

FEDERAL PUBLIC SERVICE COMMISSION
(Curriculum & Research Wing)

Scheme and Syllabi for Screening/ Professional Tests Relating to
Posts Advertised Vide Consolidated Advertisement No. 06/2014

<p>For Each Case No. of Paper : 1 Marks : 100 Time Allowed: 100 Minutes</p>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
1.	129/2014	Research Officer (Urdu), (BS-17), Finance Division	<p>i Second Class OR Grade 'C' Master's Degree in Urdu or equivalent qualifications from a University recognized by the HEC</p> <p>ii Two (2) years post qualification experience in translation from English to Urdu and Vice Versa</p>	Subjective Professional Test = 100 marks	<ul style="list-style-type: none"> • Translation of Five paragraphs on Financial matters from English to Urdu 10X5=50 Marks • Translation of Five paragraphs on Financial matters from Urdu to English 10X5=50 Marks
2.	131/2014	Assistant Professor (Male) (Commerce) (BS-18), F.G. Colleges/ Higher Secondary Schools for Men, Federal Directorate of Education, Islamabad, Capital Administration and Development Division	<p>Ph.D. Degree in the relevant subject and one (01) year post qualification teaching experience at College/ University level.</p> <p align="center">OR</p> <p>M. Phil in the relevant subject with three (03) years post qualification teaching experience at College/ University Level.</p> <p align="center">OR</p> <p>Second Class or Grad "C" Master's Degree in the relevant subject with five (05) years post qualification teaching experience at College/ University level</p>	<p>Objective Type Test (MCQ)</p> <p>Part-I</p> <p>Subject Test = 70 marks</p> <p>Part-II</p> <p>Professional Test=30 marks</p>	<p>Part-I (Masters Level)</p> <ul style="list-style-type: none"> • Auditing • Cost Accounting • Managerial Economics • Financial Management • Operations and Production Management • Research Methods in Business • Computer Application in Business (E-Commerce) • Banking/Islamic Banking • Business Law/Commercial Law <p>Part-II</p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Educational Planning and Management, • Testing and Evaluation, • Development of Education in Pakistan.
3.	137/2014	Assistant Executive Engineer (BS-17), (Civil), PAK. PWD, Ministry of Housing & Works.	Bachelor's Degree in Engineering in Civil from a recognized University.	<p>Objective Type Test (MCQ)</p> <p>Part-I</p> <p>English = 20 marks</p> <p>Part-II</p> <p>Professional Test=80 marks</p>	<p>Part-I</p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p>Part-II</p> <ul style="list-style-type: none"> • Building Material & Building Construction, • Surveying & Levelling, • Hydraulic & Hydrology, • Soil Mechanics & Foundation, • Concrete Technology & R.C.C Structure Design, • Construction Management, • Structural Design Applications, • Engineering Materials, • Reinforced Concrete, • Ground Improvement, • Earth and Rock Structure.

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
4.	138/2014	Lecturer (Male) (BS-17), A. English B. Mathematics C. Economics D. Arabic E. Philosophy F. Education G. Statistics H. Commerce I. Physical Education J. Physics K. Chemistry L. Urdu M. Islamic Studies N. Pakistan Studies O. Political Science P. Computer Science Q. Persian R. Library Science S. Geography T. Applied Psychology Federal Government Colleges for Men, Federal Directorate of Education, Islamabad, Capital Administration and Development Division.	Second Class or Grade 'C' Master's degree or equivalent in the relevant subject.	Objective Type Test (MCQ) <u>Part-I</u> English = 20 marks <u>Part-II</u> Subject Test = 50 marks <u>Part-III</u> Professional Test = 30 marks Note: <ul style="list-style-type: none"> ▪ In Language Subjects (i.e Urdu, English, Arabic and Persian), English part for 20 marks will not be included. ▪ There will be 70% subject Test and 30% Professional Test. ▪ In the subject of Education, there will be 20% English Test and 80% Subject Test. 	<u>For A (English)</u> <u>Part-I (Master's Level) (70 Marks)</u> <ul style="list-style-type: none"> • English Literature 16th to 20th Century. • Vocabulary • Structuring of Sentences. • Linguistics. • English Language Teaching. • Grammar. • Syntax. • Diction. <u>Part-II (30 Marks)</u> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan. <hr/> <u>For B (Mathematics)</u> <u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring <u>Part-II (Masters Level)</u> <ul style="list-style-type: none"> • Calculus/Differentiation, Integration, Limits of Continuity • Discrete Structures/Discrete Mathematics, • Communication Skills for Mathematicians, • Computing Tools for Mathematicians, • Classical Mechanics, • Mathematical Statistics, • Real Analysis, • Mathematical Spaces (Sets, Vector Spaces, Metric Spaces, topological spaces Tensors, • Differential Equations <u>Part-III</u> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan.

