

Appendix 'A'

(Outlines of Tests)

There will be one paper carrying 100 marks of three hour's duration.

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|----|-------------------------------|----------|
| 1. | Prose Part: | 50 Marks |
| 2. | General Part: | 50 Marks |
| | i. Comprehension | 15 Marks |
| | ii. Report writing | 10 Marks |
| | iii. Translation into English | 10 Marks |
| | iv. Essay (200 words) | 15 Marks |

Appendix 'B'

(Syllabi and Courses of Reading)

- | | | |
|----|--|----------|
| 1. | Prose Part: | 50 Marks |
| | Text Book: | 50 Marks |
| | A Selection of English Prose by Dr. Nousheen Khan
and Prof. Ghulam Sarwar Qureshi | |
| 2. | General Part: | 50 Marks |
| | i. Comprehension | 15 Marks |
| | ii. Report writing | 10 Marks |
| | iii. Translation into English | 10 Marks |
| | iv. Essay (200 words) | 15 Marks |

Associate Degree in Arts

English Language-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Section-I

Q.1	Question From "A Selection From Modern English Essays."	20
Q.2	Question From The Old Man, and the Sea.	20

Section-II

Q.3.	Essays with outline	25
Q.4.	Correction of Sentences.	10
Q.5	Idioms and Phrasal verbs.	10
Q.6	Letter writing or Job Application.	15
		100

Appendix 'B'

(Outlines of Tests)

Recommended Books:

1. A Selection of Modern English Essays : edited by Prof. Sajjad Sheikh, published by Maktaba-e-Karvan, Katchery Road, Lahore
2. The Old Man and the Sea: Eornest Hemingway.
3. Skill Worker (Caravan) by Dr. Surriya Shafi, Prof. Sabiha Mansoor & Prof. Humaira Irfan.

٣. تأملات في الحياة: للناطقة الذبياني

شعراء صدر الاسلام

☆

١. الف. في الغزل لجرير

وله ايضاً من قصيدة يرثي بها امراته

٢. في مدح زين العابدين علي بن الحسين: للفرزدق

٣. في هجاء بني تميم: للاخطل

وله ايضاً في وصف سكران

٤. في الغزل: لكثير عزة.

٥. رسالة الى الثريا: لعمر بن ابي ربيعة

الشعراء المخضرمون

☆

١. من قصيدة في مدح النبي ﷺ لا عشى قيس

٢. في مدح النبي ﷺ لحسان بن ثابت.

٣. في رثاء صخر: للمخنساء

٤. في الحماسة والفروسية لعمر بن معديكرب

شعراء العصر العباسي

☆

١. الاذن تعشق احياناً: ليشارين برد.

٢. في مدح المهدي: لابي العتاهية

٣. في طلب العلم: للامام الشافعي

٤. عاقبة الجهالة: لابي نواس

وله ايضاً في الصمت

٥. الحب الاول: لابي تمام

٦. في شكوى الزمان والاخوان: للمتنبي

٧. من لطيف التشبيه: لصاحب بن عباد

٨. في الفخر والرد على الحساد لابي العلاء المعري.

٩. من لامية العجم: لابي اسماعيل الطغراني.

Recommended Books:

١. الادب العربي: ترتيب دأكثر خالقداد ملك مطبوعه آزاد بك دپو.

٢. الادب العربي: تقديم دأكثر محمد اعزاز الحسن شاه مطبوعه آزاد بك دپو

٣. المنهج العربي ترتيب لجنة اساتذه جامعه پنجاب لاهور.

ASSOCIATE DEGREE IN SCIENCE

Total Mark: 100

**Botany-II
Appendix 'A'**

(Outlines of Tests)

Paper-A:	Cell Biology, Genetics and Evolution (Written)	:	35 Marks
Paper-B:	Plant + Physiology and Ecology (Written)	:	35 Marks
Paper-C:	(Practical-I)	:	15 Marks
Paper-D:	(Practical-II)	:	15 Marks

Note:

- (a) The 70% portion of question paper will be subjective type and 30% objective type, the question paper will be section wise and each question will be divided in parts.
- (b) The choice in attempting the question will be minimized to some extent.

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Cell Biology, Genetics and Evolution 35 Marks

Cell Biology:

1. Structures and Functions of Bio-Molecules
 - Carbohydrates
 - Lipids
 - Proteins
 - Nucleic Acids
2. Cell: The Physico-chemical nature of Plasma membrane and cytoplasm.
3. The ultra structure of plant cell with a brief description and functions of the following organelles
 - i. Endoplasmic reticulum
 - ii. Plastids
 - iii. Mitochondria
 - iv. Ribosomes
 - v. Dictyosomes
 - vi. Vacuole
 - vii. Microbodies (Glyoxysomes + Peroxisomes)
4. Nucleus: Nuclear membrane, nucleolus, ultrastructure and morphology of chromosomes, karyotype analysis
 1. Reproduction in somatic and embryogenic. cell, mitosis & meiosis, cell cycle

2. Chromosomal aberrations.
 - i. Change in the number of chromosomes. Aneuploidy and Euploidy
 - ii. Changes in the structure of chromosomes, Deletion, Duplication, Inversion and Translocation.

Genetics:

1. Introduction scope and brief history of genetics. Mendelian inheritance; Laws of segregation and independent assortment, back cross, test cross, dominance and incomplete dominance.
2. Sex linked inheritance, sex linkage in Drosophila and man (colour blindness. XO. XY. WZ mechanism, sex limited and sex linked characters, sex determination.
3. Linkage and crossing over: Definition, Linkage groups, Construction of linkage maps, Detection of linkage.
4. Molecular genetics ; DNA replication- Nature of gene, Genetic code, Transcription, Translation, Protein synthesis, Regulation of gene expression (e.g. lac operon).
5. Transmission of genetic material in Bacteria: Conjugation gene recombination in E. coli Transduction and Transformation.
6. Principles of genetic engineering biotechnology; Basic genetic engineering techniques.
7. Application of genetics in plant improvement: Induction of genetic variability (gene mutation, recombination), Physical and chemical mutagens, Selection, Hybridization and plant breeding techniques, Establishment of varieties Release of new varieties.
8. Recombinant DNA technology, Plasmid vector, Cloning vectors, Polymerase chain reaction, Genetic Transformation in Plants.

Paper-B: Plant Physiology and Ecology

35 Marks

Physiology:

1. Types and properties of solutions. Electrolytes and non-electrolytes. SI units for expressing concentration of solutions, acids, bases and salts, pH. Definition of buffers and their role in biological systems. Colloidal systems, their nature, properties, and biological significance.
2. Water relations (water potential, osmotic potential, pressure potential, matric potential) Absorption and translocation of water. Transpiration, factors affecting transpiration. Stomatal structure and functions.
3. Mineral nutrition: Soil as a source of minerals. Passive and active transport of nutrients. Essential mineral elements, their role and deficiency symptoms with emphasis on N, K, P & Ca.
4. Enzymes: Definition, nature, classification and properties.
5. Photosynthesis: The process; absorption and action spectra. Mechanism: light reactions (electron transport and photophosphorylation) and dark reactions (Calvin cycle). Factors

affecting this process; concept of limiting factors. Products of photosynthesis.

6. Respiration: Definition and mechanism, Glycolysis. Krebs cycle. Electron transport system and oxidative phosphorylation. Anaerobic respiration. Respiratory substrates and respiratory quotients.
7. Nitrogen Metabolism: Biological nitrogen fixation.
8. Growth: Definition; role of auxins, gibberellins, cytokinins abscisic acid and ethylene in controlling growth, introduction to plant tissue culture.
9. Photoperiodism: Definition. Historical background, Short day, Long day and day neutral plants. Role of phytochromes and hormones in photoperiodism.
10. Dormancy: Definition and causes of seed dormancy: Methods of breaking seed dormancy.
11. Vernalization : Annual and biennial forms. Hormonal concept and phasic development theory.
12. Plant Movements: tropic movements - phototropism, Gravitropism and their mechanisms. Nastic movements.

Ecology:

1. Concepts of Ecology
2. Brief history of Ecology
3. Ecophysiology
 - (a) Light and temperature responses
 - i. Quantity of light
 - ii. Variation in light (temperature)
 - iii. Ecophysiological responses
 - (b) Edaphology
 - i. Brief introduction of soil forming process
 - ii. Texture, structure, and water
 - iii. Chemical Properties
 - iv. Biological components: Soil Organisms. Organic matters
 - v. Soil erosion, causes and solutions
 - (c) Water
 - i. Precipitation: kinds, and affectivity.
 - ii. Distribution of vegetation in relation to moisture.
 - (d) Water logging and salinity, causes, effects and reclamations
 - (e) Wind-Ecological importance of wind
4. Population Ecology
A brief introduction, history and background. Seed dispersed. Seed bank, Demography, Reproductive strategy.

5. Community Ecology
 - i. Concept of plant community-attributes
 - ii. Sampling methods
 - iii. Succession-history, concept, development and modern theories of succession
 - iv. Brief concept of productivity.
 - v. Local vegetation
6. Ecosystem
 - i. Definition and background with special reference to pond, Desert, Forest and grassland
 - ii. Ecological dynamics
 - iii. Biogeochemical cycle (Hydrologic and nitrogen cycle).
7. Pollutions: Soil, water and air pollution

Paper-C: Practical-I

15 Marks

Cell Biology:

1. Study of cell structure using compound microscope and elucidation of ultra-structure from electron microphotographs
2. Measurement of cell size.
3. Study of mitosis and meiosis by smear squash method and from prepared slides.
4. Study of chromosome morphology and variation in chromosome number.
5. Extraction and estimation of carbohydrate, protein, RNA, DNA from plant sources.

Genetics :

1. Genetical problems related to transmission and distribution of genetic material.
2. Identification of DNA in plant material. Carmine, orcein staining.
3. Study of salivary gland chromosomes of *Drosophila*.

Paper-D: Practical-II

15 Marks

Physiology:

1. Preparation of solutions of specific normality of acids/bases, salts, sugars, molal and molar solutions and their standardization.
2. Determination of uptake of water by swelling seeds when placed in sodium chloride of different concentrations.
3. Measurement of leaf water potential by the dye method.
4. Determination of the temperature at which beet root cells lose their permeability.
5. Determination of the effects of environmental factors on the rate of transpiration of a leafy shoot by means of a photometer/by cobalt chloride paper method.
6. Tests for sugars (Reducing and non-reducing). Glucose, maltose, fructose.
7. Chemical tests for the following cell constituents:

- i. Starch
 - ii. Cellulose
 - iii. Lignin
 - iv. Proteins
8. Extraction of chlorophyll from the leaves and separation of component pigments on a paper chromatogram. Study of absorption spectra using spectrophotometer.
 9. Comparison of the effects of green, red and blue-coloured light on the amount of oxygen evolved by a photosynthesizing plant.
 10. Estimation of oxygen utilized by a respiring plant by Winkler's method.
 11. Extraction of amylase from germinating wheat seeds and study of its effect on starch breakdown.
 12. Measurement of carbon dioxide evolution during respiration of germinating seeds by the titration method.
 14. Measurement of growth by leaf area increase method.
 15. Study of different stages of seed germination.

Ecology:

1. Measurement of light and temperature.
2. Effect of light and temperature on seed germination
3. Determination of soil texture by hydrometer method.
4. Determination of maximum water holding capacity.
5. Determination of carbonates, electrical conductivity and pH in Soil and Water.
6. Measurement of wind velocity.
7. Population demographic techniques.
8. Measurement of vegetation by Quadra: and plotless methods
9. Determination of productivity by harvest method
10. Trips / visits to ecologically diverse vegetations.

Recommended Books:

1. Barbour, M. G., J.H. Burke and W.D. Pitts, 1999. Terrestrial Plant Ecology, The Benjamin. Gunning Publishing Co. Palo Alto California. U.S.A.
2. Carroll, S.B., Grenier J.K. and Welnerbee, S.d. 2001. From DNA to Diversity- Molecular Genetics and the Evolution of Animal Design. Blackwell Science.
3. Chapman, J.L. and Reiss MJ. Ecology: principles and application. Cambridge University Press,
4. Dyonsager, V.R. (1986). Cytology and Genetics. Tata and McGraw Hill Publication Co. Lid.. New Dehli,
5. Hopkins. W.B. 1999, Introduction to Plant Physiology. 2nd Ed. John Wiley & Sons New York.
6. Hoelzel. A.R. 2001. Conservation Genetics. Kluwer Academic Publishers.

7. Ihsan Ullah; (1995). Plant Physiology, Biochemical Processes in Plants, UGC Press.
8. Lodish. H. 2001. Molecular Cell Biology. W.H. Freeman and Co.
9. Ricklefs. R.E. 2000. Ecology. W.H. Freeman & Co. U.K.
10. Ricklefs. E.R. 2001. The Economy of Nature W.H. Freeman & Co. U.K.
11. Salisbury F.B. and Ross C. B. 1999. Plant Physiology. 5th Edition. Wadsworth Publishing Co. Belmont CA.
12. Taiz, L and Zeiger, E. 1998. Plant Physiology. 2nd Ed. Sinauers Publ, Co .Inc.Calif.
13. Sinha, U. and Sinha, S. (1988). Cytogenesis Plant Breeding and Evolution. Vini Educational Books, New Dehli.
14. Strickberger, M.V. (1988), Genetics, MacMillan Press Ltd, London.
15. Hussain P. 1989. Field and Laboratory Manual of Plant Ecology National Academy of Higher Education, Islamabad.
16. Krebs. C.J. 1997. Ecology. Harper and Row Publishers.
17. Lewin. R. 1997. Principles of Human Evolution. Blackwell Science.
18. Moore, P.D. and S. B. Chapman. 1986. Methods in Plant Ecology Blackwell Scientific Publication, Oxford.
19. Smith. R.L. 1996. Ecology and Field Biology. Addison Wesley Longman Inc., New York.
20. Smith. R.L. 1998 Ecology of Elements. Harper & Row Publisher) New York.
21. Stiling O.D. 1996. Ecology: Theories and applications. Prentice Hall, New Jersey.
22. Subrahmanyam. N.S. and Sambamurthy, A.V.S.S. 2000. Ecology Narosa Publishing Houses, New Delhi.
23. Townsend. C.R. Harper J.L. and Begon M.E. 2000. Essentials Ecology. Blackwell Scientific Publications, UK
24. Witham & Devlin. 1986 Exercises in Plant Physiology, AWS Publishers, Boston.

ASSOCIATE DEGREE IN SCIENCE

Chemistry- II

(Outlines of Tests)	
Paper-A: Organic Chemistry (Written) :	40 Marks
Paper-B: Applied Chemistry (Written) :	40 Marks
Paper-C: Organic Chemistry & Applied Chemistry (Practical-II)	10+10=20 Marks

(Syllabi and Courses of Reading)

Paper A: Organic Chemistry

Marks: 40

It is compulsory to attempt at least TWO questions from each section.

Section- I

1. Basic Concepts

Weightage of marks

3

Atomic, molecular and hybrid orbitals; multiple localized and delocalized bonds; properties of bonds, inductive effect (-I, +I), dipole moment. The concept of resonance, rules for resonance; resonance energy; steric inhibition of resonance; hyperconjugation; resonance effect (-R, +R); hydrogen bonding; tautomerism (keto-enol).

2. Hydrocarbons

Weightage of marks

4

Classification of hydrocarbons. Nomenclature, methods of preparations, physical characteristics and chemical reactions of alkanes, cycloalkanes, alkenes and alkynes. Source of aromatic hydrocarbons. Structure of benzene and the concept of aromaticity. Aromatic electrophilic substitution reactions.

3. Stereoisomerism

Weightage of marks

5

Conformational analysis of ethane (C₂H₆) and butane (C₄H₁₀). Optical isomerism: optical activity, chiral carbon atom and optical isomerism. Geometrical (*cis/trans*) isomerism. Relative (*D/L*) and absolute (*R/S*) configuration. Creation of chiral carbon and racemization; resolution of racemic mixture. Elements of symmetry; optical isomerism in compounds containing one or two asymmetric carbon atoms (concept of enantiomerism & diastereoisomerism); designation of absolute configuration (CIP rule).

4. Alkyl Halides

Weightage of marks

4

Nomenclature, methods of preparation and chemical reactions with special reference to nucleophilic substitution (S_N2 & S_N1) and elimination reactions (E₂ & E₁) of alkyl halides. Preparations, structure and synthetic applications of Grignard's reagents.

5. The Hydroxyl group and Ethers

Weightage of marks

4

Nature of hydroxyl group in alcohols and phenols.

Alcohols: Classification and nomenclature of alcohols; methods of preparation and chemical reactions of alcohols; distinction between 1°, 2° and 3° alcohols; Polyhydric alcohols.

Phenols: Methods of preparation & chemical reactions of phenols; acidity of phenols;

Ethers: Methods of preparation (Williamson's synthesis) and reactions of ethers.

Section- II

6. The Carbonyl Group

Weightage of marks

5

Nature of carbonyl group and its reactivity; nomenclature, methods of preparation & chemical reactions of aldehydes and ketones; distinction between aldehydes and ketones; Aldol reactions (self & cross).

7. Carboxylic Acids and their Derivatives

Weightage of marks

6

Nomenclature, methods of preparation and chemical reactions of carboxylic acids; strength (pK_a) of carboxylic acids and the factors affecting it. Formation and hydrolysis of acid anhydrides, acid amides, acid halides and esters including glycerides. Introduction to amino acids.

8. Nitrogen Compounds: Amines:

Weightage of marks

5

Classification, nomenclature, methods of preparation and chemical reactions of amines; distinction between 1°, 2° and 3° amines. Preparation and reactions of aniline. Basicity of aliphatic and aromatic amines and factors affecting it. Diazonium salts and their synthetic applications.

9. Bio-molecules and Simple Heterocycles

Weightage of marks

4

Importance, nomenclature, properties, synthesis and reactions of simple heterocycles (carbohydrates, proteins, lipids, nucleic acids).

Recommended Books (Organic Chemistry)

1. Younas, M., "Text Book of Organic Chemistry" Ilmi Kutab Khana, Lahore (2006).
2. Rehman, A., "Text Book of Organic Chemistry" Caravan Book House, Lahore (2006).
3. March, J., "Advanced Organic Chemistry" Wiley, New York (1992).
4. Pine, S. H., "Organic Chemistry" McGraw-Hill, New York (1987).
5. Sykes, P., A "Guide Book to Mechanism in Organic Chemistry" Prentice Hall (1999).
6. Younas, M., "Organic Spectroscopy" A. H. Publisher, Lahore (2006).
7. Solomons, T. W. G., "Fundamentals of Organic Chemistry" Wiley, New York (1999).
8. Kemp, W., "Organic Spectroscopy" Macmillan, London (1990).
9. Chughtai, F. A., "Organic Reactions" Majid Book Depot, Lahore/Faisalabad (1995).
10. Vogel, A. I., "A Text Book of Practical Organic Chemistry" Prentice Hall (1996).
11. Clarke, H. T. and D. Haynes. "A Hand Book of Organic Analysis" Edward Arnold, London (1947).

12. Mann, F. G and B. C. Saunders. "Practical Organic Chemistry" Longman, London (1978).
13. Shriner, R. L., D.Y. Curtin, R.C. Fuson, and T.C. Morrill, "The Systematic Identification of Organic Compounds" Wiley, New York (1997).
14. Rehman, A., "Experimental Organic Chemistry" The Caravan Book House, Lahore (2006).
15. Morrison R. T. and R.N. Boyd, "Organic Chemistry" Allyn and Bacon, London (1987).

Paper B: Applied Chemistry

40 Marks

It is compulsory to attempt at least TWO questions from each section.

Section-I

1. Introduction to Spectroscopy

Weightage of marks

5

Electromagnetic radiations (EMR); spectral bands; principle, instrumentation, sample handling and applications of IR & UV/Vis spectroscopy.

2. Nuclear Chemistry

Weightage of marks

5

Radioactivity; stability of nuclei, nuclear transformation, measurement of nuclear radiation, nuclear reactions, fission and fusion, nuclear reactor, uses of radioisotopes, nuclear hazards and safety measures.

3. Separation Techniques

Weightage of marks

4

General introduction and applications of solvent-extraction and chromatographic techniques, such as, paper, ion-exchange and column-chromatography.

4. Modern Materials

Weightage of marks

6

Introduction to liquid crystals, inorganic polymers, ceramics, fiber glass, thin films, semiconductors and composite materials.

Section-II

5. Environmental Chemistry

Weightage of marks

8

Introduction to environment and its segments, Green House effect and global warming; acid rain and its impact on environment. Sources of pollution (soil, air and water), heavy metal pollution in water bodies; toxicity of pollutants.

6. Evaluation of analytical data

Weightage of marks

6

Concepts of mean, mode, median, accuracy & precision; determinate and indeterminate errors, significant figures, rounding off, standard deviation, relative standard deviation. Application of mean, median, mode, rounding off significant figures and standard deviation in chemistry.

7. Chemical Industries

Weightage of marks

6

Metallurgies of Cu, Fe and Al; fertilizers (urea & phosphate); industries (paper and sugar).

Recommended Books

1. Voet, D. R and Voet, J. G. "Biochemistry" John Wiley & Sons, NY (2001).
2. Kent, J.A. Riegel's "Handbook of Industrial Chemistry" CBS Publishers and Distributors, New Delhi (1997).
3. Arnikar, H.J. "Nuclear Chemistry. Krishna Prakashan Media (P) Ltd. (1998).
4. Gurdeep R. "Advanced Physical Chemistry", Krishna Prakashan Media (P) Ltd. Delhi (2002).
5. Maeder, M. and Neuhold, Y-M. "Practical Data Analysis in Chemistry" Elsevier UK (2007).
6. Younas, M., "Organic Spectroscopy" A. H. Publisher, Lahore (2005).

Paper C: Applied Chemistry & Organic Chemistry (Practical-II) Marks: 20 (10+10)
Organic Chemistry Marks 10

1. Qualitative organic analysis: systematic identification of organic compounds containing groups like COOH and its derivatives, OH, NH₂ and C=O.
2. Purification techniques (solvent extraction, distillation and recrystallization etc.)
3. Preparation of simple organic compounds (benzoic acid, ethyl benzoate, tribromophenol, aspirin and nitrobenzene).

Recommended Books (Organic Chemistry)

1. Vogel, A.I. "A Text Book of Practical Organic Chemistry" Longman, London (2005).
2. Shaheen, M. A., Paracha, R. N, Jilani, "Manual of Practical Chemistry" Vol.III, Jilani Notes, Sargodha, (2016).
3. Mann, F.G and Saunders B.C. "Practical Organic Chemistry" Longman, London (2007).
4. Shriner, R.L., Curtin, D.Y. Fuson, R.C. and Morrill, T.C. "The Systematic Identification of Organic Compounds" Wiley, NY (2003).

Applied Chemistry**Marks 10**

1. Percentage determination of Ba²⁺ in Ba(NO₃)₂ by gravimetric method.
2. Gravimetric determination of Ni²⁺.
3. Estimation the glucose content in a sample by titration method.
4. Determination of adsorption parameters using Langmuir adsorption isotherm of AcOH on charcoal.
5. To determine the wavelength of maximum absorption (λ_{\max}) of compounds using spectrophotometer.
6. To determine the concentration of Cr³⁺ in water sample by using spectrophotometer.
7. To determine the concentration of Mn²⁺ in water sample by using spectrophotometer.

