry: Basic principles.	T 1 & T2
27	Mass spectrometry: instrumentation.	T 1 & T2
28-29	Mass spectrometry: Molecular ion, meta-stable ions, fragmentation processes.	T 1 & T2
30	Mass spectrometry: Applications including the fragmentation pattern of- Alkanes.	T 1 & T2
31	Mass spectrometry: Applications including the fragmentation pattern of- alcohols.	T 1 & T2
32	Mass spectrometry: Applications including the fragmentation pattern of- acids.	T 1 & T2
	Section-C	1 25 1,4
33-34	Spectrofluorimetry: Theory, quantitative description.	T 1 & T2
35	Spectrofluorimetry: experimental factors affecting fluorescence intensity.	1850
36-37	Spectrofluorimetry: Relationship of fluorescence to molecular structure, instrumentation.	T 1 & T2
38	Spectrofluorimetry: interferences, pharmaceutical application.	
39-40	Flame atomic absorption & Flame emission spectroscopy: Basic concepts, instrumentation.	
41-42	Flame atomic absorption & Flame emission spectroscopy: background emission, interferences.	
43-45	Flame atomic absorption & Flame emission spectroscopy: qualitative & quantitative applications in pharmaceutical analysis.	T 1 & T2

4. Continuous Assessment:

Component	Weightage	Schedule	Syllabus
Assignment-I	10	11-08-2019	•
Periodical Test-I	10	28 th , Aug., 2019*	Section A
Assignment-II	10	14-10-2019	-
Periodical Test-II	10	20 th Oct., 2019*	Section B

^{*} Tentative

5. Notices

Notices concerning the course, if any, will be displayed on the notice board of the department.

Course Incharge

BPH-7.2 (Pharmaceutical Analysis III)