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For C (Economics)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring.</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Micro Economics, • Macro Economics, • International Trade, • Economics Development, • WTO and Developing Economies, • Monetary Theory & Public Finance, • Agriculture Development in Pakistan • Industrial Development in Pakistan • Energy Crises and Policy in Pakistan • Interest Free Banking in Pakistan <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan <p><u>For D (Arabic)</u></p> <p><u>Part-I (Master's Level) (70 Marks)</u></p> <ul style="list-style-type: none"> • History of Arabic literature • History of Semetic Languages • Arabic Phonetic • Arabic Syntax • Arabic Classical Literature • Arabic Vocabulary, • Arabic Grammar usage, • Arabic Sentence Structure <p><u>Part-II (30 Marks)</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For E (Philosophy)</u></p> <p><u>Part-I</u></p> <p>Vocabulary, Grammar Usage, Sentence Structuring.</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Definition, Nature and Scope of Philosophy • Philosophical Methods • Muslim Thinkers: Allama Iqbal., Imam Ghazali, Al-Farabi, Ibn-e- Sina, Ibn-e- Khaldun, Ibn-e-Rushid, Shah Wali Ullah • Ethics • Contemporary Philosophical Movements <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan <p><u>For F (Education)</u></p> <p><u>Part-I (20 marks)</u></p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (80 marks)</u></p> <ul style="list-style-type: none"> • Aims of Education in Pakistan, • Educational Reforms in Pakistan, • Philosophy of Education, • Sociology of Education, • Educational Psychology, • Educational Guidance & Counseling, • Educational Planning & Management, • Educational Administration and Supervision, • Curriculum Development & Instructions, • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan • Issues and Problems of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For G (Statistics)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Master's Level)</u></p> <ul style="list-style-type: none"> • Measures of Central Tendency, • Measures of Dispersion or Variation, • Regression and Correlation, • Index Numbers, • Probability Theory, • Probability Distributions, • Frequency Distribution & Graphical Presentation of data • Time Series Analysis, • Statistical Inference, • Sampling Theory and Techniques, • Analysis of Variance, • Experimental Design. <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan <hr/> <p><u>For H (Commerce)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring.</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Auditing • Cost Accounting • Managerial Economics • Financial Management • Operations and Production Management • Research Methods in Business • Computer Application in Business • Banking/Islamic Banking • Mercantile Law <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For I (Physical Education)</u></p> <p><u>Part-I</u> Vocabulary, Grammar usage, Sentence Structuring.</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Philosophy of Physical Education, • Curriculum of Physical Education, • Psychology of Physical Education, • Measurement & Evaluation, • Rules of all games, • Rules of all Athletic events, • Recreation, • Audio Visual aid, • Athletic Injuries, • Handicap Sports Organization. • Development of Physical Education in Pakistan <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan
					<p><u>For J (Physics)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Heat and Thermodynamics, • Waves and Optics, • Electrostatic, • Electricity and Magnetism, • Atomic and Modern Physics, • Nuclear Physics, • Basic Solid State Physics, • Basic Electronics, • Electrodynamics, • Mechanics <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p>For K (Chemistry)</p> <p>Part-I</p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p>Part-II (Masters Level)</p> <ul style="list-style-type: none"> • Chemical Kinetics, • Chemical Equilibrium, • Quantum Theory of Atom, • Synthetic Chemistry & Polymers, • Reaction Mechanism, • Green Chemistry, • Spectroscopy, • Nano Technology, • Colloidal State. <p>Part-III</p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan
					<p>For L (Urdu)</p> <p>Part-I (Master's Level) (70 Marks)</p> <p>اروڈ ذخیرہ الفاظ ☆</p> <p>اروڈ جملے کا ڈھانچہ ☆</p> <p>اروڈ قواعد کا استعمال ☆</p> <p>لسانیات ☆</p> <p>انیسویں اور بیسویں صدی کا اردو ادب اور اس کا تنقیدی جائزہ ☆</p> <p>اردو ادب کی نثری اصناف کا تحقیقی جائزہ ☆</p> <p>اردو ادب کی شعری اصناف کا تحقیقی جائزہ ☆</p> <p>غالبیات ☆</p> <p>اقبالیات ☆</p> <p>Part-II (30 Marks)</p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan.