8. To determine the concentration of the sucrose, glucose and dextrose in samples by using polarimeter.
9. To determine the Iodine value of the oil and fat.
10. Identification Al^{3+} , Cr^{3+} and Fe^{3+} in samples by TLC.
11. Determine the partition coefficient of I_2 between water and CCl_4 .
12. Qualitative analysis of lipids, proteins and carbohydrates.

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Appendix 'A'**(Outlines of Tests)**

Paper-A:	Data Base Management Systems & System and Network Administration (Written) :	70 Marks
Paper-B:	Practical :	30 Marks

Appendix 'B'**(Syllabi and Courses of Reading)**

Paper-A:	Data Base Management Systems & System and Network Administration	70 Marks
<u>Section-I:</u>	Database Management System	35 Marks

Theory:

Introduction to Database Processing: relationship of application programs and the DBMS, file-processing systems, database processing systems, history of database processing. Database Development: database and DBMS, creating a database, components of database applications, database development processes. Entity Relationship modeling. Semantic Object Model. Relational Model and Normalization: relational model, normalization —1 to 5th normal forms, domain/key normal form, synthesis of relations, multivalued dependencies, Iteration 2. Database Design Using Entity- Relationship Models: transformation of entity-relationship models into relational database designs. Database Design with Semantic Object Models: transformation of database designs. Database Design with Semantic Object Models: transformation of semantic objects into relational database designs. Database Application Design: characteristics of database applications, form design, report design, application program design. Foundations of Relational Implementation: defining relational data, relational data manipulation. Structured Query Language: querying a single table, querying multiple tables, exists and not exists, changing data. Relational Implementation for Personal Databases: creating the database schema, creating forms, creating reports. Client-Server database systems : client-server architecture, reliability and security, open database connectivity (ODBC) standards, applications of ODBC in client-server systems.

Recommended Books:

1. "Data Base Processing", Sixth Edition by David M. Kroenke (1998).
2. "Database Systems" by C.M. Ricardo.
3. "Fundamental of Database Management Systems", by R. Elmarsi and S.B. Navathe.
4. "Fundamental of Database Systems" by C. J. Date

Section-II:**Operating Systems and Networks****35 Marks**

Introduction to Operating Systems: Types of operating systems, operating systems modes. Process Management: process scheduling, process state, scheduling criteria, process supervisor calls. Inter-process Communication and Synchronization : inter process communication, deadlock, deadlock presentation, deadlock avoidance, deadlock detection recovery from deadlock. Memory Management : simple absolute partition, single relocate able partition, multiprogramming, multi partitions, simple paging, simple segmentation. segmentation with paging, page and segment table, swapping, overlaying. Virtual Memory: demand paging, segmentation. File Systems Management: directories and names, types of file systems objects, file system functions, information types, file system architecture. Device Management: hardware I/O organization, software organization, devices. Security: authentication, prevention. detection, correction, identification, threat categories, program threats.

Networking Basic Concepts: line configuration, topologies, transmission modes, categories of network, internetwork. The OSI Model: layered architecture, functions of the layers. TCP IP protocols suite. Transmission Media: twisted-pair, coaxial cable optical fiber:

Recommended Books:

1. "Operating Systems" by J.A. Harris (Schaum's outlines) 2002.
2. "Data Communications and Networking" by B.A. Forouzan. 2nd edition.

Paper-B: (Practical)**30 Marks****Section-I****15 Marks**

1. Exploring Access 2000 work place: opening access applications, menus, toll bars other components.
2. Designing and creating a database.
3. Entering and editing data into tables.
4. Designing and using basic forms.
5. Integrating Access with other Microsoft Office applications and Internet.
6. Establishing Relationships between tables.
7. Finding sorting and filtering information.
8. Creating basic queries.
9. Designing and using basic reports.

10. Creating and using data access Pages.
11. Creating action queries.nine advanced queries.

Recommended Books:

1. “Microsoft Access 2000: Comprehensive Course” by H.A. Napier & P. J. J. (2001)

Section-II

15 Marks

1. Installation of Windows 2000 Professional: Installation from CD, Installation from Network.
2. Configuring the Windows 2000 Environment: Control Panel, Management Console. Installing New Hardware.
3. Managing the Desktop: Desktop Settings, Accessibility Features, Local Settings.
4. Managing Users: Creating Users. Disabling User Account, Deleting User Account. Renaming User, Changing Password. Managing User Properties.
5. Managing Groups: Creating Groups, Group Membership, Renaming Group, Deleting Group, Local Group Policies.
6. User Profiles and Hardware Profiles: Local User Profiles, Roaming Profiles. Mandatory Profiles, Managing Hardware Profiles.
7. Managing Disks: File Systems. File System Conversions. Disk Storage, Disk Management Utilities.
8. Files and Printing Management: File and Folder Basic Management, Creating Shares, Share Permissions. Managing Printer Properties. Sharing Printer, Printer Permissions.
9. Managing Network Connections: Network Dataflow, OSI Model Layer, Installation and Configuration of Network Adaptor. Installing and Configuring Network Protocols.
10. Dialup Networking and Internet Connectivity: Configuring General Modem Properties. Running Modem Diagnostics, Configuring Advanced Modem Properties
11. Managing System Recovery Functions: Recovery and Backup, Using Backup Utility. Using Restore Wizard.

Recommended Books:

1. “Windows 2000 Professionals Study Guide” by L, Donaisald (2001).

**ASSOCIATE DEGREE IN ARTS / SCIENCE
ECONOMICS (ELECTIVE)-II**

**APPENDIX 'A'
(Outlines of Test)**

PAPER 'II': Macroeconomics and Economic Development of Pakistan

100

Appendix 'b'

(Syllabi and courses of reading)

NOTE

In Paper "II" six questions will be best from Section-I and four questions from Section-II. The candidates will be required to attempt five questions in all selecting three questions from Section-I and two questions from Section-II.

PAPER-B:

MACRO ECONOMICS AND ECONOMIC DEVELOPMENT OF PAKISTAN

SECTION – I MACRO ECONOMIC:

1. A FRAME – WORK FOR MACRO ECONOMICS

Macro Economics Vs Micro Economics. Macro Economics. Macro Economic Problems: Unemployment, Inflation And Growth.

2. DETERMINATION OF NATIONAL INCOME AND EMPLOYMENT (two sector Economy)

(i) The Classical Theory of Employment:

Say's Law of Market. Aggregate Demand and the Quantity Theory of Money.

Real Wage Function. Classical Macro Economics System, its Diagrammatic representation. Keynesian Critique of the Classical System.

(ii) Keynesian Theory of Income and Employment:

Equilibrium Level of National Income: Saving and Investment Approach; Consumption and Investment Approach. Relation Between Investment and Income. Investment Multiplier. Inflationary and Deflationary Gaps and Full Employment level.

3. DETERMINANTS OF NATIONAL INCOME (Two Sector Economy) :

(i) Consumption:

Consumption and Saving Functions. Keynesian Psychological Law of Consumption. Determinants of Consumption. Explanation of the Observed Relationship between consumption and Income Relative Income, Permanent Income and Life Cycle Theories of Consumption.

(ii) Investment:

Investment and Capital, Determinants of Investment. Marginal Efficiency of Capital (MEC) and Marginal Efficiency of Investment (MEI). Optimal Level of Investment. The Principles of Acceleration.

4. GENERAL EQUILIBRIUM IN THE GOODS AND MONEY MARKET:

The Derivation of IS Function in the Goods Market. The Slope and position of IS Curve. The Derivation of LM Function in the - Money Market. The Demand for and Supply of Money. The Interest Rate. The Slope of position of LM Curve. Simultaneous Equilibrium in the goods and Money Market. Adjustments towards Equilibrium.

5. FLUCTUATIONS IN NATIONAL INCOME:

Business Cycles and their main Features. Interaction of Multiplier and Accelerator. Counter-Cyclical Measures.

6. MONETARY INFLUENCE ON INCOME DETERMINATION:

Monetary Policy: Its Nature, Objectives and Instruments. Influence of Monetary Policy on Income Determination (by affecting C+I+G). Money and Inflation, Stagflation.

7. FISCAL POLICY AND INCOME DETERMINATION:

Fiscal Policy: Its Nature, Objectives and Instruments. The Impact of Government Expenditure, Taxes and Transfer Payments in the Equilibrium Level of National Income.

8. INTERNATIONAL TRADE AND INCOME DETERMINATION

Theory of Comparative Advantage. Classical and Heckscher-Ohlin Theory. Balance of Payments. Disequilibrium and Adjustment Policies. Devaluation and Revaluation. Depreciation and Appreciation of Exchange Rates. Determination of National Income in a Four Sector Economy. The Foreign Trade Multiplier and Changes in the Level of Income.

SECTION - II: ECONOMIC DEVELOPMENT OF PAKISTAN

1. THE CONCEPT AND MEASUREMENT OF ECONOMIC DEVELOPMENT:

Main Features of Developing Economy with Special Reference to Pakistan.

2. AGRICULTURE AND INDUSTRY:

Relative Importance of Agricultural and Industrial Sectors in the Economic Development of Pakistan.

3. ECONOMIC DEVELOPMENT THROUGH PLANNING:

Need and Role of Development Planning. Market Imperfections and Price Distortions. Short Term, Medium Term and Long Term Plans. Formulation of Objective targets and Strategy in Development Planning.

4. ECONOMIC PLANNING IN PAKISTAN:

Planning Machinery in Pakistan. Justification of Economic Planning in Pakistan. Factors Prohibitive in Effective Planning in Pakistan. Main Contours and Critic Evaluation of the Last Five Year Plan (Seventh Five Year Plan) with reference to Strategies, Objectives, Targets and Achievements. Role of Annual Planning in Economic Development.

5. RESOURCE MOBILIZATION FOR PLANNED ECONOMIC DEVELOPMENT IN PAKISTAN :

(i) Financial Resources :

Domestic and Foreign Resources of Pakistan. Extent of Pakistan's Dependence on Foreign Aid and Debt Servicing Problem.

(ii) Human Resources:

Human Resource Mobilization in Pakistan. The Need and Role of Manpower Planning.

NOTE

(i). In paper "A" four questions will be set from Section-I and six questions from Section-II. The candidates will be required to attempt 05 questions in all selecting 03 questions from section-I and 02 questions from section-II.

(ii) In Paper "B" six questions will be set from Section-I and four questions from Section-II. The candidates will be required to attempt five questions in all selecting three questions from Section-I and two questions from Section-II.

Recommended books:

- | | |
|-------------------------------------|--|
| (i) Chieng, Alpha C, | Fundamentals Methods of Mathematical Economics' 3 rd Edition. |
| (ii) J.Parry Lewis | "An Introduction of Mathematics Theory" And 2 nd Edition. |
| (iii) Ferguson & Gould's | "Microeconomics Theory" 6 Edition. |
| (iv) Glahe, Fred R. | "Macroeconomics" 2 nd Edition. |
| (v) Prof. Abdul Ghani Chaudhary | "Rahber-e-Muashiat" |
| (vi) Dr. Muhammad Hussain Chaudhary | "Economic Thoery" |
| (vii) M. Hanif Aslam | "Economic Theory" |

ASSOCIATE DEGREE IN ARTS

علم التعلیم-II (Elective)- Education

(Syllabi and Courses of Reading)

100 نمبرز

دوسرا پرچہ

1:	تعلیمی انقیاد سے تعارف
2:	نشور و نما کا مطالعہ
3:	نظریات تعلیم
4:	تعلیم پر اثر انداز ہونے والے عوامل
5:	ذہانت
6:	مستقبل بچوں کے مسائل اور رہنمائی
7:	فطین، کم فہم، مضطرب، برائے پیشہ، معذور شخصیت
8:	تعلیمی انتظامیات کا مفہوم اور اہمیت
9:	تعلیمی ادارہ بطور معاشرتی مرکز
10:	اہم نصابی مشاغل
11:	تفہیم و ضبط
12:	معلم

(الف) (ب) (ج) (د) معاشرتی

(الف) (ب) (ج) (د) تعلیم بذریعہ سنی و خطا تعلیم بذریعہ انکاس مشروط تعلیم بذریعہ تقلید تعلیم بذریعہ بصیرت

وچھی۔ ذہانت۔ آمادگی۔ تاثر۔ مشق۔ رویہ۔ تحریک۔ جذبات۔ روحان۔ تمدن

(الف) (ب) (ج) (د) تعریف نظریات یقائس

(الف) (ب) (ج) (د) تشکیل شخصیت کے عناصر

(الف) (ب) (ج) (د) مفہوم اور اہمیت ضبط کے محرکات اسلامی نظریہ ضبط

(الف) (ب) (ج) (د) رسول اللہ صلی اللہ علیہ وآلہ وسلم بحیثیت مثالی معلم اسوۂ حسنہ کی روشنی میں معلم کے شخصی اور پیشہ دارانہ اوصاف

علم التعلیم برائے (مجازہ کتب) اے ڈی آرٹس

- 1: پروفیسر ڈاکٹر حافظ عبدالملق (2004) "ایجوکیشن" ڈیگری پیشہ زار دو بازا ارلا ہور
- 2: مقبول احمد (2005) "اساسیات علم التعلیم" (B.A.I, II) علمی کتاب خانہ کیرنٹر سٹیٹ اردو بازا ارلا ہور۔
- 3: پروفیسر عبدالغفور فقی "آئینہ علم التعلیم" (بی اے حصہ اول، دوئم)۔ خالد بک ڈپو اردو بازا ارلا ہور۔
- 4: پروفیسر مرزا آئی محمد (1997-98) (پرچہ اول، دوئم) مرکزی کتب خانہ کیرنٹر سٹیٹ لاہور۔
- 5: ایس ایم شاہد (1999-2000) "علم التعلیم" (حصہ اول، دوئم) مجید بک ڈپو لاہور۔
- 6: پروفیسر عبدالسلام چوہدری (2001-2002) "رہبر علم التعلیم" (حصہ اول، دوئم) قریشی برادرز پیشہ زار اردو بازا ارلا ہور۔

ENGLISH LITERATURE-II FOR ASSOCIATE DEGREE IN ARTS (ELECTIVE)

Appendix 'A'
(Outlines of Tests)

Paper 'II': Marks
100

Appendix 'B'
(Syllabi and Courses of Reading)

Method	William Shakespeare	20
Glass Meanagerie	Tennessee William	20
Poetry: (John Milton, William Wordsworth, John Keats, Robert Browning, Robert Frost).		40

John Milton: On His Blindness: How Soon Hath Time
Paradise Lost, Book I, Lines: 1-26
Paradise Lost, Book I, Lines: 105-124
Paradise Lost, Book IX, Lines: 896-916

Wordsworth: To Butter fly
The Sun has long been set
Lines composed a few miles above Tintern Abbey
The Reverie of Poor Susan
Resolution and Independence
Sonnet: Composed upon Westminster Abbey Sep, 3, 1802
Sonnet: London 1802
Ode: Intimations of Immortality from
Recollection of Early Childhood.

John Keats: On the Grasshopper and Cricket
Ode: Bards of Passion and of Mirtn
Ode: To Autum
Sonnet: To Sleep
Sonnet: The Human Seasons
Sonnet: To Fancy
Meg Merrilies
Song: In a drear-nighted December

Robert Browning: Meeting at Night: Parting at Morning:
"Incident of the French Camp":
My Last Duches:
Prospice: Childe Ronald to the Dark Tower Came.

Robert Frost: "Neither Out Far nor in Deep":
"Nothing Gold can Stay: "Bereft"
"The Oven Bird: free at my Window:
"The Trial by Existence"
"The Span of Life"
"Acquainted with the Night"
"Fire and Ice"
"The Road Not Taken"

N.B.__ All the prescribed books are for intensive reading.

A compulsory question on explanation of passages with reference to the context from the prescribed books will be set in Paper B.

ASSOCIATE DEGREE IN ARTS
Essentials of Home Economics-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Human Development & Family Studies;	75 Marks
	Art & Design and Home Management (Written) :	
Paper-B:	Practical :	25 Marks

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A:	Human Development & Family Studies and Art & Design and Home Management	75 Marks
<u>Section-I:</u>	Human Development & Family Studies	25 Marks

1. Developmental Stages & Adjustments

- i. Introduction to human development
- ii. Brief introduction of infancy, childhood, adolescence
- iii. Early adulthood
- iv. Middle adulthood
- v. Late adulthood / Old age

2. Maternal And Child Health

- i. Preparation for parenthood
- ii. Maternal health
- iii. Prenatal care
- iv. Postnatal care

3. Introduction to Family

- i. Definition, objectives and importance
- ii. Function of family
- iii. Family types
- iv. Family life cycle

4. Family Relations

- i. Introduction to family relations.
- ii. Factors affecting family relations.
- iii. Preparation for marriage (husband-wife relations and relations with inlaws).

iv. Dealing with tensions and conflicts in the family.

5. Community Development and the Family

- i. Definition of community
- ii. Communities in urban/rural areas.
- iii. Functions of community in family development
- iv. Role of family in the development of community

Section-II: Art & Design

25 Marks

1. Importance of Art and Design in Home Economics

2. Application of Design in Everyday Life

- i. Home Designs
- ii. Apparel designs
- iii. Design in consumer goods

3. Principles of Design

- i. Balance
- ii. Proportion
- iii. Emphasis
- iv. Harmony
- v. Rhythm

4. Elements of Design

- i. Line
- ii. Color
- iii. Shape and form
- iv. Texture

5. Graphic Designing

- i. Lettering
- ii. Labeling

Section-III: Management of Home and Environment

25 Marks

1. Home Management

- i. Scope of management
 - Definition of management
 - Management; importance and process
 - Goals and values; definition and importance
- ii. Resources:
 - Management of specific resources
 - Management of time and energy
- iii. Work simplification
 - Fatigue
 - Layout of work areas and equipment

2. Management of family income

- i. Budgeting
- ii. Saving: importance and methods of saving

3. Decision making

- i. Definition
- ii. Steps of decision making

4. Environmental Management

- i. Definition and importance of environment
- ii. Causes of environmental degradation
- iii. Impact of environment on healthy family living

5. Consumer Education

- i. Definition and Importance
- ii. Consumer behavior
- iii. Rights and responsibilities of consumer (examples from every domain of Home Economics)

6. Flower Arrangement

- i. Principles of fresh & dry Flower arrangements
- Types of fresh Flower arrangements

Paper-B: Practical

25 Marks

Section-I:

Participating in community based intervention and support programs OR
Study, evaluate and report any problem of a peer or 3 to 5 year child

Section-II

- i. Color wheel (6 color schemes)
- ii. Study of color and texture in paper collage.
- iii. Application of principle of design in card making (3 cards)
- iv. Designing of label (2 labels)
- v. 3 sample each of Tie n Dye and stenciling.
- vi. Designing with letters on file covers / Cards /Poster (A4 Size)

Section-III

1. Flower arrangement (Fresh, Dry)
2. A poster depicting environmental hazards and remedies

ASSOCIATE DEGREE IN ARTS

Fine Arts-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	History of Western Art (Written)	:	30 Marks
Paper-B:	Test of Life Drawing (Practical)	:	20 Marks
Paper-C:	Test of Composition (Practical)	:	20 Marks
Paper-D:	Exhibition of Work (Practical)	:	30 Marks *

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A **History of Western Art** **30 Marks**

- Giotto, Massacio, Donatello, Leonardo da Vinci, Michaelangelo
- Baroque: Rembrandt, Rubens
- Neo Classicism: David, Ingres
- Romanticism: Delacroix
- Realism: Courbet, Millet
- Impressionism: Manet, Monet, Seurat, Cezanne, Van Gugh

Characteristics of various movements and a general survey of the works of the individual painters be discussed. No individual painting of any painter may be asked for critical appreciation

Paper- B, C &D: Practical **20,20,30 Marks**

*Must be certified by the teachers concerned as being the candidates own work with name of the student and the signature of the teacher in ink at a place which can not trimmed out. Work without certification will not be marked.

The details of the exhibition of peers works will be as under:

Drawing	2
Still Life	1
Landscape	1
Portrait	1
Figure Composition	2
Sculpture	1 (round or relief)

ASSOCIATE DEGREE IN ARTS / SCIENCE

Geography-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Regional Geography (Written)	:	50 Marks
Paper-B:	Map Work & Practical	:	50 Marks

The distribution of marks for the Map Work and Practical Examination shall be as follows

1. Lab. Work.
2. Field Surveying
3. Field Report
4. Record of Map Work.
5. Vive Voce

Examination in Lab. Work, Field Survey and Field Report shall be conducted during the Practical Examination by the same Examiners. -

Note. : A [minimum of sixty practical's of 3 hours each shall be required in two years]

(30 practical's each year). Map Work & Practical Examination will spread over two days

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Regional Geography 50 Marks

GEOGRAPHY OF SOUTH ASIA AND PAKISTAN

Study of South Asia with special emphasis on Pakistan order the headings:

- a) Resource base:
(Physical, Human and Economic)
- b) Transport,
- c) Trade
- d) International relations.

Recommended Books

1. BRANDNOCK.R.W. (1992) Handbook of South Asia London
2. KURESHY,K .U. (1986) Geography of Pakistan Lahore Hafeez Press
3. BRANDNOCK, R.W. (1982) Agricultural Challenges in South Asia London: John Murray

4. JOHNSON, B.L.C (1979) Pakistan London, Heinemann.
5. SPATE, O.H.K and India and Pakistan London: Methuen
LEARMONTH, A.T.A. (1986).

Paper-B: Map Work & Practical

50 Marks

1. Study of Maps
 - (a) Types of Maps
 - (b) Seals Plain and diagonal
2. Methods or representation of relief. Exercises and drawing of composite contour maps with the help of given data and information.
3. Interpretation of:
 - (a) Topographical Maps
 - (b) Arial Photographs and introduction to Remote Sensing.
 - (c) Weather maps of Pakistan.
4. Map projections : general principles, classification, choice of projection, merits and demerits, construction or graticule by simple graphic methods of the Following projections:
 - (a) Cylindrical-Simple and Equal Area, and Mercator's (with Table).
 - (b) Zenithal-Gnomonic, Stereographic and Orthographic (Polar cases)
 - (c) Conical one and two standard parallels and Bonne's.
5. Simple quantitative techniques and their use in geography. Study of frequency Distribution, averages (Mean, median and mode), mean deviation standard deviation and correlation.
6. Preparation of distribution craps with the help or Symbols - Line bars. Shads, dots, circle.
7. Instrumental surveying-Making of plans with the help of chain, plane table and prismatic compass.
8. Field report based on the study or geographical aspects of a selected areas/activity.

Recommended Books:

1. DENT, B.D. (1993) *Cartography: Thematic Maps design*
Oxford, WCB
2. BENTON jr. A.R. (1992) *Elements of Plane Surveying*
New York: McGraw-Hill
3. CAMPBELL, J. (1990) *Introduction to Cartography*
Oxford, WCB
4. BRIGGS, K (1989) *Practical Geography*
London: Hodder and Stoughton
5. ROBINSON, A.H. (1988) *Elements of Geography*
New York, John Wiley
6. SINGH, R.L. (1979) *Elements of Practical Geography*
New Delhi, Kalyani Publisher
7. AHMAD, K.S (1973) *Map Production*
Lahore Publisher Unit
8. BYGOTT, J. (1969) *An Introduction to Map Work and
Practical Geography*
London University Tutorial Press
9. MONKHOUSE, F.J (1971) *Maps and Diagrams*
&
WILKINSON, H.R. (Third Ed.) London. Methuen & Co

ASSOCIATE DEGREE IN ARTS
Health & Physical Education-II

Total Mark: 100

Appendix 'A'
(Outlines of Tests)

Paper-A:	Health Education (Written)	:	75 Marks
Paper-B:	Practical	:	25 Marks

Appendix 'B'
(Syllabi and Courses of Reading)

Paper-A: Health Education 75 Marks

1. Meaning of Scope of Health Education

- (a) Definition and Scope..
- (b) Importance.
- (c) Relationship with Physical Education.
- (d) Health and longevity

2. Personal Hygiene

- a) Islamic conception about personal Hygiene.
- b) Care of Eyes, Nose, Throat, Teeth, Feet, Fingers, Nails, Arms, Pite. Skin and
- c) tei.
- d) Dress
- e) Effect of the following on human health
- f) Tobacco, Naswar, Sleeping pills. Opium, Morphia, Hashish Heroin. Charas, Alcohol.

3. Community Health

- a) Public Health problems.
- b) Sanitation of home, school and locality.
- c) Symptoms, Causes and prevention of the following communicable diseases:
- d) Influenza, Typhoid, Cholera, Aids.

4. Air

- a) Composition
- b) Circulation.
- c) Pollution.

d) Purification.

5. Human Organism

- a) Anatomy and Physiology of the following systems :
- b) Muscular System.
- c) Respiratory System.
- d) Blood circulatory System.

6. Effects of Exercise on Human Body

- A. Effects of exercise on the following
 - a) Muscular System.
 - b) Blood Circulatory System.
 - c) Respiratory System.
- B. Fatigue and Relaxation.

7. Nutrition

- a) Constituents of food.
- b) Functions of food.
- c) Food Hygiene.
- d) Balanced Diet with special reference to the sources of food available in Pakistan.
- e) Effects of malnutrition of human body.

8. Corrective Physical Education

- a) Posture and its importance.
- b) General deformities (Kyphosis, Lordosis, Scoliosis. Flat foot).
- c) Causes of deformities.
- d) Remedial exercises.

9. Massage

- a) Utility and importance.
- b) Kind of Massage, Aquates, Mud, Manual.

10. First Aid

Definition and importance.

General principles of First Aid.

Signs, Symptoms and First Aid of Fractures, Dislocation, Sprains, Strains, Cramps, Wounds,

Paper-B: Practical**25 Marks**

1	Agilities/stretching/Balancing	10
a	Dive Roll	
b	Head Standing	
c	Hand Standing	
d	Standing Board Jump	
e	Forward Roll	
f	Backward Roll	
g	Spanning	
h	Cart Wheeling	
2	Postural Judgment and Personal Hygiene	10
a	Demonstration and Judgment of Correct Sitting, Standing, Walking and Lying posture	
b	Appraisal of Dress, Hairs, Eyes, Skin, Armpits	
c	Skill in brushing the teeth	
d	Demonstration of Ablution	
3	Viva Voce (Health & Physical Education	
a	Practical Note Book containing Personal Hygiene, Gymnastic, Posture and Movement concepts	5
b	Recognition of selection on the University/Divisional/Provincial/National Teams and Recognition of Social/Community Service	

**ASSOCIATE DEGREE IN ARTS
HISTORY (ELECTIVE)-II**

PREFACE

As a matter of fact 'History' is an accurate (possible) record of past events. It provides the status of phenomenon at given times. It also provides interpretation and evaluation of problems, issues, movements and direct observation as eyewitness and indirect observation through documents, relics and remains. It helps to determine the change, growth and development of human race. It is discovery of characteristics traits, norms, and statutes in different ages.

SYLLABUS FOR HISTORY TWO-YEAR (COURSE)

Scheme of Studies

History Syllabus shall consist of two papers of 100 marks each. Students shall be asked to choose any one of the following four groups. In each paper there shall be one compulsory objective question of multiple choice, bearing 20 marks.

The four groups in ADA History are as under.

1. **Islamic History**
Paper II: - History of Abbasids (750 AD to 1258 AD)
and Muslim Rule in Spain (712 AD to 1492 AD)
OR
History of Modern Muslim World. (1919 AD to 2002 AD)
2. **History of Muslims of South Asia**
Paper II: - History of Mughals (1526 AD 1857 AD)
3. **History of Pakistan**
Paper II: - History of Pakistan (1947 AD to 2005 AD)
4. **History of Europe**
Paper II: - International Relations and Organizations. (1945 AD to 2005 AD)

Detail of Courses

ISLAMIC HISTORY -II

**HISTORY OF ABBASIDES (750 to 1258 AD)
and MUSLIM RULE IN SPAIN (712 to 1492 AD)**

1. **The Abbasid Movement**

The Abbasid Movement and causes of its success. Role of Abu Muslim Khurasani; establishment of Abbasid caliphate.

2. **Abul Abbas Al Saffah**

His character and consolidation of power.

3. **Abu Jaffar Al Mansur**

Rebellions of Abdullah bin Ali and Abu Muslim Khurasani; Rawandiya sect and the kharjites; Mansur and the Alids; conquests and consolidation of the Caliphate – Administration; foundation of Baghdad. Character and achievements.

4. **Al Mehdi**

Revolts of Muqannah and Zindiq; conquests; wars against the Romans; estimate of his character.

5. **Al Hadi**

His policy towards Alids; revolts; estimates of his character.

6. **Harun al Rashid**

Rise and fall of the Barmakides, early revolts; wars in Africa, establishment of Idrisia kingdom; war against Romans. His character and achievements.

7. **Amin-al-Rashid**

Differences with Mamun; war between the two brothers and murder of Amin; estimates of his character.

8. **Mamun-al-Rashid**

Disorder in Baghdad, entry in Baghdad. Tahiriyya and Zaidiyya kingdoms – Babak Khurrami – conquests in the East, Asia Minor and the Mediterranean. His religious policy – Mutazalite, scientific and literary progress.

9. **Muetasim Billah**

Turkish soldiery; foundation of Samarra – conquests in Asia Minor; estimate of his character.

10. **Wasiq Billah**

Aggrandizement of Turks. Turkish soldiery cut to size; new religious policy and its results.

11. **Mutawakkil**

His state policy and religious Policy; his murder.

12. **Later Abbasids**

From Mustansir Billah to Muetasim Billah, a brief survey – Fall of Baghdad at the hands of Hulaku Khan.

13. **Downfall of Abbasids**

Causes of the downfall of the Abbasid caliphate.

14. **Abbasid Administration**

Central structure and its main functionaries. Provincial administration. sources of income. Army. Judiciary.

15. **Literary, Educational and Scientific Developments**

Science, art and literature; Bait-ul-Hikmat; medicine, philosophy, ilm-ul-kalam, Ikhwan-us-Safa, astronomy and astrology, mathematics, chemistry, zoology, geography and history; traditions and jurisprudence – poetry, architecture, calligraphy, paintings and music.

16. **Societies and Economic Life**

Society and Economic life under the Abbasids.

17. **Condition of Spain on the eve of the Muslim conquest** (political, social and religious conditions.)

18. **Conquest of Spain**

Musa bin Nusair and Tariq bin Ziyad. The causes of invasion and success.

19. **Spain under Muslim Governors**

Emergence of christian state of the North.

20. **Abdul Rehman I** His character and achievements.

21. **Hisham I** His internal policy; introduction of Maliki Fiqh.

22. **Hakam I** His character and achievements, relations with theologians, wars and rebellions, rise of Maliki Fiqh.

23. **Abdul Rehman II** His character and achievements, relations with the christians, foreign policy, cultural and literary activities.

24. **Muhammad I** His character and achievements, his relations with Non-Muslims, rebellion in Toledo, rise of Banu Qisi, rebellions of Ibn Marwan and Ibn Hafsun, succession of Munzar and Abdullah.

25. **Abdul Rehman III** Early difficulties, restoration of law and order, internal and external policy, relations with the christians and Fatimids, the title of caliph, his character and achievements.

26. **Hakam II** His relations with North Africa and christians, advancement of art and literature.

27. **Hisham II (Hisham Almoeed)** His character and achievements.

28. Later Umayyads, the rise of Hajib-al-Mansur; relations with the courtiers and Theologians, Jihad against the christians, his character and achievements.

29. Administration of Spain under the Umayyads.

30. Petty dynasties.

31. Decline and fall of Umayyads of Spain: causes, Almoravids, Almohads.
32. Fall of Granada (1492).
33. Contribution of arts, architecture, literature and science.

Suggested Readings:

- 1) Sir T.W. Arnold, The Caliphate.
- 2) Amir Hussain Siddiqui, Islamic State; A Historical Survey.
- 3) Fayyaz Mahmood, History of Islam.
- 4) Syed Amir Ali, London, The Short History of Saracens.
- 5) Syed Amir Ali, London, The Spirit of Islam.
- 6) S.A.Q. Hussani, Arab Administration.
- 7) Mazhar-ul-Haq, History of Islam.
- 8) Dr. Imam-ud-Din, Dacca, 1959, Political History of Muslim Spain.
- 9) Dr. Imam-ud-Din, A Cultural History of Spain.
- 10) Dozy, R., Spanish Islam.
- 11) Stanley lane Pole, The Moors in Spain, Lahore 1953.
- 12) T.B. Irving: The Falcons of Spain.

Paper-II

ISLAMIC HISTORY

HISTORY OF MODERN MUSLIM WORLD

(1919 to 2002 AD)

A brief introduction of modern Muslim world with special reference to the impacts of colonialism.
Special study of Iran and Arab world.

1. IRAN: land and people

- General introduction with historical background.
- World War-I and its effects on Iran.
- Rise and reforms of Raza Shah Kalalin.
- World War-II and Iran.
- Abdication of Raza Shah kalin.
- Rise of Movements.
- Raza Shah's rules.
- Iran's role in Muslim world.
- Revolution – Revolutionary regime.
- Pakistan Iran relations.

2. Saudi Arabia

Husein's rule in Hijaz; Ibn Saud, forming of Saudi Arabia into kingdom, discovery of oil and its impact upon the socio-political and economic life of the society 2nd World War and aftermath. King Saud, its internal and external polices. King Faisal internal reforms, foreign Policy, King Khalid rule. King Fahad rule.

3. Iraq Under Mandatory Power: 1920 to 1930 AD

King Faisal; internal problems, Anglo—Iraqi Treaty, Politics in 1930s, Iraq during World War second, domestic politics in 1950, the Baghdad pact, The revolution of 1958 and its aftermath, the First Baath Revolution, The era of Arif, the Second Baath Revolution, Iraq under Saddam Husein. American intervention and Fall of Saddam Husein.

4. Syria

Under French Mandate, partition of Syria into Lebanon and Syria, Franco—Syrian Treaty 1936. Syria during World War 2nd, the Husenei Zaim Revolution, the Hinawi and the Shiskali coups, Return to constitutional life, UAR, After the dissolution of Union, Baath party rule, The Leadership of Hafiz Assad.

5. Lebnan

Under French Mandate, Franco—Lebnon treaty, 1936 Lebnon's Liberation and (World war II), The coup of 1952 and its aftermath, The Lebanese civil war; The Presidencies of Faud Chechab and Suleiman Franjiyeh, Lebanon 1976 to 1985.

6. Palestine

Land, people, balfoure declaration, British mandate, partition of the Palestine, creation of Isreal, 1948 Arab-Isreal War, 1967 and 1973 Arab—Isreal wars, Palestinian problems and UNO.

7. Egypt

Under British protectorate, under monarchy, Saad Zaghul & Wafd party; Anglo Egyptian treaty of 1936; Nahas Pasha & Wafd party; Egypt during second world war, the 1952 coup, General Naguib, President Nasser. Suez crises, Pan—Arabism and UAR After the dissolution of UAR, Arab; Isreal wars of 1967 & 1973 & Egypt, Sadat's rule, Camp David agreement, Ikhwan-ul-Muslimin. Hosni Mobarik's rule.

Recommended Books :

- 1) Hurewitz, J.C., Soviet American Rivalry in the Middle East New York, 1969.
- 2), The Middle East Politics: The Military Dimeses New York, 1969.
- 3), Diplomacy in the Near and Middle East: A Documentary Record, Princetion, 1956, 2 Vol.
- 4) Al—Marayati, Aloid A & Others, The Middle East: Its Governments & Politics, Belmont, 1972.
- 5) Rubinsten, Alvin Z. , Red Star on the Nile: The Soviet Egyptian relationship since the June war, Princnton, 1977.
- 6) Hitti, P.K. , Near East in History.
- 7) Harari, Maurice, Governments & Politics of the Middle East.
- 8) Neguib, Muhammad, Epyt's Destiny: A personal statement, New York, 1955.
- 9) El—Sadat, Anwer, Revolt on the Nile, London, 1957.
- 10), In Search of Identity: An Autobiography, New York, 1978.
- 11) Abdullah, King of Jordan, My Memoirs, tran, by Harlod W.G. London, 1978.
- 12) Armajani, Yahya, Middle East: Past and Present, New Jersy, 1980.
- 13) Sharabi, H.B., Government & Politics of Middle East in the 20th Century New Jersy, 1962.
- 14) Lenczowski, George, The Middle East in the World Affairs, New York, 1988.

HISTORY OF MUSLIM RULE IN SOUTH ASIA

PAPER- II

HISTORY OF MUGHALS

(1526 to 1857 AD)

1. South Asia at the advent of Mughals

Socio-political conditions of South Asia at the eve of Mughal invasion; causes of the advent.

2. Zahir-ud-Din Muhammad Babar

His early life; invasion on South Asia, first battle of Panipat, foundation of Mughal rule, defeat of Rajput; His character and personality as a literary man, as a statesman and as a general.

3. Naseer-ud-Din Muhammad Humayun

His early life, capture of throne and conquests, his reforms; administration and public works. His achievements as ruler.

4. Sher Shah Suri and the establishment of Sur Dynasty

His early life, capture of throne and conquests, his reforms; administration and public works. His achievements as a ruler; successors of Sher shah and the end of Suri Dynasty.

5. Jalaluddin Muhammad Akbar

His early life, accession to throne, second battle of Panipat; Bairam khan and his downfall; petticoat government; conquests in the north and the Rajput policy; penetration in the south and Deccan policy; religious trends and his religious policy; Din-e-Elahi, administration, mansabdari system; his land revenue system. His character and achievements.

6. Nuruddin Muhammad Jahangir

His accession; Khusru's revolt; conquests in the North and South. Noor Jehan and her marriage with Jahangir; her ascendancy; Qandhar question; revolts of prince Khurram and Mahabat Khan. His character and personality estimates. Patronage towards painting.

7. Shahabuddin Muhammad Shah Jehan

His early life, marriage with Mumtaz Mahal, his accession to throne, golden period of the Mughal Rule. His central Asian Policy; Deccan Policy. War of succession between his sons; causes of the success of Aurangzeb and the failure of Dara Shikoh. His character and achievements as an architect king.

8. Mohiyuddin Muhammad Aurangzeb Alamgir

His early life, accession and theory of kingship; his military expeditions, Rajput Policy, Deccan policy, his policy towards Marhatas and Sikhs, his religious policy. His character and achievements.

9. Period of Decadence: Later Mughals

Causes of the decline of the Mughal Empire, Rise of European powers in India, invasion of Nadir Shah of Iran and Ahmad Shah Abdali of Afghanistan.

10. Growth of Independent Principalities

Punjab, Bengal, Ouadh, Deccan, and Mysore.

11. Socio-Cultural and Economic Condition Under the Mughals

Contributions in the field of art, architecture and literature; society; commerce; industry; and economic developments.

12. Religious Movements

"Mahdevi" movement; Muslim Tasawwuf, Qadria and Naqshbandia order; Hazrat Mujaddid Alf-i-Sani and his services towards revival of Islam. Shah Walaulah and his contributions. Faraizi Movement. Tehrik-e-Mujahidin.

13. Rise and expansion of English East India Company—war of independence 1857.

Suggested Readings:

1. S.M. Ikram, History of Muslim Civilization in India and Pakistan.
2. S.M. Ikram, History of Muslim Rule in India.
3. Syed Abdul Qadir, History of Indo-Pak.
4. Prof. Zubair, History of Indo-Pak.
5. I.H. Qureshi, The Administration of Mughal Empire.
6. Sir Wolseley Haig, The Cambridge History of India.
7. I.H. Qureshi, The Muslim Community of the Indo-Pakistan sub-continent.
8. I.H. Qureshi, A short history of Pakistan, Vol. III.
9. Sh. Rashid, "later Muslims".
10. Islam R. "Sufism in South Asia" 2002, OUP, Karachi.

11. Khan, Gulfishan, "Indian Muslims Perception of the West.

HISTORY OF PAKISTAN

Paper- II

1947 to 2005 AD

1. **Early Period**

Introduction and background of Pakistan. Early difficulties and problems with especial emphasis on Kashmir issue and Canal Water Dispute. Quaid-I-Azam as first Governor General.

2. **Political and Constitutional Development Formative Phase (1947-58)**

The Objective Resolution 1949, Basic Principles committee's report Muhammad Ali Bogra's formula. Dissolution of the first constituent assembly, formation of one unit; constitution of 1956; its main features.

3. **Military Rule:(1958-1971)**

The Basic democracy, the constitution of 1962; its working and failure.

Ayub Khan's Regime; growth of Industrialization, agricultural reforms Indo-Pakistan War 1965.

Yahya Khan's regime; his Legal Frame Work Order, general elections of 1970, Awami Leagues six points programme, the political crises, Indo-Pakistan War 1971, causes for the separation of East Pakistan, fall of Dhaka.

4. **Revival of Democracy in Pakistan(1972-77)**

Z.A. Bhutto's regime; policies, reforms 1973 constitution and its first seven Amendments.

Failure of parliamentary democracy in Pakistan, circumstances leading to the imposition of Martial Law in 1977.

5. **Military Rule: (1977-88)**

Zia-ul-Haq's policies and efforts at the Islamization of laws. Restoration of parliamentary system, referendum, elections of 1985. RCO and the 8th Amendment, Junejo's ministry, dissolution of the assembly.

6. **Restoration of Democratic Governments**

Constitutional amendments.

The functioning of democratic governments and their failure. Pakistan in 21 century, its political and economic problems, and its role in world politics.

7. **Political Parties**

Pakistan Muslim League, Awami League, Jamat-i-Islami, Jamiat-ul-Islam, Jamiat-ul-Ulema-e-Pakistan, National Awami Party; Pakistan Peoples Party.

8. **Vested Interest Groups**

Feudals; sectarian parties, military and civil bureaucracy, ethnicity.

9. **Economic Development**

Land reforms, industrial development, nationalization de-nationalization and privatization.

10. **Foreign Policy**

Basic principles of Pakistan's foreign policy.

Relations with immediate neighbors: India, Afghanistan, Iran, China and Central Asia.

Relations with Muslim world: Saudi Arabia, Turkey, Iraq and Indonesia, Malaysia.

Relations with super powers: U.S.A., Russia,

Defense pacts: SEATO, CENTO, Economic pacts: RCD, ECO, SAARC, OIC.

Relations with the European Union.

Pakistan's Stand on war against terrorism.

11. **Human Rights in Pakistan**

Human Rights, gender issue, child labour, minorities.

Suggested Readings:

1. I.H. Qureshi, A Short History of Pakistan.
2. Khalid bin Saeed, The Political System of Pakistan.
3. G.W. Chaudhry, Constitutional Development in Pakistan.
4. Inayatullah, Economic Problems of Pakistan.
5. S.M. Burke, Foreign Policy of Pakistan.
6. Safdar Mahmood, Pakistan: History and Politics.
7. Ayub Khan, Friends not Masters.
8. Rafiq Afzal, Political Parties in Pakistan.
9. Hasan Askari, Military & Politics in Pakistan.
10. Lawrence Ziring, Pakistan in the 20th Century.
11. Stanly worlper, Zulfi Bhutto of Pakistan.
12. Jalal, Ayesha "The Sole Spokesman."
13. "Sovereignty and the Self".
14. Ziring, L. "Ayub Khan Era"
15. Ali, Shaukat "Pakistan-A Religion—Political History".

HISTORY OF EUROPE

PAPER-II

International Relations and Organizations 1945 to 2005 AD

1. **International Organizations:-**
 - United Nations organisation
 - a) Aims, objectives and Principles of U.N.O.
 - b) The work of the U.N.O.
 - c) An estimate of U.N.O.
2. **Post World War II Diplomacy:-**
 - I. Super power relations and the Cold war.
 - II. The Truman doctrine.
 - III. The Marshal plan.
 - IV. Korean war.
 - V. Vietnam war.
 - VI. Middle East crises: Israel, Palestine and Suez.
3. **International Treaties**
 - I. NATO
 - II. WARSAW
 - III. CENTO
 - IV. SEATO
 - V. RCD
 - VI. ARAB LEAGUE
 - VII. OIC
 - VIII. SAARC
4. **The Third World**
 - I. The emergence of China as a world power in international politics.
 - II. Latin America and Southern Africa in world affairs.
 - III. Far East, China and Japan in world affairs.
 - IV. South Asia in world affairs.
5. **The Foreign Policies of the Great Power**
 - I. The nature of the foreign relations among the United States, Soviet Union, Britain, France and China.
 - II. The problems of the Muslim world.
 - III. The 1973 Vietnam cease fire agreements.
 - IV. Russian intervention in Afghanistan.
 - V. Down fall of Soviet Union.
 - VI. Globalization and its impact.
 - VII. War against Iraq and Afghanistan.

Recommended Books:

- 1) Morgenthau, Hans J. , Politics Among Nations, New York: Knopf 1963 (or latest ed.)
- 2) Mclellan, David S., The Cold War in Transition. New York, Macmillan, 1966.

- 3) Macridis, Roy C., Foreign Policy in World politics, Englewood Cliffs, N.J. Printice Hall, 1972.
- 4) Palmer, Norman D. & Perkins, Harward., International Relations London: Stevens, 1963 (or Latest ed.).
- 5) Crowley, D.W. The Background to current affairs, Ferozesons, Lahore.
- 6) Leonard, L.L. International Organization, New York, 1951.
- 7) Northedge, F.S. Descent from power British Foreign policy, London, 1974.
- 8) _____ The Foreign policies of the power, New York: Praceger, 1968.
- 9) John, Spainier, American policy since world War II, New York, 1973.
- 10) Thomson, Jah. The Rise of Modern Asia.

WWW.SU.EDU.PK

**International Relations-II as
Elective Subject at Associate Degree in Arts**

International Relations shall be offered as an elective subject of 200 marks in ADA examinations. It shall be comprised of two papers each of 100 marks. Following are the out-lines/contents of this course along with the core and the suggested books:

Diplomatic History of International Relations (1815-1945)

CONTENTS:

1. Congress of Vienna, 1815.
2. Second French War.
3. Franco-Prussian Wars.
4. Austro-Prussian War.
5. Unification of Italy.
6. Unification of Germany.
7. Emergence of Balance of Power in Europe.
8. The Age of Secret Diplomacy.
9. Russo-Japanese War, 1904.
10. First World War, Causes and Consequences.
11. Treaty of Versailles and the Emergence of League of Nations.
12. Economic Depression of 1930's.
13. Advent of Mussolini and Hitler and Their Impacts on World Politics.
14. New Game of Balance of Power.
15. Beginning of Second World War and its outcome.
16. The United Nations: Nature, Functions and the Future Prospects.

REQUIRED TEXT.

1. Anderson, M.S., The Ascendancy of Europe, 1815-1914. London: Longman, 1972.
2. Carrie, R. Albrecht, A Diplomatic History of Europe: Since the Congress of Vienna. London, Methuen, 1955.
3. Thompson, D., Europe Since Napoleon. (2nd revised ed.) New YORK: Knopf 1962.

FURTHER SUGESTED READINGS:

1. Taylor, A.J.P., The Struggle for Mastery in Europe, 1848-1914. Oxford: Clarendon Press, 1954.
2. Grant, A. J. & Europe in the Nineteen and Twentieth Centuries, 1786-1950. Temperely, H., London: Longman, 1961.
3. Leeds, C.A., European History, 1789-1914. (2nd ed.), Plymouth Macdonald, 1979.
4. Ross, Graham, The Great Powers and Decline of the State System 1914-1940. London: Croom Helm, 1983.
5. Langer, W.L., European Alliances and Alignments, 1871-1914 New York: Prince-Hall, 1950.
6. Little Field, Henry W., History of Europe Since 1815. New York: Praeger, 1963.

ASSOCIATE DEGREE IN ARTS

اسلامیات اختیاری-II

10 نمبر		1- تعارف حدیث (دو میں سے ایک سوال حل کرنا ہے)
20 نمبر	ترجمہ $14 = 2 \times 7$	2- حدیث کا ترجمہ و تشریح (چار میں سے دو حل کریں)
	تشریح $06 = 2 \times 3$	
10 نمبر		3- تعارف فقہ (دو میں سے ایک سوال حل کرنا ہے)
10 نمبر	ترجمہ $07 = 1 \times 7$	4- فقہ کے نصاب میں سے ترجمہ و تشریح (دو میں سے ایک حل کریں۔)
	تشریح $03 = 1 \times 3$	
10 نمبر		5- فقہ کے باب کا خلاصہ (دو میں سے ایک حل کریں۔)
15 نمبر		6- سیرت طیبہ (دو میں سے ایک سوال حل کریں)
15 نمبر		7- تاریخ نبویہ۔ بنو عباس (دو میں سے ایک سوال حل کریں)
10 نمبر		8- سلیبس میں سے معروضی سوال۔
100 نمبر	کل نمبر	

ضمیمہ

(نصاب کی تفصیل)

حدیث شریف۔ فقہ۔ سیرۃ النبی ﷺ و تاریخ اسلام

- 1- تعارف حدیث
حجیت حدیث: (مگرین حدیث کے اعترافات کا مختصر جائزہ)
مخالفت حدیث: عہد نبوی عہد صحابہ کرام اور عہد تابعین۔ (تمام ادوار پر مبنی صرف ایک جامع سوال ہی پوچھا جائے گا)
- 2- تعارف فقہ
مندرجہ ذیل عنوان:
ماخذ شریعت: (کتاب۔ سنت۔ اجماع۔ قیاس) تمام ماخذ پر مبنی صرف ایک جامع سوال ہی پوچھا جائے گا۔
عصر حاضر میں اجتہاد کی ضرورت و اہمیت۔
- 3- مطالعہ حدیث۔
عن ابن عمر لاحسد الا فی الثنتین رجل اتاه الله القرآن فهو يقوم به اناء الليل و اناء النهار و رجل اتاه الله مالا فهو يتفق منه اناء الليل و اناء النهار. (رواہ البخاری و مسلم)
عن انس قال قال رسول الله صلى الله عليه و سلم ثلث من كن فيه و جد حلاوة الايمان ان يكون الله و رسوله احب اليه مما سواهما و ان يحب المرء لا يحبه الا لله و ان يكره ان يعود في الكفر كما يكره ان يذوق في النار. (رواہ البخاری و مسلم)
عن صفوان بن سليم انه قيل لرسول الله صلى الله عليه و سلم ايكون المؤمن جباناً قال نعم فقیل له ايكون المؤمن بخيلاً قال نعم فقیل له ايكون المؤمن كذاباً فكان لا. (رواہ البيهقي في شعب الايمان مرسل)
عن ابي هريره ان رسول الله صلى الله عليه و سلم قال لا يزني الزاني حين يزني و هو مومن و لا يسرق السارق حين يسرق و هو مومن و لا يشرب الخمر حين يشربها و هو مومن و لا ينتهب نهباً يرفع فيها ابصارهم حين ينتهبها و هو مومن و لا يغفل احدكم حين يغفل و هو مومن فأياكم اياكم. (رواہ البخاری و مسلم)
عن عبد الله بن عمر قال رجل يأنى الله من أكيس الناس و احزم الناس قال أكثرهم ذكر للموت أكثرهم استعداد اولئك الاكياس ذهبوا بشرف الدنيا و كرامة الآخرة.
عن عمرو بن عوف قال قال رسول الله صلى الله عليه و سلم فوالله ما لفقرا اخشى عليكم و لكن اخشى عليكم الدنيا كما بسطت على من كان قبلكم

فتنا فسوها كمانتنا فسوها وتهليككم كما هتكم. (رواه البخاري ومسلم).

عن انس ان النبي صلى الله عليه وسلم قال من كانت نيته طلب الآخرة جعل الله غناه في قلبه وجمع له شمله واتته الدنيا وهي راغمة ومن كانت نيته طلب الدنيا جعل الله الفقر بين عينيه وشنت عليه امره ولا ياتيه منها الا ما كتب له. (رواه الترمذي ورواه)

عن ابي هريرة قال قال رسول الله صلى الله عليه وسلم لا تغبطن فاجراً بنعمة فانك لا تدرى ما هو لاق بعد موته ان له عند الله قاتلاً لا يموت يعني النار. عن ابي هريرة قال قال رسول الله صلى الله عليه وسلم اذا نظر احدكم الى من فضل عليه في المان والخلق فليتنظر الي من هو اسفل منه ممن فضل عليه. (رواه البخاري ومسلم)

عن ابي هريرة ان رسول الله صلى الله عليه وسلم قال ثلث منجيات وثلث مهلكات فاما المنجيات فتقوى الله في السر والعلانية والقول بالحق في الرضاء والسخط والتصد في الغناء والفقر واما المهلكات فهوئ متبع شخ مطاع واعجاب المرء بنفسه وهي اشدهن. (رواه البيهقي في شعب الایمان) عن ابن مسعود عن النبي صلى الله عليه وسلم فقال لا تزول قدما ابن آدم يوم القيمة حتى يسال عن خمس عن عمره فيما افناه وعن شبابه فيما ابلاه وعن ماله وعن من اين اكتسبه وفيما اتقاه وماذا عمل فيما علم. (رواه الترمذي)

عن ابي هريرة قال قال رسول الله صلى الله عليه وسلم من ياخذ عني هواء الكلمات فيعمل بهن او يعلم من يعمل بهن؟ قلت انا يا رسول الله فآخذ بيدي فعد خسماً فقال اتق المحارم تكن اعيد الناس وارض بما قسم الله لك تكن اغنى الناس واحسن الي جارك تكن مومنأ واحب للناس ماتحب لنفسك تكن مسلماً ولا تكثر الضحك فان كثرة الضحك تميت القلب. (رواه احمد والترمذي)

عن حذيفة قال قال رسول الله صلى الله عليه وسلم لا تكونوا معة تقولون ان احسن الناس احسنا وان ظلموا ظلمنا ولكن وطنوا انفسكم ان احسن الناس ان تحسنوا وان اساء فلا تظلموا.

عن ابن عمر قال صعد رسول الله صلى الله عليه وسلم المنبر فنادى بصوت رفيع يا معشر من اسلم بلسانه ولم يقضى الايمان الي قلبه لا تؤذوا المسلمين ولا تعيروهم ولا تتبعوا عوراتهم فانه من يتبع عورة اخيه المسلم يتبع الله عورته ومن يتبع الله عورته يفضحه ولو في جوف رحله. (رواه الترمذي)

عن سهل بن سعد قال قال رسول الله صلى الله عليه وسلم من يضمن لي مابين لحبيبه ومابين رجله اضمن له الجنة. (رواه البخاري)

عن ابن عمر قال قال رسول الله صلى الله عليه وسلم لا تكثر الكلام بغير ذكر الله فان كثرة الكلام بغير ذكر الله قسوة للقلب وان ابعث الناس من الله القلب القاسي.

عن سلمان قال قال رسول الله صلى الله عليه وسلم ان ربكم حيي كريم يستحي من عبده اذا رفع يديه ان يردهما صفراً. (رواه الترمذي والبوداوي)

عن عبدالله بن عمر قال نهى رسول الله صلى الله عليه وسلم عن بيع الثمار حتى يبدو صلاحها نهى البائع والمشتري. (رواه البخاري ومسلم)

وفي رواية لمسلم نهى عن بيع النخل حتى تزهر وعن السنبل حتى يبيض ويامن العاهة ونهى البائع والمشتري.

عن ابي هريرة ان رسول الله صلى الله عليه وسلم مر على صبرة طعام فادخل يده فيها فنالت اصابعه بللا فقال ما هذا يا صاحب الطعام؟ فقال اصابته السماء يا رسول الله! قال افلا جعلته فوق الطعام حتى يراه الناس من غش فليس منا. (رواه مسلم)

عن واثلة بن الاسقع قال سمعت رسول الله صلى الله عليه وسلم يقول من باع عيباً ولم يبيته لم يزل في مقت الله ولم تزل الملكة تلعننه. (رواه ابن ماجه)

عن علي قال نهى رسول الله صلى الله عليه وسلم عن بيع المضطر وبيع الغرر وعن بيع التمرة قبل ان تدرك. (رواه البوداوي)

عن ابي سعيد قال قال رسول الله صلى الله عليه وسلم التاجر الصدوق الامين مع النبيين والشهداء. (رواه الترمذي والدارقطني وابن ماجه)

عن ابي هريرة ان رسول الله صلى الله عليه وسلم قال لا تلقوا الركبان لا يبيع لبيع ولا يبيع بعضكم على بيع بعض ولا تتناجشوا ولا يبيع حاضر لباد ولا تصروا الابل والغنم فمنايتا عها بعد ذلك فهو بخير النظرين بعد ان يحلبها ان رضيها امسكها وان سخطها ردها كو وصاعاً من ثمر. (رواه البخاري ومسلم)

عن عمر عن النبي صلى الله عليه وسلم قال الجالب مرزوق والمحتر ملعون. (ابن ماجه)

عن ابي هريرة ان الله عزوجل يقول انا ثالث الشريكين مالم يخن احدهما صاحبه فاذا خانه خرجت من بينهم. (البوداوي)

عن عبدالله بن عمر قال قال رسول الله صلى الله عليه وسلم من اخذ من الارض شيئاً بغير حقه خسف به يوم القيامة الى سبع ارضين.

عن ابي هريرة قال قال رسول الله صلى الله عليه وسلم مامن مسلم يغرس غرساً او يزرع زرعاً فيأكل منه طيراً او انسان او بهيمة الا كان له به صدقة. (رواه البخاري ومسلم)

عن ابي سعيد قال قال رسول الله صلى الله عليه وسلم افضل الجهاد من قال كلمة حق عند سلطان جابر. (رواه الترمذي والبوداوي وابن ماجه)

عن ابن عمر قال قال رسول الله صلى الله عليه وسلم السمع والطاعة على المرء المسلم فيما احب وكره مالم يومر بمعصية فاذا امر بمعصية فلا سمع ولا طاعة.

عن خريم ابن قاتك قال صلى رسول الله صلى الله عليه وسلم صلوة الصبح فلما انصرف قام قائماً فقال عدلت شهادة الزور بالاشراك بالله ثلاث مرات ثم قرا فاجتنبوا الرجس من الاوثان واجتنبوا قول الزور حنفاء لله غير مشركين به.

وعن ابي هريرة قال: قال رسول الله صلى الله عليه وسلم: للمومن على المومن سنت خصال: يعوده اذا مرض، ويشهده اذا مات ويجيبه اذا دعاه، ويسلم عليه اذا لقاه ويشتمه اذا عطس وينصح له اذا عاب او شهد.

وعنه قال: قال رسول الله صلى الله عليه وسلم: لا تدخلون الجنة حتى تؤمنوا ولا تؤمنوا حتى تحابوا، اولا ادلكم على شيء اذا فعلتموه تحاببتم، افشروا السلام بينكم.

وعن عبدالله بن مسعود قال: قال رسول الله صلى الله عليه وسلم "عليكم بالصدق فان الصدق يهدي الى البر، وان البر يهدي الى الجنة وما يزال الرجل يصدق ويتحرى الصدق حتى يكتب عند الله صديقاً واياكم والكذب فان الكذب يهدي الى الفجور، وان الفجور يهدي الى النار، وما يزال الرجل يكذب ويتحرى الكذب حتى

یکتب عبداللہ کذاباً و فی روایۃ المسلم قال: ان الصدق بروان البریہدی الی الجنة و ان الکذب فجور و ان الفجور یهدی الی النار۔
و عن ام کلثوم قالت: قال رسول اللہ صلی اللہ علیہ وسلم لیس الکذاب الذی یصلح بین الناس و یقول خیراً و ینمی خیراً:
و عن المغیرة قال رسول اللہ صلی اللہ علیہ وسلم: ان اللہ حرم علیکم عنق الامہات و واد البنات و منعاً و ہات و کرہ لکم قیل و قال و کثرة السؤال و اضااعة المال۔

عن النعمان بن بشیر قال: قال رسول اللہ صلی اللہ علیہ وسلم: تری السومنین فی تراحمهم و توادهم و تعاطفهم کمثل الجسد اذا اشتکی عضوا تداعی له سائر الجسد بالسهر و الحمی۔

و عن ابی ہریرہ قال: قال رسول اللہ صلی اللہ علیہ وسلم: ایاکم و الظن فان الظن اکذب الحدیث و لا تحسسوا و لا تجسسوا و لا تناحشوا و لا تحاسدوا و لا تباغضوا و لا تدابروا و کونوا عباد اللہ اخوانا۔

و عن عبداللہ بن عمر قال: قال رسول اللہ صلی اللہ علیہ وسلم: "ان من احبکم الی احسنکم اخلاقاً۔
عن ابی ہریرہ قال: قال رسول اللہ صلی اللہ علیہ وسلم: لیس الشدید بالصرعة انما الشدید الذی یملک نفسه عند الغضب۔

و عن ابی ہریرہ قال: قال رسول اللہ صلی اللہ علیہ وسلم: یقول اللہ تعالیٰ: الکبریا رذائی و العظمة اذاری: فمن ناز عنی و احدمنها اخلتہ النار۔"

عن ابی ہریرہ ان رسول اللہ صلی اللہ علیہ وسلم قال: اتدرون ما المفلس؟ قالوا: المفلس فینا من لادرمہ لہ و لا متاع لہ فقال: ان المفلس من امتی من یتاتی یوم القیامۃ بصلۃ و صیام و زکاة و یتاتی قد شتم هذا و قذف هذا و اکل مال هذا و سفک دم هذا و ضرب هذا فیعطی هذا من حسناتہ و هذا من حسناتہ فان فنیت حسناتہ قبل ان یتضی ما علیہ اخذ من خطایہم فطرحت علیہ ثم طرح فی الناس"

و عن انس قال: قال رسول اللہ صلی اللہ علیہ وسلم "من احب ان یبسط لہ فی رزقہ اور ینسالہ فی اثرہ فلیصل رحمہ"
و عن عمر قال: قال رسول اللہ صلی اللہ علیہ وسلم "لاتطرونی کما اطرت النصارى بن مریم فانما انا عبده فقولوا عبداللہ و رسولہ۔

عن ابی سعید قال قال رسول اللہ صلی اللہ علیہ وسلم ایما مسلم کسا مسلماً ثوباً علی عری کساه اللہ من خضر الجنة و ایما مسلم اطعم مسلماً علی جوع اطعمہ اللہ من ثمار الجنة و ایما مسلم سقا مسلماً علی ظمأ سقاه اللہ من الریحق المختوم۔ (داؤد۔۔۔ ترمذی)

عن ابن عمر ان رسول اللہ صلی اللہ علیہ وسلم قال المسلم اخو المسلم لا یظلمہ و لا یسلمہ و من کان فی حاجۃ اخیه کان اللہ فی حاجتہ و من فرج عن مسلم کربۃ فرج اللہ عنہ کربۃ من کرب یتاتی یوم القیامۃ و من ستر مسلماً سترہ اللہ یوماً القیامۃ۔ (بخاری۔ مسلم)

عن ابی ہریرہ عن النبی ﷺ قال ما تقصت صدقة من مال و ما زاد اللہ عبداً یعفو الا عزا و ما تواضع احد للہ الا رفعہ اللہ۔
4۔ مطالعہ فقہ

قدوری کی کتاب اصولہ میں سے متن کا ترجمہ و تخریح اور باب کے خلاصہ پر مبنی سوالات پوچھے جائیں گے۔
قدوری کی کتاب اصولہ میں سے مندرجہ ذیل ابواب خارج کر دیئے گئے ہیں۔

باب صلوٰۃ الکسوف و الخسوف۔ باب صلوٰۃ الاستسقاء۔ صلوٰۃ فی الکعبہ۔ باب قیام شہر رمضان۔
5۔ سیرت النبی ﷺ و تاریخ اسلام

(الف) نبی اکرم ﷺ کے خصائص و امتیازات:
(ب) مطالعہ سیرۃ النبی ﷺ کی اہمیت۔ دعوت دین میں نبی کریم ﷺ کا طریق کار اور سماجی جمیلہ۔ اس عالم سیرت طیبہ کی روشنی میں۔

تاریخ اسلام
1۔ مسلمانوں کے عروج کے اسباب و اثرات
مسلمانوں کے زوال کے اسباب و اثرات

2۔ دور بروز عباس اور ہشامی مسلمانوں کے رفاہی و خلائی کارنامے۔
طب طیبیات: کیا ریاضی تقلیات میں مسلمانوں کے کارنامے ان تمام شعبوں پر مبنی صرف ایک جامع سوال ہی پوچھا جائے گا۔ الگ الگ شعبہ جات نہیں پوچھے جائیں گے۔

ASSOCIATE DEGREE IN ARTS
صحافت اختیاری-II (Journalism Elective-II)

100 نمبر

صحافت کا ماضی اور حال

-1

طباعت و اشاعت

(الف) دنیا میں طباعت و اشاعت کی مختصر تاریخ

(ب) خبر نویسی کا آغاز اور ارتقاء

(ج) امریکہ و برطانیہ کے ابتدائی اخبارات کا جائزہ

(د) برصغیر میں طباعت اور خبر نویسی کا آغاز

-2

برصغیر کی صحافت۔ آزادی سے قبل

(الف) برصغیر کے ابتدائی انگریزی اور اردو اخبارات

(ب) ۱۸۵۷ء کی جنگ آزادی میں صحافت کا کردار

(ج) سر سید احمد خاں کی صحافت

(د) محمد علی جوہر کی صحافت

(س) نظرف علی خاں کی صحافت

(ش) تحریک پاکستان میں مسلم اخبارات کا کردار

-3

صحافت پاکستان میں

(الف) پاکستانی صحافت کے فنی ارتقاء کا جائزہ

(ب) نمایاں قومی روزنامے۔۔۔۔۔ فنی اور معنوی معیار کا جائزہ

(ج) نمایاں قومی ہفت روزے۔۔۔۔۔ فنی اور معنوی معیار کا جائزہ

(د) نمایاں قومی ماہنامے۔ ڈائجسٹ اور تخصصی یا فنی رسائل کا جائزہ

(ر) پاکستان اخبارات کا ترقی یافتہ ممالک کے اخبارات سے موازنہ

-4

آزادی صحافت۔ قوانین اور حکومتی رویہ

(الف) آزادی صحافت کا تصور اور اہمیت

(ب) سیفٹی ایکٹ اور ڈیفنس آف پاکستان روٹرز کے نمایاں پہلو

(ج) پریس اینڈ پبلی کیشنز آرڈیننس ۱۹۶۳ء کے نمایاں پہلو

(د) رجسٹریشن آف پریسنگ پریس اینڈ پبلی کیشنز آرڈیننس ۱۹۸۸ء

(ر) صحافت پر مختلف اقسام کے دباؤ

۱۔ اشتہارات

۲۔ سیاسی و مذہبی گروہ

۳۔ شعبہ ہائے تعلقات عامہ

۴۔ نیوز پرنٹ اور دوسری سہولتوں کا فقدان

(س) حکومت اور صحافت۔۔۔۔۔ تعلقات اور کشمکش

-5

صحافت کیلئے ضابطہ اخلاق کی ضرورت

(الف) ضابطہ اخلاق کی ضرورت اور اہمیت

(ب) پاکستان میں ضابطہ اخلاق کی تیاری اور اس پر عملدرآمد کی کوششیں

(ج) ہماری مطبوعہ اور الیکٹرانک صحافت کا موجودہ رویہ اور صحافتی اخلاق

-6

مطبوعہ صحافت اور الیکٹرانک صحافت کا موازنہ

(الف) اخبارات و رسائل، ریڈیو اور ٹیلی ویژن کی بطور ذریعہ ابلاغ عام اہمیت کا تقابلی جائزہ

(ب) مقابلہ و مسابقت اور ان میں ہونے والی ترقی و تہذیبی

(ج) قومی ضرورتیں اور تقاضے اور اخبارات و رسائل، ریڈیو اور ٹیلی ویژن کا کردار

تجویز کردہ کتب:

- ۱۔ صحافت برصغیر پاک و ہند میں، ڈاکٹر عبدالسلام خورشید
- ۲۔ اخبار نویسی کی مختصر ترین تاریخ، ایس ایم ہاز
- ۳۔ تاریخ صحافت، افتخار کھوکھر

LIBRARY SCIENCE

ASSOCIATE DEGREE IN ARTS (ELECTIVE COURSE)

PAPER-II

- 1- Acquisition of Library Material**
 - Meaning and definition
 - Principals of book selection
 - Book selection tools
 - Accessioning library material and accession register
- 2- Cataloguing**
 - Meaning and definition of cataloguing
 - Scope and purpose of cataloguing
 - Kinds and forms of cataloguing
 - Introduction to AACR-2
 - Elements of Main Entry card and added entries
 - Introduction to Sears List of Subject Headings
- 3- Reference Sources**
 - (a)- Printed Reference Sources
 - Dictionaries –Encyclopedia –Bibliographies
 - Directories –Periodical – Geographical Sources
 - (b)- Electronic Sources
 - Databases – CDs, Online Source – Website – Internet – E-mail
- 4- Reference Services**
 - Supervision – Instruction – Guidance- Information storage and retrieval – Bibliography - Evaluation
- 5- Computer in Libraries**
 - Introduction to Computers
 - Components of Computer
 - Hardware and Software
 - Input and Output Devices
 - Use of Computer in Libraries
- 6- Cataloguing Practical (worth 20 %)**

ASSOCIATE DEGREE IN SCIENCE
A-Course of Mathematics
Paper-II

NOTE: Each section having four questions, please attempt two questions from each section.

SECTION-I (4/12: 17,17,17,17)

Antiderivatives and indefinite integrals. Methods of integration. Definite integral as limit of sum. Fundamental theorem. Properties. Improper integrals. Reduction formulas. Double and triple integral (simple cases). Area between curves. Length of arc. Intrinsic equations. Asymptotes. Extrema and its application. Singular points. Curvature. Evolute and envelopes. Volume and surfaces of revolution.

SECTION-II (4/12: 16,16,16,16)

Definition and examples of metric spaces. Open and closed balls and sets. Neighborhoods. Limit points. Interior, exterior and boundary sets. Closure of a set. Complete metric spaces. Definition and examples of topological spaces. Basic properties. Neighborhoods. Limit points. Interior, exterior and boundary sets. Closure of a set. Divisibility. Euclid theorem. Greatest divisor. Least common multiple. Prime factorization theorem. Introduction to elementary logic. Predicate calculus. Methods of proofs.

SECTION-III (4/12: 17,17,17,17)

Definition and examples of a group. Order of an element of a group. Subgroup. Cyclic and permutation groups. Lagrange's theorem. Rings and fields. Algebra of matrices. Co-factors, minors, adjoint and inverse of a matrix. Elementary row and column operations. Echelon form and rank of matrix. Solution of the system of linear equations (Homogeneous and non-homogeneous) by use of matrices. Net work flow problems. Determinants with properties.

Recommended Books

1. Calculus by H. Anton. John Wiley and Sons New York. (Latest Edition)
2. Calculus By C.H Edwards and D.E. Penney. Prentice Hall. Inc. (Latest Edition)
3. Calculus By S.I. Grossman. Academic Press Inc (London) Ltd. (Latest Edition)
4. Calculus and Analytic Geometry by S.M. Yousaf. Illmi Kitab Khana. Urdu Bazar Lahore 1998
5. Calculus and analytic geometry by G.B Thomas and R.I. Finney, Addison-Wesley Publishing Company. Lahore. (Latest Edition)
6. Elementary Linear Algebra by C.H. Edwards. Jr and Davide penney. Prentice Hall international Inc. (1988)
7. Mathematical Techniques by K. H. Dar. Irfan-ul-Haq and M.A. Jajja. The Carvan Book House. Kachehry Road Lahore. 9th Edition 1997
8. Mathematics Methods by S.M. Yousaf. Illmi Kitab Khana. Urdu Bazar Lahore. (2000)
9. Set Theory and Logic by Stoll, Robert R.S. Chand & Co. New Delhi
10. Number Theory by Dr. Manzoor Hussain. The Carvan Book House. Kachehry Road, Lahore.
11. Elementary Linear Algebra (sixth edition) by Howard Anton And Chris Rorres. John Willey & Sons. INC. 10th Edition 2000

ASSOCIATE DEGREE IN SCIENCE
B-Course of Mathematics
Paper -II

NOTE: Each section having four questions, please attempt two questions from each section.

SECTION-I (4/12: 17,17,17,17)

Basic concepts of differential equations. Classification and formation of DEs. Various methods of solutions of first order ODE (linear and non-linear). The Bernoulli's, Ricatti and Clairaut's equations. Singular solutions. Orthogonal trajectories. Application of first order ODE in problems of decay and growth, population dynamics, logistic equations. Linear DE of higher order (homogeneous and non-homogeneous). Solution by: D-operator and undetermined co-efficients Methods. Reduction of order and variation of parameters methods for 2nd order linear DE. Cauchy-Euler equation. Power series solution about an arbitrary point.

SECTION-II (4/12: 16,16,16,16)

Laplace Transformation, solution of ODEs. Error analysis. Solution of non-linear (algebraic and transcendental) equation in one variable using bisection method, false position method, Newton - Raphson method and fixed point method. Difference operators. Interpolation (Newton's and Lagrange's methods). Numerical differentiation (at a point of the data). Numerical integration (rectangular, trapezoidal and 1/3 Simpson's rules).

SECTION-III (4/12: 17,17,17,17)

Co-ordinates in three dimension. Rectangular, cylindrical and spherical co-ordinates. Equations of plane, straight line, sphere, cylinder, cone, ellipsoid, hyperboloid and paraboloid. Longitude and latitudes. Spherical triangle and direction of Qibla. Inner Product Space, Eigen values and Eigen vectors, Diagonalization of matrices.

Recommended Books.

1. Theory of Differential Equations of Dennis G.Zill. Books Thomson Learning Academic Resource Center. USA. 8th Edition 2013
2. Mathematical Techniques by K.H. Dar, Irfan-ul-Haq and M.A. Jajja. The Carvan Books House. Kachehry Road, Lahore. 9th Edition 1997
3. Mathematics Methods by S.M. Yousaf. Illmi Kitab Khana. Urdu Bazar, Lahore. 1998
4. Numerical Analysis by R.L. Burden and J.D. Faires. PES-Kent Publishing Company. Bostan. USA 9th Edition 2011
5. Operations Research by H.A. Taha. Prentice-hall Inc. Englewood. Cliffs USA. 4th Edition 2011
6. Mathematical Statistics. By Dr. J.E.Freund. Prentice-hall Inc. Englewood. Cliffs USA. 7th Edition 2007
7. Vector and Tensor Methods, by Chorlton, Ellis Horwood Publishers. 1976
8. Elementary Vector Analysis. By Dr. Munawar Hussain. S.M. Hafeez. M.A. Saeed and Ch. Bashir Ahmed. The Caravan Book House, Kachhry Road, Lahore.
9. A Text Book by Dynamics by Chorlton, Van Nostrand Company Ltd. London. 1967
10. Mechanics by O.K. Ghori. West Pakistan Publishing Company, Lahore. 1971

ASSOCIATE DEGREE IN ARTS / SCIENCE

General Mathematics

Paper-II

NOTE: Each section having four questions, please attempt two questions from each section.

SECTION-I (4/12: 17,17,17,17)

Vectors in three-dimensions. Scalar and vector products with applications. Scalar and vector triple products. Differentiation and integration of vector functions. Gradient, divergence and curl. Sequences. Bounded Sequences. Convergence and divergence of sequences. n th-term test, comparison test, ratio test, root test and integral test for convergence and divergence of infinite series. Convergence and divergence of alternating series. Complex numbers and their properties. De Moivre's theorem and its applications. Circular, logarithmic and hyperbolic functions. Separation into real and imaginary parts.

SECTION-II (4/12: 16,16,16,16)

Algebra of matrices. Determinants with properties. Co-factors, minors, adjoint and inverse of a matrix. Elementary row and column operations. Echelon form and rank of matrix. Solution of the system of linear equations (Homogeneous and non-homogeneous) by use of matrices. Network flow problems. Vector spaces and sub spaces. Linearly dependent and independent vectors. Bases and dimension. Linear transformation. Matrix of linear transformation. (relevant theorems of bases and linear transformation with out proofs)

SECTION-III (4/12: 17,17,17,17)

Basic concepts of differential equations. Classification and formation of DEs. Various methods of solutions of first order ODE (linear and non-linear). The Bernoulli's, Riccati and Clairaut's equations. Singular solutions. Orthogonal trajectories. Application of first order ODE in problems of decay and growth, population dynamics, logistic equations. Linear DE of higher order (homogeneous and non-homogeneous). Solution by: D-operator and undetermined co-efficients Methods. Reduction of order and variation of parameters methods for 2nd order linear DE. Cauchy-Euler equation.

Recommended Books

1. Calculus by H. Anton. John Wiley and Sons New York. (Latest Edition)
2. Calculus By C.H Edwards and D.E. Penney. Prentice Hall. Inc. (Latest Edition)
3. Calculus By S.I. Grossman. Academic Press Inc (London) Ltd. (Latest Edition)
4. Calculus and Analytic Geometry by S.M. Yousaf. Illmi Kitab Khana. Urdu Bazar Lahore 1998
5. Calculus and analytic geometry by G.B Thomas and R.I. Finney., Addison-Wesley Publishing Company. (Latest Edition)
6. Elementary Linear Algebra by C.H. Edwards. Jr and Davide penney. Prentice Hall international Inc. 1988
7. Mathematical Techniques by K. H. Dar. Irfan-ul-Haq and M.A. Jajja. The Carvan Book House. Kachehry Road Lahore. 9th Edition 1997
8. Mathematics Methods by S.M. Yousaf. Illmi Kitab Khana. Urdu Bazar Lahore. 2000
9. Set Theory and Logic by Stoll. Robert R.S chand & Co. New Delhi.
10. Number Theory by Dr. Manzoor Hussai. The Carvan Book House, Kachachry, Lahore
11. Elementary Linear Algebra by Howard Anton and Chris Rorres John Wiley & Sons Inc 10th Edition 2010

ASSOCIATE DEGREE IN ARTS

PERISAN ELECTIVE-II

Appendix A

(Outlines of Tests)

1. Translation of the passage from the text into Urdu (Prose). (20)
2. Urdu translation and explanation of the passage from the text (Poetry). (20)
3. Critical and biographical questions on any one of the following. (20)
Ghazali, Nizam-ul-Mulk Toosi, Rumi, Hafiz & Ghalib.
4. Definition and examples of the following Rhetorics. (10)
مرامۃ الطیر، تضاد، تلخیص، حسن تعلیل
5. Translation from Urdu to Persian. (10)
6. Objective questions relating to the syllabus. (20)

Note: Division of marks for B.A. examination 2008 and afterward will be as under:

Subjective = 60 Objective = 40 Total = 100

Appendix-B

(Syllabi and Courses of Reading)

- 1- حضرت عبداللہ انصاری انتخاب از رسالہ الہی نامہ
"الہی ظاہر داریم۔۔۔۔۔ من گمان"
- 2- امام غزالی انتخاب از کیسای سعادت
رکن دوم اصل اول (آداب طعام خوردن)
"یدان کہ راه عبادت ہم از ہملہ عبادت است۔۔۔۔۔ کفر ان نعمت کردہ باشد"
- 3- جلال الدین دوانی انتخاب از اخلاق جلالی
آداب سخن گفتن۔ "باید کہ بسیار گوید۔۔۔۔۔ کی پیش گو۔"
- 4- نظام الملک طوسی انتخاب از سیاست نامہ
"اندر پیش و پیش کردن و بر رسیدن کار دین و شریعت و مانند این"
- 1- بر پادشاہ واجب است در کار دین۔۔۔۔۔ در این معنی حکایات بسیار است این قدر یاد کردہ آمد و کفایت است
- 2- حکایت امیرالمؤمنین عمر "زید بن اسلم۔۔۔۔۔ خدایت پیام ز او چنانکہ ما را از تہہ کردی۔"
- 5- بختی بیوی افسانہ "طرح کم خرج"
- 1- ابوسعید الخدری انتخاب از رباعیات
i- باز آ باز آ ہر آنچه ہستی باز آ
ii- وصل تو کجا دین مجور کجا
iii- عصیان خلائق ارچہ صراحت است
iv- با علم گزعل بر ابر گردو
v- گر قرب خدا می طلبی دلجو باش
- 2- مولانا جلال دین رومی انتخاب از مشوی مستوی مولوی
دختر اول شعر بشو ازنی چون حکایت می کند۔۔۔۔۔ قصہ حای عشق مجنون می کند
شعر نمبر 18، 20، 23، 27، 33 یعنی کوہ در قفس آمد و جالاک شد

"کثر ماندن دهان آن شخص که نام پختن را بدستش خورد"
 "آن دهن کثر کرد۔۔۔۔۔ رحم خواهی بر ضعیفان رحم آر"

انتخاب از غزلیات

- غزل
 3- ہمای رخ کہ باغ و گلستانم آرزوست کے اشعار نمبر 1'4'11'9'11'14'20'24'
 شعرالدین عراقی انتخاب از غزلیات
 i- یک لحظہ دیدن رخ جانا تم آرزوست
 ii- تختین بادہ کا عمر جام کر دند۔
 iii- زرد ویدہ خون نشا تم زحمت شب جدائی۔
 4- افضل الدین خاقانی انتخاب از قصاید
 قصیدہ ایوان مدائن کے اشعار نمبر 1'2'1'8'11'14'16'19'20'24'34'36'37'40'41'
 5- حافظ شیرازی انتخاب از غزلیات
 i- بیا کہ قصر ال بخت مست بنیاد است
 ii- دی با تم بسر بردن جهان بکسرتی از دو
 iii- یوسف گم گشتہ باز آید بکنعان غم خور
 iv- این چه شور است کہ در دو قمری شیم
 v- ای پادشہ خربان دادا غم تنجانی
 6- غالب دہلوی انتخاب از غزلیات
 i- جنون مجمل بصرای تیر مانده است اشب
 ii- بوادنی کہ در آن خضر را عصا سخت است
 iii- بایزدی ہر آئینہ پرہیز گشت اند
 iv- بیا و جوش تنای دیدم بنگر
 v- بیا کہ قاعدہ آسان بگردانم (اس غزل کے پہلے پانچ اور آخری دو شعر شامل ہیں)
 7- ملک اشعرا بہار انتخاب از غزلیات بہار
 i- آخرا از جو تو عالم را خیر خواہیم کرد
 ii- در طواف شمع گفت این سخن پر و دانی
 مجوزہ کتب
 1- سوانح مولانا روم شیلی نعمانی
 2- ادب نامہ ایران از استیول بیگ بدشانی
 3- حافظ شیرین سخن و کٹر معین
 4- جدید ایرانی ادب از ڈاکٹر ظہور الدین احمد
 5- Ghalib by Dr. Arif Shah C. Syid Gillani
 6- تاریخ ادبیات ایران و کٹر رضا زادہ شفق
 7- شعر العجم از شیلی نعمانی
 8- الفرائی از شیلی نعمانی
 9- حدائق البلاغت از مولوی نصیر الدین
 10- آموزگار فارسی و کٹر حضور سلیم
 11- ارستان ایران از ڈاکٹر وحید مرزا
 12- غالب کی فارسی شاعری مرزا منور۔
 13- نمونہ سازی دلا ویز و آموزندہ فارسی از ڈاکٹر محمود دیرسیاتی
 14- گنج سخن فارسی حصہ دوم طبعہ فیوٹوٹیسٹ مین بازار سیٹلاحت ٹاؤن سرگودھا۔

**ASSOCIATE DEGREE IN ARTS
PHILOSOPHY (ELECTIVE)-II**

**Appendix 'A'
(Outlines of Tests)**

Option (i) Ethics:	OR	Marks 100
Option (ii) Muslim Philosophy:		Marks 100

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper 'B': Option (i) Ethics:

- (i) Problem and scope of ethics, Relation of ethics to Psychology, Sociology, Logic, Aesthetics and religion.
- (ii) Evolution of conduct and the growth of moral judgment, General comparison of customary and reflective morality.
- (iii) Psychological basis of conduct, Desire, wish, will and character. The nature of moral judgment. The subject and object of moral judgment.
- (iv) A critical analysis of the theories of moral standard:
 - a) Hedosism, Bentham, Mill and Sidgwick.
 - b) Standard as Law; Butler, Shaftesbury Hutcheson and Kant.
 - c) Perfectionism: Spenecer, Hegel, T.H. Greem and Iqbal.
 - d) The standard as Value: intrinsic and extrinsic values.

Commensurability of values: Rashdall, Moore and Ross

Applied Ethics: duties and virtues, casuistry, moral freedom, moral progress, crime and punishment.
The significance of different theories for practice.

Books Recommended:

- | | |
|--------------------|-------------------------|
| 1. LilliS, W. | Introduction to Ethics. |
| 2. Mackenzie, J.S. | Manual of Ethics. |
| 3. Qadir, C.A. | ✻✻✻ |
| 4. Dar, B.A | Quranic Ethics. |

OR

Paper 'B': Option (ii) Muslim Philosophy:

1. Origin and Nature of Sufism. Character of Mystics Experience.
2. Development of Muslim theology: Mutazilism and Asharism.
3. Muslim Philosophers: Al-Kindi, Al-Farabi, Ibn Sina, Al-Ghazali, Ibn Bajjah, Ibn Tufail, Ibn Rushd and Ibn Khaldun.

Books Recommended:

- | | |
|--|-------------------------------|
| 1. Shiekh, M.S. | Studies in Muslim Philosophy. |
| 2. Abdul Khaliq & Shaidace, Prof. Yusuf. | ✻✻✻ |

ASSOCIATE DEGREE IN SCIENCE

Physics-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	(Written)	75 Marks
Section-I:	Electricity and Magnetism (4 Q)	
Section II:	Modern Physics, Atomic and Nuclear Physics (3 Q)	
Section III:	Electronics (3 Q)	
Paper-B:	Electricity and Magnetism, Electronics, Modern Physics, and Nuclear Physics (Practical)	25 Marks

Note:

"Out of the Whole Syllabus (for a paper) there will be 10 questions as usual and the candidate will have to attempt 5 out of 10 questions. However;

There will be three Sections. Section I will be of four questions while remaining two sections will have three questions each. The candidate will have to attempt five (5) questions selecting not more than two (2) questions from each section.

Furthermore there will be 2 to 3 parts of question in each Section. One of the parts will be either numerical or a question related to the Physical significance of the topic (conceptual question)."

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Written (Time: 3 Hours) 75 Marks

Note: Attempt five (5) questions selecting not more than two (2) questions from each section.

Sr. No.	Section	Subject
1	Section-1	Electricity and Magnetism
2	Section-1I	Modern Physics, Atomic and Nuclear Physics
3	Section-1II	Electronics

EELCTROSTATICS	
TOPIC	SCOPE
Electric charge: Conductors and insulators	Review of previous concepts, Coulomb's law for point charges.
Vector form of coulomb's Law	
Electric Field	Field due to point charges; due to several point charges, electric dipole.
Electric field of continuous charge distribution	For example, ring of charge, disc of charge, infinite line
	of charge.
Point charge in an electric field	
Dipole in an electric field	Torque and energy of a dipole in uniform field.
Gauss's Law	Electric flux, Gauss's law (integral and different form)
Application of Gauss's law (integral form)	Charged isolated conductors, conductor with a cavity, field near a charged conducting sheet, field of infinite line of charge, field of infinite sheet of charge, field of spherical shell and field of spherical charge distribution.
Suggested level	Ch: 26& 27 of H.R.K (Vol-2, Ed. 5 th)
EELCTRIC POTENTIAL	SCOPE
TOPIC	
Electric Potential	Electric potential energy
	Potential due to point charge. Potential due to collection of point charges. Potential due to dipole. Electric potential of continuous charge distribution.
Calculating the potential from the field and vice versa	Field as the gradient or derivative of potential.
	Potential and field inside and outside an isolated conductor. Equipotential surfaces.
Suggested level	Ch: 28 of H.R.K (Vol-2, Ed. 5 th)
CAPACITORS AND DIELECTRICS	SCOPE
TOPIC	
Capacitors and dielectrics	Capacitance, calculate the electric field in capacitors of various shapes (including atomic view)
	Application of Gauss's law to capacitor with dielectrics and Gauss's Law for dielectrics.
	Ch: 30 of H.R.K V2 (E5)
ELECTRIC CURRENT & THE ELECTRICAL PROPERTIES OF MATERIALS	
TOPIC	SCOPE
Electric current	Current density and drift speed, resistance, resistivity, conductivity (microscopic view of resistivity).
Ohm's law	Basic definition, analogy between current and heat

	flow, and microscopic view of Ohm's law.
Energy transfers in the electric circuit	
Semiconductors and superconductors	Descriptive (giving basic idea).
Suggested level	Ch; 29 of H.R.K (Vol-2, Ed. 5 th)
DC CIRCUIT	
TOPIC	SCOPE
Calculating the current in a single loop, multiple loops and voltages at various elements of a loop	Use of Kirchoff's voltage and current laws.
RC circuit	Growth and decay of current in an RC circuit. Analytical treatment
Suggested level	Ch; 31 of H.R.K (Vol-2, Ed. 5 th)
MAGNETIC FIELD EFFECTS	
TOPIC	SCOPE
Magnetic field (B)	Basic idea
Magnetic force on a charged particle	Recall the previous results.
Magnetic force on a current carrying wire	
Torque on a current loop	Discuss mathematical treatment
Magnetic dipole	Discuss quantitatively
	Ch: 32 of H.R.K (Vol-2, Ed. 5 th)
AMPERE'S LAW	
TOPIC	SCOPE
Bio-Savart Law	Analytical treatment and applications to a current loop, force on two parallel current carrying conductors.
Amper's Law	Integral and differential forms, application to solenoids and toroids (integral form)
Suggested level	Ch: 33 of H.R.K (Vol-2, Ed. 5 th)
FARADAY'S LAW OF ELECTROMAGNETIC INDUCTION	
TOPIC	SCOPE
Faraday's law	Magnetic flux, consequences of Faraday's law
Lenz law	Discussion, Eddy current etc.
Motional E.M.F	Quantitative analysis
Suggested level	Ch; 34 of H.R.K (Vol-2, Ed. 5 th)
MAGNETIC PROPERTIES OF MATTER	
TOPIC	SCOPE
Magnetic dipole (μ)	Energy & torque of magnetic dipole in field
Gauss law for magnetism	Discussion and developing concepts of conservation of magnetic flux and mono poles. Differential form of Gauss' law.
Origin of atomic and nuclear magnetization	Definition and relationship of M, B and μ
Magnetic Materials	Paramagnetism, diamagnetism and ferromagnetism

	Discussion, hysteresis in ferromagnetic materials Ch; 35 of H.R.K (Vol-2, Ed. 5 th)
Suggested level;	
INDUCTANCE	
TOPIC	SCOPE
Generating and electromagnetic wave	
Travelling waves and Maxwell's equations	Analytical treatment, obtaining differential form, Maxwell's equations, obtaining the velocity of light from Maxwell's equations.
Energy transport and the Poynting vector	Analytical treatment and discussion of physical concepts
Suggested level	Ch: 38 of H.R.K (Vol-2, Ed. 5 th)
Section-I:	
Modern Physics, Atomics and Nuclear Physics	
MODERN PHYSICS	
QUANTUM PHYSICS	
TOPIC	SCOPE
Thermal Radiations (Black Body Radition)	Stefan Boltzmann, Wien and Plank's law (Consequences)
The quantization of Energy	Quantum Numbers, correspondence principle.
The Photoelectric effect.	Explanation of Photoelectric effect.
Einsten's photon theory	Discussion
The Compton effect	Analytical treatment
Line spectra	Quantitative discussion, explanation using quantum theory.
Suggested level	Ch; 49 of H.R.K (Vol-2, Ed. 5 th)
WAVE NATURE OF MATTER	
TOPIC	SCOPE
Wave behavior of particles	de Broglie hypothesis
Testing de Broglie's hypothesis	Davission-Germer Experiment and explanation.
Waves, waves packets and particles	Localizing a wave in space and time.
Heisenberg's uncertainty principle (HUP)	H.U.P for momentum-position and energy time, H.U.P applied to single slit diffraction.
Wave function	Definition, relation to probability of particle.
Schrodinger Equation	To be presented without derivation (and application)
	To specific cases e.g., step potentials, and free particle, Barrier tunneling (basic idea).
STATES AND ENERGY LEVELS	

TOPIC	SCOPE
Trapped Particles and probability densities.	Particles in a well, probability density using wave function of states. Discussion of particle in a well. Barrier tunneling
The correspondence principles	Discussion
Dual nature of matter (waves and particles)	Discussion.
Suggested level	Ch: 50 of H.R.K (Vol-2, Ed. 5 th)
ATOMIC AND NUCLEAR PHYSICS	
ATOMIC STRUCTURE OF HYDROGEN	
TOPIC	SCOPE
Bohr's theory	Derivation and quantitative discussion; Franck Hertz experiment. Energy levels of electrons.
	Atomic Spectrum
Angular momentum of electrons.	Vector atomic model, orbital angular momentum, space quantization. Orbital angular momentum & magnetism, Bohr's magneton.
Electron spin	Dipole in no uniform field, Stern-Gerlach experiment, discussion of experimental results.
X-Ray spectrum	Continuous and discrete spectrum (explanation)
X-Ray & atomic number	Mosley's Law
Development of periodic table	Pauli exclusion principle and its use in developing the periodic table.
Laser	Definition, basic concepts of working of He-Ne laser.
Suggested Level	Ch: 51 of H.R.K (Vol-2, Ed. 5 th)
NUCLEAR PHYSICS	
TOPIC	SCOPE
Discovering the nucleus	Review, Rutherford's experiment and interpretation
Some nuclear properties	Nuclear systematics (Mass No. Atomic No. Isotopes)
	Nuclear Force (Basic ideas)
	Nuclear radii
	Nuclear masses, Binding energies, Mass defect.
	Nuclear spin and magnetism.
Radioactive decay	Law of decay; half -life , mean life
Alpha decay	Basic ideas.
Beta decay	Basic idea.
Measuring ionizing radiation (units)	Curie, Rad, etc.
Natural Radioactivity	Discussion, radioactive dating.
Nuclear reactions.	Basic ideas e.g. reaction energy, Q value
	Exothermic endothermic (some discussion on reaction energies in contact with nuclear stationer states).
Energy from the nucleus, Nuclear fission	Basic process; Liquid drop model, description,

	Theory of nuclear fission.
Nuclear reactors	Basic principles.
Thermonuclear fusion (T.N.F)	Basic process; T.N.F in stars.
Controlled thermonuclear fusion	Basic ideas and requirements for a T.N. reactor.
Suggested level.	Ch; 54 of H.R.K (Vol-2, Ed. 5 th)
Section-III:	
Electronics	
TOPIC	SCOPE
Semiconductor materials	Idea of energy bands and energy gaps (Qualitative). P-type, N-type materials.
Junction diode	Structure, characteristics and applications as rectifiers
Transistor	Basic structure and operation.
Transistor, biasing and transistor as an amplifier	Biasing for amplifiers, characteristics of common base, common emitter, common collector, load line, operating point, hybrid parameters. Common emitter mode (Explanation).
Amplification with feedback	Positive and negative feedbacks.
Oscillators	Oscillators, Multivibrators.
Logic gates	OR, AND, NOT, NAND, NOR and their basic applications.
Suggested level	Basic Electronics by B. Grob.

Paper-B: Electricity and Magnetism, Electronics, Modern Physics, and Nuclear Physics

25 Marks

Sr. No.	Subject
1	Electricity and Magnetism
2	Modern Physics,
3	Atomic and Nuclear Physics
4	Electronics

List of Experiments for Practical Paper "B".

1. Electricity and Magnetism:

- To measure the unknown resistance using neon flash bulb and capacitor.
- To study the I-H Curve by Magnetometer.
- To study the conversion of a pointer galvanometer into a voltmeter and an ammeter.
- To calibrate an ammeter and a voltmeter by potentiometer.

5. To determine low resistance by Carey Foster bridge.
6. To determine the charge sensitivity of a ballistic galvanometer taking into account logarithmic decrement.
7. To compare the capacitances of two capacitors by ballistic galvanometer.
8. To study the Acceptor circuit.
9. To study the Rejector circuit.
10. To measure measurement of magnetic field by flux meter or by search coil method.
11. To measure the value of horizontal component 'H' of earth's magnetic field by an earth inductor.

2. Modern Physics, Atomic and Nuclear Physics:

12. To study the variation of photoelectric current with the intensity of light.
13. To determine the Planck's constant using spectrometer.
14. To determine e/m of an electron by deflection method.
15. To determine the ionization potential of mercury.
16. To study the characteristic curves of a Geiger-Müller (G. M.) tube.
17. To determine the range of Alpha particles.
18. To study the stopping power of alpha particles in air, Mica, Ag, Cu and Al.
19. To study the absorption coefficient of Beta-particles, using a Geiger-Müller (G. M.) tube.

3. Electronics:

20. To Set up half-wave and full-wave rectifier circuits and observe the wave shapes on the oscilloscope screen. To study the effect of smoothing circuits on the ripple voltage.
21. To set up a transistor oscillator circuit and measure its frequency by using an oscilloscope.
22. To draw the characteristics of a semiconductor diode.
23. To set up a single stage transistor amplifier circuit and measure its voltage gain.
24. To set up a high frequency oscillator and measure its frequency with a wave meter.

Note: Minimum 30 experiments should be performed, at least 12 from List of Experiments

for Practical Paper "C" and 18 from List of Experiments for Practical Paper "B".

POLITICAL SCIENCE (ELECTIVE)-II

Political Science (Associate Degree in Arts)

Syllabi and Courses of Reading

Government and Politics in U.K. U.S.A., Switzerland and Pakistan Marks 100

Government and Politics in U.K. U.S.A., Switzerland and Pakistan

(Note: The paper will be divided into the following two parts consisting of 60 and 40 marks respectively)

Part-I

1. United Kingdom:

- (a) Nature and Evolution to the British Constitution; its Sources and Salient Features.
- (b) Structure of the Government:
 - (i) Kingship; its Role and Reasons for its Survival.
 - (ii) Cabinet: Features and Role. Cabinet, Ministry and Privy Council.
 - (iii) Parliament: Composition and Powers; Procedure of Law making. Supremacy of the Parliament.
 - (iv) Judiciary: Organization and Jurisdiction; Rule of Law.
- (c) Civil Service; Local Self government; Political Parties.

2. United States

- (a) Constitution: Growth, Nature and Salient Features.
- (b) Federal System: Division of Power in Theory and Practice.
- (c) Presidency: Theory and Practice.
- (d) Congress; Composition, Powers, Procedure of Law making, Role of Committees in the Congress.
- (e) Federal Judiciary: Organization and Jurisdiction. Judicial Review.
- (f) Separation of Powers.
- (g) Political Parties.

Switzerland:

- (a) History of the Development of the Constitution.
- (b) Major Features of the Constitution.
- (c) The Federal Executive.
- (d) The Federal Legislature.
- (e) The Cantons in the Swiss Political System.
- (f) Direct Democracy.

PART II

Islamic Republic of Pakistan:

- (a) Ideological Basis of Pakistan.
- (b) Constitutional Development since 1947.
- (c) A detailed study of the Government System under 1973 Constitution.

Books Recommended:

I.H. Qureshi:	Struggle for Pakistan.
Mercridis and Ward:	Modern Political Systems.
S.M.Ikram:	Muslim India and the Birth of Pakistan.
Ogg and Zink:	Modern Foreign Governments.
Syed Hasan Riaz:	Pakistan Na Guzeer Tha (Urdu)
Muhammad Sarwar:	Jadeed Hukomatain (Urdu)
A.C. Kapur,	Select Modern Constitutions.
A. Appadoral,	The Substance of Politics (Selection on Switzerland), Oxford.

ASSOCIATE DEGREE IN ARTS / SCIENCE

Applied Psychology-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Applied Areas of Psychology (Written)	:	80 Marks
Paper-B:	Mini Research (Practical)	:	20 Marks

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Applied Areas of Psychology 80 Marks

1. Introduction:

Scope of Psychology

Introduction of Applied Areas of Psychology

2. Clinical Psychology:

Introduction: aims and scope

Brief History

Role of a Clinical Psychologist

Perspectives of Clinical Psychology

Clinical Assessment and Intervention

Status of Clinical Psychology in the World

Status of Clinical Psychology in Pakistan

3. Counseling Psychology:

Introduction: aims and scope

Brief History

Role of a Counseling Psychologist

Perspectives of Counseling Psychology

Assessment and Intervention

Status of Counseling Psychology in the World

Status of Counseling Psychology in Pakistan

4. Organizational/Industrial Psychology:

Introduction and Brief History of I/O Psychology

Scope of I/O Psychology

Approaches to I/O Psychology

Services provided by I/O Psychologists

Assessment and Intervention

Status of I/O Psychology in the World

Status of I/O Psychology in Pakistan

5. Developmental Psychology:

Introduction: Aims and scope

Brief History

Role of a Developmental Psychologist

Approaches of Developmental Psychology

Assessment and Intervention

Status of Developmental Psychology in the World

Status of Developmental Psychology in Pakistan

6. Health Psychology:

Introduction: aims and scope

Brief History

Role of a Health Psychologist

Models of Health Psychology

Assessment and Intervention

Status of Health Psychology in the World Status of Health Psychology in Pakistan

7. School and Educational Psychology:

Introduction: aims and scope

Brief History

Role of a School Psychologist

Perspectives of School Psychology

Assessment and Intervention

Status of School/Educational Psychology in the World

Status of School/Educational Psychology in Pakistan

8. Social Psychology:

Introduction; Group Types: Primary group, Secondary group, Reference group, In and out group Attitude: Types of attitudes; Stereotypes, Prejudices Nature and components, Leadership: types and characteristics Mass Communication: Electronic media and Print media.

9. Sports Psychology:

Introduction: aims and scope

Brief History

Role of a Sport Psychologist

Perspectives of Developmental Psychology

Assessment and Intervention

Status of Sport Psychology in the World

Status of Sport Psychology in Pakistan

10. Forensic Psychology:

Introduction: aims and scope

Brief History

Role of a Forensic Psychologist

Perspectives of Forensic Psychology

Assessment and Intervention

Status of Forensic Psychology in the World

Status of Forensic Psychology in Pakistan

11. Emerging Areas in Psychology:

Positive Psychology

Environmental Psychology

Peace Psychology

Military Psychology

Paper-B: Mini Research (Practical)

20 Marks

Students are required to perform mini research in group (comprising of 4-5 members).

Mini Research Report : 10 marks

Viva Voce : 10 marks

Recommended Books:

1. Kaplan, R. M. & Saccuzzo, D. P. (2005). *Psychological Testing: Principles, Applications, and Issues*. USA: Wadsworth.
2. Slater, A. & Bremner, G. (2003). *An Introduction to Developmental Psychology*. Germany: Blackwell Publishing.
3. Santrock, J. W. (2007). *Child Development*. (11th ed.). USA: McGraw-Hill.
4. Crow, L. D. & Crow, A. (2000). *Educational Psychology*. Pakistan: National Book

- Foundation. Sharma, R. N. & Sharma R. K. (2006). *Advanced Educational Psychology*. India: Atlantic Publisher.
5. Myers, D. G. (2008). *Social Psychology*. USA: McGraw-Hill.
 6. Muchinsky, P. M. (2002). *Psychology Applied to Work*. USA: Wadsworth.
 7. Snyder, C. R. & Lopez, S. J. (2007). *Positive Psychology*. USA: SAGE Publications.
 8. Towl G. J. & Crighton, D. A. (2010). *Forensic Psychology*. UK: Blackwell Publishing.
 9. Bell, P. A., Greene, T. C., Fisher J. D. & Baum, A. (2001). *Environmental Psychology*. USA: Harcourt.

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(پنجابی)

ADA PUNJABI ELECTIVE-II

SYLLABI PAPER-II

Appendix "A"

Outline of Tests

نمبر 100

تقدیری وچار+ پنجابی کہادتاں

Appendix "B"

Syllabi & Courses of Reading

نمبر 30

نمبر 15

نمبر 20

نمبر 15

نمبر 20

= 5x3=2+1

(ادب)

(تقدیر)

مطلب سے ورتوں دامو قح

پنجابی کہادتاں (اکھان)

اردو توں پنجابی ترجمہ

مضمون

پہلا حصہ

دو چا حصہ

نصابی کتاباں (مجوزہ)

i. تقدیری وچار:

مصنفین

Text Books (Prescribed)

سید اختر جعفری (مدیر)

شہباز ملک - سلم رانا - یونس اختر - نور احمد نقیب

تاج بک ڈپوار دو بازار لاہور

ڈاکٹر شہباز ملک

عزیز بک ڈپوار دو بازار لاہور

پبلشر

ii. پنجابی کہادتاں:

مولف

پبلشر

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ASSOCIATE DEGREE IN ARTS

Social Work-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Social Work-II (Written)	:	75 Marks
Paper-B:	Practical	:	25 Marks

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Social Work-II 75 Marks

I. Introduction to Social Welfare

- a) Definition and Scope
- b) Historical Perspective of Social Welfare in Pakistan

II. Pakistani Society

- a) Definition and description of the term "Society"
- b) Characteristics of Pakistani Society
- c) Comparison of Rural and Urban Communities

III. Culture

- a) Definition and description of the term "Culture"
- b) Characteristics of Pakistani Culture
- c) Influence of allied Cultures on Pakistani Culture
- d) Social Norms-definition and stages (i.e. folkways, mores and laws)
- e) Socialization-definition, description and factors of socialization, (i.e. Family, Neighborhood, Peer Group, Religious Institution, Educational Institutions and Mass Media and Communication)

IV. Social Institutions

- a) Definition and description of "Social Institutions"
- b) Types of Social Institutions: Primary, Secondary
- c) Structure, Importance and Functions of the following:
Family Institution-Religious Institution
Political Institution-Economic Institution
Educational Institution-Recreational Institution

V. **Social Change**

- a) Definition and concept of "Social and Cultural Change"
 - b) Process and effects of Social Change in Society
 - c) Factors which promote and hinder Social Change
-
- i. **Socio-Economic Needs of Pakistan**
 - a) Agricultural Development-importance of Agriculture Development and hurdles involved-measures
 - b) Industrial Development-importance of Industrial Development, hurdles involved, Measures-Village Aid, IRDP etc.
 - c) Problems arising out of industrialization and Urbanization-Education and Health, Measures
 - ii. **Educational Needs and Problems**
 - a) Purposes and importance
 - b) Existing educational needs and problems, Measures
 - c) Future requirements
 - d) Importance of guidance and counseling in educational institutions
 - e) Adult education, Its need and importance, Hurdles Involved, Measures
 - f) Education and National Development
 - iii. **Health Needs and Problems**
 - a) Causes of low health standards, Measures
 - b) Health education and its importance
 - c) Health and National Development
 - d) Dengue
 - e) Drug Addiction
 - iv. **Child labour**

Nature, causes, impact, eradication strategies
 - v. **Terrorism**

Nature, causes, impact, eradication strategies
 - vi. **Environmental problems**

Nature, causes, impact, eradication strategies

Recommended Books:

1. Abdul HamedTaga (1998). Sociology and Social Problems. Abdul Hameed and Sons Publishers, Lahore.
2. Alam Anwar (2003). Principle of Sociology. Saif Printing Press, Peshawar.
3. Anwar Alam (2006). Applied Sociology (Social Problems and Research). Saif Printing Press, Peshawar Cantt. Department of Sociology, University of Peshawar.
4. Bertrand, Alving (1982). Rural Sociology. Mc-Graw Hill, New York.
5. Chaudhry. M. Iqbal (1985). Pakistani Society. Aziz Publishers, Urdu Bazar, Lahore.
6. Gerald Smale (2000). Social Work and Social Problems. Macmillan Press, London.
7. Hallahan (1991). Exceptional Children (4th ed.). Merrill Pub.Co., Columbus.
8. Khalid M. (2008). Social Work Theory and Practice with special reference to Pakistan (3rd edition). Kifayat Academy, Karachi.
9. Michel Oliver and Bob Sapey (1999). Social Work with Disable People (2nd Edition). Macmillan England.
10. Smith (1998). Introduction to Special Education (3rd Ed.). Allyn & Bacon, Boston.
11. Saeed, GulRukh, (2010). Tarug-a-Social Work (Part-II) Awais Publications, 2012.

Paper-B: Practical

25 Marks

Students will be assigned different activities like the following and they shall submit a comprehensive report on each of the activity:

- a) Organizing a group activity.
- b) Social survey on any special problem of the area.

SOCIOLOGY (ELECTIVE)-II

Sociology-II (Associate Degree in Arts) (Syllabi and Courses of Reading)

Sociological Theory, Research and Social Problem.

100

Marks

Sociological Theory and Research:

- (I) **Social Thought and Sociological Theory:-**
(a) Meaning and Nature of Social Thought.
(b) Meaning and Nature of Sociological Theory:
- (II) **Brief Introduction to Muslim Social Thought:-**
Ibn-e-Khaldun, Imam Ghazali and Shah Wali Ullah.
- (III) **Sociological Theories:-**
Auguste Comte, Emile Durkheim and Max Weber.
- (IV) **Research Methodology:-**
(a) Scientific Method and its application to Sociology.
(b) Types of Sociological Research: Exploratory, Descriptive and Explanatory / Experimental.
(c) Relationship between Theory and Research.
(d) Different Methods of Sociological Research: Qualitative and Quantitative Methods.
- (V) **Research Design:-**
(a) Selection of problem
(b) Concepts Literature Review
(c) Variables
(d) Hypotheses.
(e) Plan of Work
- (VI) **Universe and Sampling:-**
(a) Definition of Universe.
(b) Definition of Sampling.
(c) Types of Sample: Simple Random Sample and Stratified Sample.
- (VII) **Data Collection:-**
(a) Techniques of Data Collection: Interviewing and Observation.
(b) Tools of Data Collection: Interview schedule and questionnaire.
- (VIII) **Analysis of Data:-**
(a) Frequency Distribution and Tabulation.
(b) Ratios and Percentages.
(c) Measure of Central Tendency (Average): Mean, Median and Mode.
- (IX) **Social Problems:-**
(a) Overpopulation
(b) Illiteracy
(c) Crime & Delinquenty
(d) Environmental Pollution

Recommended Books:-

- | | |
|--|--|
| 1. Baker, Therese L. | Doing Social Research, New York: The Free Press, 1988 |
| 2. Goode, William, J. and Paul K. Hatt: | Methods in Social Research, London: McGraw Hill, 1952 |
| 3. Horton, B. and Leslie Gerald R. (latest ed) | — |
| 4. Young, Pauline V | Scientific Social Surveys and Research, Tokyo: Charles E. Tuttle Co. |
| 5. Ali, Dr. M. Basharat: | Muslims: The first Sociologists, Lahore: Maktabai-Miliya. |
| 6. Taga, Abdul Hameed | "Umrani Nazria wa Tahqeeq", Lahore: Ismail Brothers Publishers, 1991 |
| 7. Ahmad, Fahmida Masood | "Moashrati Masael Ki Omraniat", Karachi: Illmi Kitab Ghar, 1992. |
| 8. Khalid, Mohammad | Sociological Theory: A Historical Perspective, Karachi: Kifayat Academy, 1990. |

ASSOCIATE DEGREE IN ARTS /SCIENCE

Statistics -II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Statistics-II (Written)	:	75 Marks
Paper-B:	Practical	:	25 Marks

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Statistics-II **75 Marks**

Candidates are required to attempt five questions in all, at least two from each section.

Section-I:

Sampling and Sampling Distribution (Weight 2/10)

Sampling designs of Simple random, Stratified random, Systematic random and Cluster sampling, Judgment and Quota Sampling. Random Numbers and their use in sampling. Advantages of sampling.

Probability and non-probability sampling, sampling and non-sampling errors, Calculation of sample mean, proportion and variance of simple random samples and stratified random samples. Sampling distribution of a statistic and its standard error. Sampling Distribution of mean, proportion, difference between two proportions and two means. Central limit theorem with illustration (Proof not required).

Statistical Inference (Weight 2/10)

Nature of statistical inference, point and interval estimation of parameter, properties of a good point estimator, confidence interval and its interpretation. Null and alternative hypotheses, simple and composite hypotheses. Type I and Type II errors. Level of significance. P-value and power of a test (only concept and definition), Acceptance and rejection regions, one sided and two sided tests, test procedure. Inference about single mean and difference between means for paired and un-paired observations. Inference about proportion and difference between two proportions. Determination of sample size. (Application of Normal distribution and t-distribution).

Inference About Variance (Weight 1/10)

Introduction and application of Chi-square distribution: Interval estimation and test of hypothesis about population variance (Interval estimation for variance - single sample).

Introduction and application of F-distribution: test of hypothesis for equality of two variance.

Section-II:

Analysis of Count Data (Weight 1/10)

Chi-square test of Independence, Chi square test of goodness of fit, Chi- square test of homogeneity.

Regression and Correlation Analysis (Weight 2/10)

Multiple linear regression with two regressors, coefficient of multiple determination. Partial and multiple correlation up to three variables. Inference of simple correlation and regression, partial and multiple correlation. Interval estimates and tests of hypothesis about parameters, mean prediction and individual prediction.

Analysis of Variance (Weight 1/10)

Analysis of variance for one-way classification and two-way classification. Multiple comparison tests; Least significant difference and Duncans multiple range test.

Basic Experimental Designs (Weight 1/10)

Basic principles of experimental design. Completely randomized, Randomized Complete Block and Latin Square Designs, Descriptions, layouts, statistical analysis, advantages and limitations of these designs. Application of these designs (Analysis of all these designs with single observation in each cell).

Paper-B: Practical

25 Marks

There will be two questions from each section and candidates are required to attempt one from each section. The distribution of marks will be as under:

Each question of 9 marks	i.e. 9 + 9	18 marks
Practical Note Book:		03 marks
Viva Voce:		04 marks

Recommended Books

1. Clarke G. & Cooke D. (1998). A basic Course in Statistics, Arnold Publisher, London, 4th Edition.
2. Wonnacott T.H. and Wonnacott R.J. (1981). Introductory Statistics, John Willy & Sons, New York.
3. Chaudhry, S.M. & Kamal, S. (1999). Introduction to Statistical Theory Parts I & II, Ilmi Kitab Khana, Urdu Bazar, Lahore.

4. Beg, M.A. and Mirza, M.D. (1997). Statistics, Theory and Methods, Volumes I & II, Carven Book House, Kutechery Road, Lahore.
5. Chase W Bown F. (1997). General Statistics, 3rd Edition, John Willy & Sons, New York.
6. Graybill, Iyer & Burdick (1998). Applied Statistics, A first course in inference. Prentice Hall, New Jersey.
7. Moore D.S., McCabe G.R., (1997). Introduction to the Practice of Statistics, 3rd Edition, Will Freeman & Co., New York.
8. Blumen (1997), Elementary Statistics, 3rd Edition, McGraw Hill, New York.
9. Chaudhry, R.M. (1998). Polymer Modern Statistics, Polymers.

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ASSOCIATE DEGREE IN ARTS

نصاب (اُردو اختیاری)

نصاب کا خاکہ

پرچہ - II:

۱۵ نمبر	۱۔ شعری اصناف کا تعارف و ارتقا
۱۵ نمبر	۲۔ نثری اصناف کا تعارف و ارتقا
۲۰ نمبر	۳۔ تاریخ ادبِ اردو کے ادوار
۱۰ نمبر	۴۔ ادبی اصطلاحات
۱۰ نمبر	۵۔ بیان و بدیع
۱۰ نمبر	۶۔ علم عروض
۲۰ نمبر	۷۔ مضمون نویسی

کل نمبر پرچہ ب ۱۰۰

نصاب کی تفصیل

(پرچہ - II)

۱۔ شعری اصناف کا تعارف:

(غزل - مثنوی - قصیدہ - مرثیہ - نظم معری - نظم آزاد)

۲۔ نثری اصناف کا تعارف:

(داستان۔ ناول۔ افسانہ۔ آپ بیتی۔ سفرنامہ۔ انشائیہ)

۳۔ تاریخ ادبِ اردو کے ادوار: (ان ادوار کے مطالعہ کے لیے ڈاکٹر انور سدید کی کتاب ”اردو ادب کی تحریکیں“ نصاب کا حصہ ہے)

ایہام گوئی کا دور

فورٹ ولیم کالج کا دور

علی گڑھ اور سرسید احمد خاں

رومانوی تحریک کا دور

ترقی پسند تحریک کا دور

۴۔ ادبی اصطلاحات:

(فصاحت۔ بلاغت۔ داخلیت۔ خارجیت۔ کلاسیکیت۔ تغزل۔ سہل ممتنع۔ محاکات۔ معاملہ بندی)

۵۔ بیان و بدیع:

علم بیان: (تشبیہ۔ استعارہ۔ مجازِ مرسل۔ کنایہ)

علم بدیع: (مراۃ النظر۔ لف و نشر۔ تضاد۔ تینیس تام۔ حسن تعلیل)

۶۔ علم عروض:

(بحر ہزج مثنیٰ سالم۔ بحر متقارب مثنیٰ سالم۔ بحر جز مثنیٰ سالم۔ بحر رمل مثنیٰ سالم)

۷۔ مضمون نویسی:

نصاب میں موجود ادبی موضوعات کے حوالے سے تفصیلی مضمون

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ASSOCIATE DEGREE IN SCIENCE

Zoology-II

Total Mark: 100

Appendix 'A'

(Outlines of Tests)

Paper-A:	Chordates Diversity (Classification, Phylogeny and Organization) (Written)	:	35 Marks
Paper-B:	Animal form and function (A comparative Perspective) (Written)	:	35 Marks
Paper-C:	Practical-I	:	15 Marks
Paper-D:	Practical-II	:	15 Marks

Appendix 'B'

(Syllabi and Courses of Reading)

Paper-A: Chordates Diversity (Classification, Phylogeny and Organization) 35 Marks

1. Hemichordata and Invertebrate Chordates

Evolutionary Perspective: Phylogenetic Relationships; Classification up to subphylum or class where applicable; Further Phylogenetic Considerations.

2. The Fishes: Vertebrate Success in Water

Evolutionary Perspective: Phylogenetic Relationships; Survey of Superclass Agnatha and Gnathostomata; Evolutionary Pressures: Adaptations in Locomotion, Nutrition and the Digestive System, Circulation, Gas Exchange, Nervous and Sensory Functions, Excretion and Osmoregulation, Reproduction and Development; Further Phylogenetic Considerations.

3. Amphibians: The First Terrestrial Vertebrates

Evolutionary Perspective: Phylogenetic Relationships; Survey of Order Caudata, Gymnophiona, and Anura. Evolutionary Pressures: Adaptations in External Structure and Locomotion, Nutrition and the Digestive System, Circulation, Gas Exchange, Temperature Regulation, Nervous and Sensory Functions, Excretion and Osmoregulation, Reproduction, Development, and Metamorphosis; Further Phylogenetic Considerations.

4. Reptiles: The First Amniotes

Evolutionary Perspective: Cladistic Interpretation of the Amniotic Lineage; Survey of Order Testudines or Chelonia, Rhynchocephalia, Squamata, and Crocodilia; Evolutionary Pressures: Adaptations in External Structure and Locomotion, Nutrition and the Digestive System, Circulation, Gas Exchange, and Temperature Regulation, Nervous and Sensory Functions, Excretion and Osmoregulation, Reproduction and Development; Further Phylogenetic Considerations.

5. Birds: Feathers, Flight, and Endothermy

Evolutionary Perspective: Phylogenetic Relationships; Ancient Birds and the Evolution of Flight; Diversity of Modern Birds; Evolutionary Pressures: Adaptation in External Structure and Locomotion, Nutrition and the Digestive System, Circulation, Gas Exchange, and Temperature Regulation, Nervous and Sensory Systems, Excretion and Osmoregulation, Reproduction and Development; Migration and Navigation.

6. Mammals: Specialized Teeth, Endothermy, Hair, and Viviparity

Evolutionary Perspective: Diversity of Mammals; Evolutionary Pressures: Adaptations in External Structure and Locomotion, Nutrition and the Digestive System, Circulation, Gas Exchange, and Temperature Regulation, Nervous and Sensory Functions, Excretion and Osmoregulation, Behavior, Reproduction and Development.

Paper-B: Animal form and function (A comparative Perspective)

35 Marks

1. Protection, Support, and Movement

Protection: The Integumentary System of Invertebrates and Vertebrates; Movement and Support: The Skeletal System of Invertebrates and Vertebrates; Movement: Non-muscular Movement; An Introduction to Animal Muscles; The Muscular System of Invertebrates and Vertebrates.

2. Communication I: Nerves

Neurons: Structure and Function; Neuron Communication: Introductory accounts of Resting Membrane Potential, Action Potential (Nerve Impulse) and Transmission of the Action Potential between Cells; Invertebrate and Vertebrate Nervous Systems: The Spinal Cord, Spinal Nerves, The Brain, Cranial Nerves and The Autonomic Nervous System.

3. Communication II: Senses

Sensory Reception: Baroreceptors, Chemoreceptors, Georeceptors, Hygroreceptors, Phonoreceptors, Photoreceptors, Proprioceptors, Tactile Receptors, and Thermoreceptors of invertebrates; Lateral-Line System and Electrical Sensing, Lateral-Line System and Mechanoreception, Hearing and Equilibrium in Air, Hearing and Equilibrium in Water, Skin Sensors of Damaging Stimuli, Skin Sensors of Heat and Cold, Skin Sensors of Mechanical Stimuli, Sonar, Smell, Taste and Vision in Vertebrates.

4. Communication III: The Endocrine System and Chemical Messengers

Chemical Messengers: Hormones Chemistry; and Their Feedback Systems; Mechanisms of Hormone Action; Some Hormones of Porifera, Cnidarians, Platyhelminths, Nemertean, Nematodes, Molluscs, Annelids, Arthropods, and Echinoderms Invertebrates; An Overview of the Vertebrate Endocrine System; Endocrine Systems of Vertebrates other Than Birds or Mammals; Endocrine Systems of Birds and Mammals.

5. Circulation, Immunity, and Gas Exchange

Internal Transport and Circulatory Systems in Invertebrates: Characteristics of Invertebrate Coelomic Fluid, Hemolymph, and Blood Cells; Transport Systems in Vertebrates; Characteristics of Vertebrate Blood, Blood Cells and Vessels; The Hearts and Circulatory Systems of Bony Fishes, Amphibians, and Reptiles, Birds and Mammals; The Human Heart: Blood Pressure and the Lymphatic System; Immunity: Nonspecific Defenses, The Immune Response; Gas Exchange: Respiratory Surfaces; Invertebrate and Vertebrate Respiratory Systems: Cutaneous Exchange, Gills, Lungs, and Lung Ventilation; Human Respiratory System: Gas Transport.

6. Nutrition and Digestion

Evolution of Nutrition; The Metabolic Fates of Nutrients in Heterotrophs; Digestion; Animal Strategies for Getting and Using Food Diversity in Digestive Structures of Invertebrates and Vertebrates; The Mammalian Digestive System: Gastrointestinal Motility and its Control, Oral Cavity, Pharynx and Esophagus, Stomach, Small Intestine: Main Site of Digestion; Large Intestine; Role of the Pancreas in Digestion; and Role of the Liver and Gallbladder in Digestion.

7. Temperature and Body Fluid Regulation

Homeostasis and Temperature Regulation; The Impact of Temperature on Animal Life; Heat Gains and Losses; Some Solutions to Temperature Fluctuations; Temperature Regulation in

Invertebrates, Fishes, Amphibians, Reptiles, Birds and Mammals; Heat Production in Birds and Mammals; Control of Water and Solutes (Osmoregulation and Excretion); Invertebrate and Vertebrate Excretory Systems; How Vertebrates Achieve Osmoregulation; Vertebrate Kidney Variations; Mechanism in Metanephric Kidney Functions.

8. Reproduction and Development

A sexual Reproduction in Invertebrates; Advantages and Disadvantages of Asexual Reproduction; Sexual Reproduction in Invertebrates; Advantages and Disadvantages of Sexual Reproduction; Sexual Reproduction in Vertebrates; Reproductive Strategies; Examples of Reproduction among Various Vertebrate Classes; The Human Male Reproductive System: Spermatogenesis, transport and Hormonal Control, Reproductive Function; The Human Female Reproductive System: Folliculogenesis, transport and Hormonal Control, Reproductive Function; Hormonal Regulation in gestation; Prenatal Development and Birth Events of Prenatal Development: The Placenta; Birth; Milk Production and Lactation.

9. Descriptive Embryology

Fertilization; Embryonic Development: Cleavage, and Egg Types; The Primary Germ Layers and their Derivatives; Echinoderm Embryology; Vertebrate Embryology: The Chordate Body Plan, Amphibian Embryology, Development in Terrestrial Environments, Avian Embryology, The Fate of Mesoderm.

Paper-C: Practical-I

15 Marks

1. Study of a representative of hemichordate and invertebrate chordate.
2. Study of representative groups of class fishes.
3. Study of representative groups of class Amphibia.
4. Study of representative groups of class Reptelia.
5. Study of representative groups of class Aves.
6. Study of representative groups of class Mammalia.
7. Field trips to study animal diversity in an ecosystem.

Note : Preserved specimen and or colored projection slide and or CD ROM projection of computer must be used.

Paper-D: Practical-II

15 Marks

1. Study and notes on skeleton of *Labeo*, *Rana tigrina*, Varanus, fowl and Rabbit,
Note for 1: Exercises of notes on the adaptations of skeletons to their function must be done.
2. Earthworm or leech; cockroach, freshwater mussel, Channa or *Catla catla* or *Labeo* or any other local fish, frog, pigeon and rat or mouse or rabbits are representative animals for study in dissections.
3. Study of models or preserved brains of representative animals and notes on adaptations.
4. Study of nervous system of earthworm and a fish.
5. Study of endocrine system in an insect and a mammal.
6. Study of different types of blood cells in blood smear.
7. Study of heart, principal arteries and principle veins in a representative vertebrate.
8. Study of respirator system in cockroach or locust and a vertebrate representative
9. Study of excretory system in an invertebrate and a vertebrate representative
10. Study of nutritive canal in an invertebrate and a vertebrate representative
11. Study of male reproductive system in an invertebrate and a vertebrate representative
12. Study of female reproductive system in an invertebrate and a vertebrate representative.
13. Study of hormonal influence of a reproductive function
14. Study of preserved advanced stages of avian and mammalian development for amniotic membranes and placenta

Recommended Books:

1. Miller, A.S. and Harley, J.B., 1999 & 2002. ZOOLOGY, 4th & 5th Edition (International). Singapore: McGraw Hill.
2. Hickman, C.P., Roberts, L.S. and Larson, A., 2001. INTEGRATED PRINCIPLES OF ZOOLOGY, 11th Edition (International). Singapore: McGraw Hill.
3. Pechenik, J.A., 2000. BIOLOGY OF INTERVEBRATES, 4th Edition (International). Singapore: McGraw Hill.

4. Kent, G.C. and Miller, S., 2001. COMPARATIVE ANATOMY OF VERTEBRATES. New York: McGraw Hill.
5. Campbell, N.A., 2002. BIOLOGY, 6th Edition. Menlo Park, California: The Benjamin/Cummings Publishing Company, Inc.

Recommended Books for Practical:

1. Miller, S.A., 2002. GENERAL ZOOLOGY LABORATORY MANUAL. 5th Edition (International) Singapore: McGraw Hill;
2. Hickman, C.P. and Kats, H.L., 2000. LABORATORY STUDIES IN INTEGRATED PRINCIPLES OF ZOOLOGY. Singapore: McGraw Hill.

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مادة العربية الزائدة Arabic (Optional) Associate Degree in ARTS

Appendix 'A'

(Outlines of Tests)

" اللغة العربية للمبأكتانيين " Paper

100 Marks

Appendix 'B'

Syllabi & Courses of Reading

Arabic (Optional)

فهرست عنوانات

القسم الاول: الحوار القسم الثاني: النصوص الادبية

القسم الثالث: القواعد العربية

القسم الاول: الحوار

١. تحيات ٢. تعارف ٣. هل نعم لا ٤. الحوار بين الاستاذ والطلاب (الف) ٥. الحوار بين الاستاذ والطلاب (ب)

٦. الحوار بين الاستاذ والطلاب (ج) لقاء ٩. مقابلة

١٠. في مكتب الطيران بالمطار !! الرحلة الدولية

٢. امع ضابط الجوازات ٣. امع مفتش الجمرك ٤. استقبال

٥. انا مشغول ٦. في المطعم ٧. الطعام العربي ٨. غداء

٩. في الفندق ٢٠. اجهزة الاعلام ٢١. المكالمات التليفونية

٢٢. السؤال عن الطريق ٢٣. في دكان الملابس

القسم الثاني: النصوص الادبية

النثر العربي:

١. من هدى القرآن الكريم ٢. من اقوال النبي ﷺ

٣. المسلمون ٤. الامة الاسلامية ٥. اهل الخير

٦. الاسلام دين التعاون ٧. الضيف الاكول

٨. سيدنا عمر بن الخطاب ٩. آمة ام النبي ﷺ

١٠. من ضرب الامثال

الشعر العربي

١. متنزل الرحمات ٢. الحب ٣. اليمامة والصيد

٤. الجدة ٥. الرفق بالحيوان ٦. ام تغنى طفلها عند النوم

القسم الثالث: القواعد العربية

١. الكلمة واقسام الكلمة ٢. الاسم واتواعه (من حيث العدد ومن حيث الجنس) ٣. الفعل واتواعه (الفعل الماضي وصيغه الفعل المضارع وصيغه الفعل الامر و

صيغه)

٤. الجملة الاسمية وقواعدها ٥. الجملة الفعلية وقواعدها

٦. الفرق بين الجملة الفعلية والاسمية ٧. المجرد والمزيد

Recommended Books:

١. اللغة العربية للمبأكتانيين: از ذاكثر محمد اعزاز الحسن شاه مطبوعه ازاد بك ڈيو لاهور

٢. اللغة العربية للمبأكتانيين: از ذاكثر راحيله خالد قريشي مطبوعه ازاد بك ڈيو لاهور

٣. تعليم اللغة العربية للمبأكتانيين جامعه اسلاميه بهاولپور مطبوعه ازاد بك ڈيو لاهور.

**ASSOCIATE DEGREE IN ARTS
Economics (Optional)**

**Appendix 'A'
(Outlines of Tests)**

Paper

Marks

100

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper 1

(This paper consists of two sections. The paper setter is required to divide the question paper into two parts in such a way that 05 questions are set from each section. Candidates will be required to attempt at least two questions from each part).

Section I (Economics Theory)

- (1) Basic Economics concepts: Nature and function of every economic system. Nature and scope of economic analysis. Economic terms. The major segments of economics theory. Micro-economics and macro-economics.
- (2) Micro-economics (Price Theory): (i) the Price of market mechanism. The influence of the price system on resource allocation, consumption patterns and income distribution.
(ii) Determination of price by supply and demand. The assumption of perfect competition. The theory of demand and utility. Elasticity of demand and its measurement. The theory of cost and supply. Equilibrium of the firm equilibrium of demand and supply in the short-run and long-run periods.
(iii) Pricing of the productive factor. Wages, Profits, interest and rent.
- (3) Macro economic (income and employment theory) : (i) Measurement of national income. Concept of GNP, and NNP, Circular flow of national income. Three approaches to national income measurement, income at factor cost, income at market price and expenditure approach.
(ii) Determination of the national income and employment. Equilibrium level of national income, saving, consumption and investment schedules and their inter-section. Say's law of markets and its refutation by 'Keynes' general theory of employment- aggregate demand, aggregate supply, effective demand.
(iii) Consumption function : The propensity to consume. The multiplier and its calculation. Logical identity of saving and investment.
(iv) Investment as determinant of effective demand.

Determinants of investment. The marginal efficiency of capital. The accelerator and its interaction with the multipliers. The rate of interest and investment.

- (4) Economics, Statistics and Mathematics:
Their growing relationship.

SECTION: II

Economics Planning in Pakistan

1. Economics Development through planning: The concept of measurement of economic development. The imperfections of market economy. The need and objectives of economics planning.
2. Special features of Pakistan's economy : Primary production, population pressure, capital deficiency, low income.
3. Development Planning in Pakistan : A brief comparison of the First, Second and Third Five-Year plans with reference to their (a) size (b) objectives (c) strategies (d) programme priorities and (e) financial resources.
4. Strategic Sector of Pakistan's economy:
 - (a) Agriculture its strategic position in economics set up, its contribution to GNP: the existing draw-back; measures to make agriculture a dynamic sector.
 - (b) Human resources development-population as a dynamic factor in the economic development of Pakistan. Non-material capital formation.
 - (c) Industries-Present industrial complex, Justification of industrial development of Pakistan. Public, vs Private enterprise and industrial development. Industrial development and Structural changes in the economic development of Pakistan.

- (d) Pakistan's export sector and economic development. Export promotion schemes. Scarcity of foreign exchange. Trends in the terms of trade of Pakistan and their cases.
 - (e) A brief discussion of Pakistan's monetary and fiscal policies as reflected in the Second and third Five-Year plans.
5. General review of the economic situation in Pakistan. Rate of growth of Pakistan's national income. The contribution of various sectors. Per capita income causes of inequality of income distribution.

Recommended Books:-

For section I:

- | | | |
|------------------------------|---|--|
| Samuelson, P.A | : | Economics (McGraw-Hill Company, New York, 1961) |
| Stonier, A.H. and Huage, D.C | : | A Text-Book of Economic Theory (Longman, London, 1964) |

For section I:

- | | | |
|--------------------------------|---|--|
| Adrus, J.R. and Mohammad, A.F. | : | Trade, Finance and Development in Pakistan, (Karachi 1966) |
| Meenal, S.A. | : | Money and Banking in Pakistan (Karachi, 1966) |
| Qureshi, AI (ed.) | : | The Third Five Year Plan and Other Papers (Rawalpindi, 1966) |
| Mahbub-u-Haq | : | The Strategy of Economic Planning – A Case Study of Pakistan, (Karachi, Oxford University Press, 1963) |
| Govt. of Pakistan | : | First, Second and Third Five-Year Plans of Pakistan Report of the Food and Agricultural Commission (Karachi, 1960) |
| -do- | : | Pakistan Economic Survey for the years 1963-64, 1964-65 and 1965-66. |
| -do- | : | Pakistan Budgets for the years 1964-65, 1965-66 and 1966-67. |

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ASSOCIATE DEGREE IN ARTS
ENGLISH LITERATURE (OPTIONAL)

Appendix 'A'
(Outlines of Tests)

Marks
100

Paper:

Appendix 'B'
(Syllabi and Courses of Reading)

Paper:

1. A Book of English Prose, edited by Dr. Imdad Hussain.
2. The Mayor of Casterbridge by Hardy.
3. As you like it (Shakespeare).

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ASSOCIATE DEGREE IN ARTS
FINE ARTS (Optional):

APPENDIX A

(Outlines of Courses)

Paper: 100 Marks

APPENDIX 'B'

(Syllabi and Courses of Reading)

Paper: History of Indo-Pakistan Architecture.

Imperial Style Shahabuddin Ghori to Aurangzeb, 1186 AD, 1605 AD

OR

History of Indo-Pak Painting.

Pre-Mughal	..	..	..	..	(Gujrati School) (Rajput School)
Mughal	..	..	..	..	(Mughal School)
Post-Mughal	..	..	..	..	(Pahari School)

OR

History of Indo-Pak Sculpture.

1. Indus Valley.
2. Buddhism.

Books recommended:

- | | | |
|---|---|--|
| 1. Indian Architecture | : | 1. Percy Brown |
| 2. Muslim Architecture Bengali | : | 2. Dr. A. H. Dani |
| 3. Thatta | : | 3. M. Idrees Siddiqui |
| 4. Important Monuments | : | 4. Muhammad Wali Ullah Khan, T.I. |
| 5. History of Fine Arts in India and Ceylon | : | 5. Vincent Smith |
| 6. Indian Miniatures | : | 6. Basil Gray |
| 7. Hand-book of Muhammad Art | : | 7. Dr. M. S. Diamand |
| 8. Indian Art | : | 8. K. Bharata Iyer |
| 9. The Art of India and Pakistan | : | 9. Sir Leigh Aston |
| 10. Indian painting | : | 10. Percy Brown |
| 11. Indus Valley Civilization | : | 11. Sir Mortimer Wheeler |
| 12. The Buddhist Art of Ghandhara | : | 12. Sir John Marshall |
| 13. Ghandhara Sculpture | : | 13. Department of Archaeology
Ferozsons Lahore. |
| 14. Indian Sculpture | : | 14. S. Karmisch, London. |

**ASSOCIATE DEGREE IN ARTS
GEOGRAPHY (OPTIONAL)**

**Appendix 'A'
(Outlines of Tests)**

Paper : General Geography of Pakistan

100

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper: General Geography of Pakistan:

General Geography of Pakistan under the following heads:-

- (i) Relief
- (ii) Climate
- (iii) Natural Vegetation
- (iv) Irrigation
- (v) Agriculture
- (vi) Minerals
- (vii) Power Resources

Books Recommended:-

Kazi, S. Ahmad,
Press, Karachi.

: A Geography of Pakistan, Oxford University

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**ASSOCIATE DEGREE IN ARTS
HISTORY (OPTIONAL)**

**Appendix 'A'
(Outlines of Tests)**

Paper :	Marks
History of Islam from the Holy Prophet to 1258 (Excluding the Provincial Dynasties)	100

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper : Dynasties)	History of Islam from the Holy Prophet to 1258 (Excluding the Provincial
-------------------------------------	---

Books Recommended:-

- | | |
|---------------------------------|-------------------------------|
| 1. Hamid-ud-Din | Tarikh-I-Islam (Urdu) |
| 2. Inayat Ullah | Tarikh-I-Islam (Urdu) |
| 3. Muhammad Iqbal | Daastan-I-Islam (Urdu) |
| 4. Abdul Qadir and Shuja-ud-Din | Tarikh-I-Islam, Lahore (Urdu) |
| 5. Fayyaz Mahmud | History of Islam, Lahore. |

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**ASSOCIATE DEGREE IN ARTS
HOME ECONOMICS (OPTIONAL)**

APPENDIX A

(Outlines of Courses)

Paper:	Marks 100
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APPENDIX 'B'

(Syllabi and Courses of Reading)

Paper:

Marks

- | | |
|---|-----------|
| (a) Child Development Family Relations:- | 25 |
|---|-----------|
- (1) Introduction to the study of family life:-
 - (a) Meaning of Family Relations and Child Development, Cultural, Social, Economics Status conferring factors in relations with the family.
 - (b) A brief account of different stages of the family life cycle.
 - (2) The child and his parents:-
Parental development – environmental influences, expectant mother – new born baby.
 - (3) Family Interaction:-
Adult Behaviour and Personality – Basic Trust, Care of Family Crisis – Illness – Death, Divorce Discretion in view with the social and cultural analysis.
- | | |
|--------------------------------|-----------|
| (b) Clothing: | 25 |
|--------------------------------|-----------|
- (1) (a) Selection of clothes in accordance with personal characteristics: keeping the art, principles and elements in mind; colour, line, design, fabric texture.
 - (2) Care and storage of clothing:-
 - (a) Influence of the physiological and economic factors on families and their clothing.
 - (b) Stain Removal.
 - (c) Seasonal Storage – Silk, wool and synthetics.
- | | |
|--|-----------|
| (c) Food and Nutrition: | 25 |
|--|-----------|
- (1) Definition of Food and Nutrition.
 - (2) Functions of food – (a) Energy yielding foods, (b) Body building foods (c) Protective foods.
 - (3) Sources and functions of nutrients – carbohydrate, fat, protein, minerals and vitamins.
 - (4) Nutritive value of foodstuffs – cereals and millet, pulses, meat, fish, eggs and poultry, fruits and vegetables, milk and milk products, nuts and oilseeds, fats and oil, carbohydrate foods, condiments and spices.
 - (5) Effects of cooking on the nutritive value of foods.
 - (6) Requirements of dietary essential principles of meal planning. Planning menu of breakfast, lunch and supper for children, adults and industrial agricultural workers.
- | | |
|--|-----------|
| (d) Home Managements: | 25 |
|--|-----------|
- (1) Home Management – its importance in the home.
 - (2) Steps of management – planning, controlling and evaluation.
 - (3) Ways of improving standard of living by good management of family resources.
 1. Money management – techniques.
 2. Budget purposes; making budgets according to various levels of income.
 1. Equipment in the home; evaluation of equipment pieces and their comparisons.
 2. Care and storage of home equipment, developing colour schemes for one's home.

ASSOCIATE DEGREE IN ARTS
International Relations (Optional)

CONTENTS:

1. The Nature and Evolution of International Relations.
2. The Nature and Development of Modern State-System.
3. Sovereignty and National Interest.
4. Colonialism, Imperialism, Neo-Colonialism and Nationalism.
5. National Power. Elements of National Power.
6. Balance of Power and Deterrence.
7. Foreign Policy: Determinants and Objectives.
8. Diplomacy.
9. International Law.
10. Economic Aspects of International Relations
11. The Concept of War and Peace in International Relations.
12. New Trends in International Relations.

REQUIRED TEXT.

1. Columbus, Theodore, Introduction to International Relations: Power New Delhi: Prentice-Hall, 1992.
2. Kegley, Charles W. Jr., & Wittkopf, Eugene R., World Politics: Trend & Transformation. (4th ed.) New York: St. Martin's Press, 1993.
3. Papp, Danial, Contemporary International Relations. (3rd ed.), New York: Macmillan, 1990.

Further Suggested Readings:

1. Aaron, Raymond, Peace and War: Theory of International Relations. Melbourne: Kreiger Pub. 1981.
2. Bull, H., & Watson, A., The Expansion of International Society. London: Oxford University Press, 1986.
3. Caplin, William D., Introduction to International Politics. Englewood Cliffs: Prentice-Hall, 1980.
4. Deutsh, K. W., The Analysis of International Relations. Englewood Cliffs: Prentice-Hall, 1978.
5. Frankal, Joseph, International Relations in a Changing World. (4th ed.), New York: Oxford University Press, 1991.
6. Goldstine, Joshua S., International Relations. Washington D.C., Harper Collins, 1992.
7. Hartman, Fredric, The Relations of Nations. (6th ed.), New York: Macmillan, 1983.
8. Hass, Ernest B., & Witing, Allen S., Dynamics of International Relations. New York: McGraw-Hill, 1956.
9. Holsti, K.J., International Politics: A Framework for Analysis. (7th ed.), Englewood Cliffs, :: Prentice-Hall, 1995.
10. Palmer, Norman D, & U International Relations. Parkins, Howard C., New York: Houghton Mifflin Co., 1994.
11. Morgenthau, Hans J., Politics Among Nations: The Struggle for Power and Peace. (7th ed.), : New York Knopf, 1985.
12. Rosen, Steven, J., The Logic of International Relations. (3rd ed.), Cambridge: Winthrop, 1980.
13. Reynolds, P. A., An Introduction to International Relations. (2nd ed.), London: Longman, 1980.
14. Schuman, Frederick, International Politics. New York: Mc Graw-Hill, 1969.
15. Wright, Quincy, The Study of International Relations. New York: Irvington Pub. 1986.
16. Zeigler, David, War, Peace and International Politics. (6th ed.), Boston: Little, Brown and Co, 1993.

ASSOCIATE DEGREE IN ARTS

اسلامیات آپشنل

Appendix 'B'

(Islamic Studies Optional)

(Syllabi and Courses of Reading)

(a) (i) Revelation, compilation and preservation of the Holy Qur'an, Maccan and Medinite Suras, I-jaz-al Qur'an.

(ii) Al-Qur'an: Surat-ul-Fateh and Surat-al-Hujrat (Chapters 48 and 49).

(b) Islamic History - Khilafat-e-Rashida, according to the following outlines:

Hazrat Abu Baqar - his life, Character, policy and achievements

Hazrat Umar - his life, character, policy and achievements.

Hazrat Usman - his life, character, policy and achievements.

Hazrat Ali, his life, character, policy and achievements.

Characteristics of the Khilafat-e-Rashida, and its religious and cultural achievements.

(Details of battles are excluded).

10 نمبر

تعارف قرآن مجید (دو میں سے ایک سوال کرنا ہے)

-1

40 = 20+20 نمبر

قرآن مجید کے سلیبس سے صرف ترجمہ (تین میں سے دو اجزاء حل کریں)

-2

20 = 10+10 نمبر

قرآن مجید کے سلیبس سے ترجمہ و تفسیر (دو میں سے ایک جزو حل کریں)

-3

30 = 15+15 نمبر

خلفائے راشدین کی سیرت و کردار پر سوالات۔ (چار میں سے دو سوالات حل کرنے ہیں)

-4

100 نمبر

کل نمبر:

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ASSOCIATE DEGREE IN ARTS

Journalism (Optional)

Outlines of Test

Marks: 100

Paper:

What is Journalism? Importance of Journalism in relation to society. How a newspaper is produced from collection of news upto the preparation of copy printing?

Role of advertising in the life of a newspaper and society.

Description of the Pakistan Press.

Books Recommended

Fann-i-Sahafat by Dr. Abdus Salam Khurshid and (use relevant chapters)

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SUBJECT: LIBRARY SCIENCE
ASSOCIATE DEGREE IN ARTS (ELECTIVE COURSE)
(Optional COURSE)

Revised Contents/Outline:

7- Introduction to Libraries

Definition and Objectives of Libraries
Types of Libraries
Various Sections of Libraries
Importance of Libraries in education and society
Qualities of a Good Library User

8- History of Books and Libraries

History and Origin of Libraries
Some important Libraries of Pakistan

9- Library Material

- A) - Printed: Books, Periodicals, Newspapers, Reports, Thesis
B) - Non-Printed materials: Manuscripts, Audio Visual materials, Microforms, Motion Pictures, Floppy Disk and CDs

10- Classification

Meaning and definition of classification
Introduction to Dewey decimal classification scheme
1st Summary of DDC
Call No: An introduction

5. Acquisition of Library Material: Meaning and Definition

Principals of Books selection
Book Selection Tools
Accessioning of library printed material (Accession Register).

6. Cataloguing

Meaning and definition of cataloguing
Use and purpose of cataloguing
Kinds and forms of cataloguing

7. Reference Sources and Services

(a) Printed Sources

Dictionaries –Encyclopedia –Bibliographies
Directories –Periodicals – Geographical Sources

(b)- Electronic Sources

Databases

CDs,

Website

Internet

E-mail

8. Computer in Libraries

Introduction to Computers

Components of Computer

Use of Computer in Libraries

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ASSOCIATE DEGREE IN ARTS

MATHEMATICS (OPTIONAL)

(Outlines of Course)

Paper: (Algebra $\frac{1}{2}$ and Calculus $\frac{1}{2}$)

Marks = 100

i) Algebra ($\frac{1}{2}$)

Introduction to Number System, Algebra of Matrices and determinants of order 2×2 , 3×3 , Addition, subtraction of matrices, scalar multiplication and multiplication of matrices, singular and non-singular matrices, adjoint and inverse of matrices.

Solution of equations by using matrices and Cramer's Rule.

Determinants:

Minor and co-factor of an element of a matrix in its determinants. Determinant of a square matrix of order 2×2 and 3×3 properties of determinants.

Quadratic Equations:

Some polynomial functions, Remainder and Factor Theorem, Synthetic Division, Relation between Roots and co-efficients of a quadratic equation. System of two equations involving two variables. Arithmetic, Geometric and harmonic sequences. Arithmetic Series, Geometric Series, Infinite Geometric Series.

Trigonometry:

Fundamentals of Trigonometry and Trigonometric identities.

ii) Calculus and Analytic Geometry ($\frac{1}{2}$)

Limit, Continuity (Simple Cases), Differentiation and Integration (Simple Cases), Differential equations (Variables separable). Introduction of a vector. Simple cases of dot and cross product of vectors.

Note:

Mathematics (Optional) means Mathematics General (Optional), A-Course of Mathematics (Optional) or B-Course of Mathematics (Optional).

ASSOCIATE DEGREE IN ARTS

Persian (Optional)

Appendix-A

	Marks
1. Gulistan (Prose). Translation of the passages into Urdu	25+20 = 45
2. Payam-i-Mashriq (Poetry). Translation and explanation of the passages into Urdu	25+20 = 45
3. General Question on the life and works of the author/poet and a critical appreciation of their works included in the syllabus.	10

Appendix-B

Books recommended:

- 1 گلزار ادب مطبوعہ پنجاب یونیورسٹی لاہور
- 2 گلستان سعدی باب اول در سیرت پادشاهان کی پہلی 20 حکایات
- 3 پیام شرق از علامہ محمد اقبال کی درج ذیل نظمیں۔
i۔ فصل بہار ii۔ زندگی iii۔ ہروداد نم iv۔ نیم صبح v۔ کرم کتابی vi۔ حکمت و شعر vii۔ کرک شب و تاب
viii۔ حدی ix۔ محاورہ ما بین خدا و انسان x۔ اگر خواہی حیات اندر نظرزی xi۔ زندگی و عمل xii۔ الملک اللہ

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**ASSOCIATE DEGREE IN ARTS
PHILOSOPHY (OPTIONAL)**

**Appendix 'A'
(Outlines of Tests)**

	Marks
Paper:	100

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper:

1. Nature, scope and function of Philosophy.
2. Greek thought from Thales to Aristotle.
3. The Modern Age – Descartes.
4. System Builders – Spinoza, Leibnitz Kant.
5. Knowledge and the sources of Knowledge – Lock, Berkley and Hums.
6. Compromise – Rationalism and Empiricism.
7. Future of Philosophy.

Books Recommended:

Hector Hawton: Philosophy for Pleasure (Chapter 1-7 and last), Fawestt Words Library, 67 West, 44th Street, New York, New Yorks.

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ASSOCIATE DEGREE IN ARTS
POLITICAL SCIENCE (OPTIONAL)

(Syllabi and Courses of Reading)

	Total Marks
Paper: Political Science	100
Section 'A' Political Theory	60
Section 'B' Constitution of Pakistan	40

Paper: Political Science:-

Section A: Political Theory:

1. The Nature and Scope of Political Science, its relations to other Social Sciences, fields of specialists within Political Science; Political Theory; Political Dynamics; International Relations; Comparative Governments and Public Administration Goals and uses of Political Science and the Problems of the study of Political Science in the modern times.
2. The State: Its essential elements, nature and definition, distinction between state society, Government, nation and nationality.
3. Theories of the State:
 - i) Theories concerning origin of the State (briefly): purpose and end of the state.
 - ii) Concepts of Sovereignty, its Meaning and Attributes, including the Islamic Concepts of Sovereignty.
 - iii) The Functions of the State.
4. The State and the Individual:
 - i) Rights; Theory of Natural Rights; Political and Civil Rights; Rights and Responsibilities.
 - ii) Liberty, its meaning, Liberty and Equality, Adjustment of Liberty and sovereignty.
 - iii) Law, Definition and Nature, the Sources of Law, Law and Morality, Law and Opinion, the Administration of Justice, and judiciary.
5. Organization of the State.
 - i) Unitary
 - ii) Federal, distribution of powers in the Federal System.
 - iii) Other (Confederations, Unions, etc)
6. Forms of Government and their characteristics.
 - i) Monarchy, absolute and Constitutional Democracy and Concept of Democracy public in Islam.
 - ii) Representative Government – Parliamentary and Presidential Systems Separation of Power.
 - iii) Dictatorship – Characteristics and Various Types.
7. Election and the Party System.
 - i) Political Parties – Definition, Party functions. Types of Party System, Two party system and Multi-party system
 - ii) Director Legislation: Initiative, Referendum, Recall and Plebiscite.
8. Modern Political Thought.
Individualism, Socialism, Communism, Idealism, Fascism.

Section B: Constitution of Pakistan

- i) Salient features of the Constitution of Pakistan
- ii) Presidency.
- iii) National Assembly; Provincial Government; Judicial System; Fundamental Rights; Basic Democracies.

Books Recommended:-

- i) Rodee, Anderson and Christal Introduction to Political Science, New York: McGraw-Hill, (lates ed.)
- ii) C.E.M. Joad Modern Political Theory, London: Oxford University Press, Amen House, E.C. 4, 1960
- iii) Roger, H. Saltau An Introduction to Politics, New York: Longman Green and Co. New York
- iv) H.J. Laski A Grammer of Politics London: Allen and Unwin.
- v) R.M. Maciver The Modern State, Oxford University Press.
- vi) H.J. Laski State in Theory and Practice, London: Allen and Unwin.
- vii) Coker Recent Political Thought, New York: McGraw-Hill.
- viii) M. Rafi Anwar Presidential Government in Pakistan.
- ix) Z.A. Sulari Politicians and Ayub.

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**ASSOCIATE DEGREE IN ARTS
PSYCHOLOGY (OPTIONAL)**

**Appendix 'A'
(Outlines of Tests)**

Total Marks

Paper: **100**

**Appendix 'B'
(Syllabi and Courses of Reading)**

Paper:

1. Definition, subject matter, Scope and methods.
2. Sensation, Sight and Hearing.
3. Perception.
4. Learning.
5. Individual Differences.
6. Memory and Imagination.
7. Feeling and Emotion,
8. Motivation-Violation.
9. Personality, Development, Factors of Personality. Social and Physiological Aspects.

Books Recommended:-

Psychology – A study of Mental Life. Woodworth, R.S.

OR

Nafsiyat by C.A. Qadir

Note:- Students who have taken Psychology in B.A as an elective subject cannot take up the subject of Psychology (Optional).

ASSOCIATE DEGREE IN ARTS

PUNJABI (OPTIONAL)

APPENDIX "A"

Outline of Tests

نمبر	100	ادبی مہکاں	آپشنل	پہچہ
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APPENDIX "B"

SYLLABI & COURSES OF READING

نمبر	100	آپشنل	پہچہ
			تشریح
			نظم
		شعراں دی تشریح + شاعر داناں + نظم داسرناواں	1- نظم
		عبارتاں دی تشریح + لکھاری داناں + سبق داسرناواں	2- نثر
		چپ شاہ + دل داپر چھانواں + جچی + پاکستان دی تحریک تے پنجابی لکھاری + بس داسر سرہوں دے پھل تے پکیاں مٹرکاں + ادبی تے غیر ادبی لکھتاں وچ فرق۔	
نمبر	10		3- اک نثری سبق دا خلاصہ
		چپ شاہ + دل داپر چھانواں + جچی + بس داسر + سرہوں دے پھل تے پکیاں مٹرکاں	
نمبر	10		4- اک نظم داسرناوی خیاں۔
		سجرا سورج + چاند بی بی + تیری یاد + کھیڈ لے + جین لئی جتن + کجھ کرو + سکھ دا دکھ + پیار تے دین انج کیہ پکائیے۔	
نمبر	20		5- اردو توں پنجابی ترجمہ

Text Book (Prescribed)

(مجوزہ)

نصابی کتاب

ادبی مہکاں

مرتبہ

ڈاکٹر شہباز ملک (مدیر)

اسلم رانا۔ ڈاکٹر سید اختر جعفری

پونس اختر۔ نور احمد شاہ

تاج بک ڈپو اردو بازار لاہور

پبلشرز

ASSOCIATE DEGREE IN ARTS

SOCIAL WORK (OPTIONAL)

**Appendix 'A'
(Outlines of Tests)**

Paper: **Total Marks**
..... **100**

**Appendix 'B'
(Syllabi and Courses of Reading)**

1. Introduction:-

- i) Definition of Social Work.
- ii) Concept of voluntary and professional Social Work.

2. Basic Concepts / Principles:-

- i) Worth and dignity of the individual.
- ii) Self help.
- iii) Self determination.
- iv) Confidentiality.
- v) Participation.

3. Introduction to Basic Methods of Social Work:-

- i) Case Work.
- ii) Group Work.
- iii) Community Development.

4. Fields of Social Work:-

- i) Child Welfare.
- ii) Youth Welfare.
- iii) Women Welfare.

5. Important Social Problems:-

- i) Beggary.
- ii) Over Population.
- iii) Drug Addiction etc.

ASSOCIATE DEGREE IN ARTS
SOCIOLOGY (OPTIONAL)

Appendix A
(Outlines of Courses)

Total Marks

Paper: **100**

Appendix B
(Syllabi and Courses of Reading)

Paper:

1. Introduction:-

- i) Field of Sociology.
- ii) Sociology as a science.
- iii) Sociology and other Social Sciences.

2. Basic Concept:-

- i) Interaction.
- ii) Norms and Sanctions
- iii) Status and roles.
- iv) Values and Beliefs
- v) Institutions
- vi) Social structure
- vii) Groups
- viii) Social organizations
- ix) Society

3. Culture:-

- i) Elements of Culture.
- ii) Cultural Processes.

4. Socialization and Personality Developments:-

- i) Biological foundations of personality.
- ii) Cultural background of personality.

5. Processes and Social Change:

- i) Co-operation, competition and conflict.
- ii) Social Change: determinants, deterrents, and consequences of change.

Text Books:-

- i) Chaudhry Mohammad Iqbal, and Mushtaq Ahmad Khan Sociology: An introduction, Lahore, Noorsons, 1966.
- ii) Young, Kimbal, and Raymond W. Mack Sociology and Social Life New York: American Book Company, 1959.

ASSOCIATE DEGREE IN ARTS
Statistics (Optional)

Outlines of Tests

Paper: (Written) Time – 3 hours Marks
100

Syllabi and Courses of Reading

Paper: (Written)

1. Introduction

Definition, Characteristics and limitations of statistics, Collection, classification and tabulation of data.

2. Graph and Diagrams

Bar and pie diagrams. Graphs of frequency distribution viz. Histogram, frequency polygon, frequency curve, cumulative frequency curve, Graphic interpolation.

3. Averages

Elementary knowledge and numerical illustrations of arithmetic mean, median mode, and weighted average. Smoothing of fluctuations by moving average method.

4. Dispersion:

Elementary knowledge and numerical illustrations of range, fractiles, quartile deviation, standard deviation, co-efficient of skewness and co-efficient of variation.

5. Attributes and Chi-Square:

Concept of attribute, idea of independence and association, dichotomy, co-efficient of association, contingency table. Chi-square.

6. Correlation:

Concept of regression, simple correlation and rank correlation with numerical illustrations.

7. Sampling:

Concept of sampling. Definition of population and sampling unit. Purposive and random sampling. Drawing of a random sample without replacement from finite population.

Books Recommended:

1. Zia-ud-Din, M., Practical Statistics with Fundamentals of Theory, 8th edition, The Punjab Educational Press, Lahore.
2. Chambers, E.G., Statistical Calculations for Beginners. Cambridge University Press, London.

ASSOCIATE DEGREE IN ARTS

نصاب (اُردو آپشنل)

نصاب کا خاکہ

معروضی حصہ

۱۔ حصہ نظم اور نثر کے حوالے سے مختصر سوالات کے جوابات ۲۰ نمبر

حصہ نثر

۱۔ تشریح و مطالب ۱۵ نمبر

۲۔ تعارف اصنافِ نثر ۱۰ نمبر

۳۔ تعارف مصنف ۵ نمبر

حصہ نظم

۱۔ تشریح شعر ۱۵ نمبر

۲۔ تعارف اصنافِ شعر ۱۰ نمبر

۳۔ تعارف شاعر ۵ نمبر

حصہ بیان و بدیع

۱۔ تشبیہ ۱۰ نمبر
استعارہ

۲۔ مجاز مرسل ۱۰ نمبر
کنایہ

۳۔ صنعت مراعات النظیر ۱۰ نمبر
صنعت تضاد

صنعت تلمیح
صنعت تعلیل

☆☆☆

کل نمبر ۱۰۰

☆☆☆

نصاب کی تفصیل

حصہ نثر

۱۔ قصہ خواجہ سگ پرست کا	میرامن دہلوی	(باغ و بہار سے اقتباس)
۲۔ پاکستان بن گیا	خدیحہ مستور	(تب تو اس مرد نے قدم بڑھا کر..... غار میں ڈال کر اپنی خاطر جمع کر کے پھرے)
۳۔ نیا قانون	سعادت حسن منٹو	(ناول ”آگن“ سے اقتباس)
۴۔ بابے والا	غلام عباس	(افسانہ)
۵۔ بگل والا	ڈاکٹر رشید امجد	(افسانہ)
۶۔ میل اور میں	پطرس بخاری	(طہر و مزاح)
۷۔ پڑیے گر بیمار	مشتاق احمد یوسفی	(طہر اور مزاح)
۸۔ تسخیر کائنات	غلام جیلانی اصغر	(انشائیہ)

حصہ شعر

غزلیات:

۱۔ میر تقی میر	(ہستی اپنی حباب کی سی ہے)
۲۔ اسد اللہ خاں غالب	(باز بچہ اطفال ہے دنیا میرے آگے)
۳۔ مومن خان مومن	(اثر اس کو ذرا نہیں ہوتا)
۴۔ حسرت موہانی	(دیکھنا بھی تو اسے دور سے دیکھا کرنا)
۵۔ ناصر کاظمی	(نئے کپڑے بدل کر جاؤں کہاں اور بال بناؤں کس کے لیے)

نظمیں:

۱۔ نظیر اکبر آبادی	برسات کی بہاریں (پانچ بند)
۲۔ علامہ محمد اقبال	مرد مسلمان
۳۔ فیض احمد فیض	مجھ سے پہلی سی محبت
۴۔ مجید امجد	آٹو گراف
۵۔ منیر نیازی	ہمیشہ دیر کر دیتا ہوں میں