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p>For M (Islamic Studies)</p> <p>Part-I Vocabulary, Grammar usage, Sentence Structuring</p> <p>Part-II (Masters Level)</p> <p>☆ قرآن کا ہزاروں موضوعات میں ☆ حدیث: حدیث کی صحت کو پہنچنے کا معیار ☆ سیرت النبی ﷺ ☆ فقہ: ہامیت، اختلاف رائے اور صحیح حاضر کے تقاضے ☆ عرب کی تاریخ۔ ☆ تعلقے و اشعار۔ ☆ تاریخ اسلام۔</p> <p>Part-III</p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan <p>For N (Pakistan Studies)</p> <p>Part-I Vocabulary, Grammar Usage, Sentence Structuring.</p> <p>Part-II (Masters Level)</p> <ul style="list-style-type: none"> • Ideology of Pakistan, • Current Issues of Pakistan, • Geography of Pakistan, • Constitutional History of Pakistan, • Language and Cultural Heritage of Pakistan, • Natural Resources of Pakistan, • Economic Development of Pakistan, • Pakistan and Islamic World, • Pakistan's Relations with UNO and its Agencies, • Current Affairs of Pakistan and its Neighbouring Countries. • Pakistan's disputes with India <p>Part-III</p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For O (Political Science)</u></p> <p><u>Part-I</u> Vocabulary, Grammar usage, Sentence Structuring.</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Ideology of Pakistan, • Pakistan Movement, • Political System of Pakistan (Constitutional Development) • Muslim Political Thoughts and Institutions, • Comparison of Political Systems, • International Relations, • International Law, • Local Government System in Pakistan, • Dynamics of Politics in Pakistan <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan <hr/> <p><u>For P (Computer Science)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Introduction to Computing • Data Communication & Networking, • C/C++ Language, • Visual Basic, • Operating System Unix/Linux • Windows XP, 2000, • Oracle/PLSQL, • System Analysis & Design, • Computer Architecture, • Operating System Concepts, • Software Engineering, • Security and Ethical issues • Database Systems, • Management Information System, • Web Programming, <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For Q (Persian)</u></p> <p><u>Part-I (Master's Level) (70 Marks)</u></p> <ul style="list-style-type: none"> • Classical Persian Prose and Poetry • Modern Persian Literature, • History of Persian Language and Literature, • Study of Iranian History and Culture, • Iqbal's Persian Poetry and Thoughts. <p><u>Part-II (30 Marks)</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan. <p><u>For R (Library Science)</u></p> <p><u>Part-I</u></p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Introduction to Library & Information Science • Information Sources and Services • Classification: Theory and Practice • Cataloguing: Theory and Practice • Procurement, Maintenance and Issuance of Library Books • Management of Libraries & Information Centres • Library Automation/Information Storage & Retrieval • Research Methods & Techniques for Librarians • Public Records, Rare Material & their Conservation • Management of Serials Publications • Rules & Procedure regarding Write Off the Library Losses <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					<p><u>For S (Geography)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Geographic Thoughts, • Regional Geography, • Geography of Pakistan, • Human Geography, • Economic Geography, • Statistical Geography, • Principles of Cartography, • Climatology/Metrology, • Oceanography, • Environmental Geography, • GIS Techniques, • Geomorphology <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan
					<p><u>For T (Applied Psychology)</u></p> <p><u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring</p> <p><u>Part-II (Masters Level)</u></p> <ul style="list-style-type: none"> • Social Psychology • Educational Psychology and Student's Learning • Psychology of Mass Communication • Psychological Testing and Assessment • Neuro-Biological Basis of Behaviour • Industrial Psychology • Counseling Psychology • Developmental Psychology • Research Methodology • Abnormal and Clinical Psychology <p><u>Part-III</u></p> <ul style="list-style-type: none"> • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
5.	139/2014	Assistant Director (BS-17), Department of Libraries, Capital Administration and Development Division	<p>Second Class or Grade 'C' Master's Degree in Library Science/Library and Information Science.</p> <p>OR</p> <p>Graduate with diploma in Library Science from a University or Bachelor of Library Science plus five (5) years post qualification professional experience in BS-16 otherwise eight (8) years if not in BS-16.</p> <p>OR</p> <p>Second Class or Grade 'C' Master's Degree with diploma in Library Science or Bachelor of Library Science</p>	<p>Objective Type Test (MCQ)</p> <p>Part-I</p> <p>English = 20 marks</p> <p>Part-II</p> <p>Professional Test=80 Marks</p>	<p>Part-I</p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p>Part-II</p> <ul style="list-style-type: none"> • Introduction to Library & Information Science • Information Sources and Services • Classification: Theory and Practice • Cataloguing: Theory and Practice • Procurement, Maintenance and Issuance of Library Books • Management of Libraries & Information Centres • Library Automation/Information Storage & Retrieval • Research Methods & Techniques for Librarians • Public Records, Rare Material & their Conservation • Management of Serials Publications • Rules & Procedure of Write off the Library Losses
6.	140/2014	Charge/Staff Nurse (BS-16), Federal Government Polyclinic, Islamabad, Capital Administration and Development Division	<p>i. Registered Nurse and Registered Midwife with PNC.</p> <p>ii. For Male one year course/ certificate in nursing related field in lieu of midwifery.</p>	<p>Objective Type Test (MCQ)</p> <p>Part-I</p> <p>English = 20 marks</p> <p>Part-II</p> <p>Professional Test=80 Marks</p>	<p>Part-I</p> <p>Vocabulary, Grammar Usage</p> <p>Part-II</p> <ul style="list-style-type: none"> • Basic Medical Sciences • General Nursing • Ward Administration • Hospitality of the Patients • Care vs. Cure for health management
7.	141/2014	Deputy Director (BS-18), Federal Seed Certification & Registration Department, Ministry of National Food Security and Research	<p>i) Second Class or Grade 'C' Master's Degree in Agriculture in one of the subjects of Seed Technology, Plant Breeding, Plant Pathology, Plant Physiology, Agronomy, Plant Protection, Horticulture, Entomology and Agriculture Extension OR M.Sc. (Botany).</p> <p>ii) At least five (5) years post qualification experience in Seed certification and Seed testing.</p>	<p>Objective Type Test (MCQ)</p> <p>Part-I</p> <p>English = 20 marks</p> <p>Part-II</p> <p>Professional Test=80 marks</p>	<p>Part-I</p> <p>Vocabulary, Grammar Usage, Sentence Structuring</p> <p>Part-II</p> <ul style="list-style-type: none"> • Seed Technology • Seed Certification/Testing • Plant Breeding and Genetics • Plant Pathology/Physiology • Agronomy • Horticulture • Agriculture Extension • Plant Protection • Agricultural Entomology • Botany.

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
8.	142/2014	Store Officer (BS-16), Department of Libraries, Capital Administration and Development Division	i) Second Class or Grade "C" Bachelor's Degree from a University recognized by HEC. ii) Two (2) years post qualification experience of Stores work in supervisory capacity in a government/semi government organization or autonomous body	Objective Type Test (MCQ) <u>Part-I</u> English =20 marks <u>Part-II</u> Professional Test =80 marks	<u>Part-I</u> Vocabulary, Grammar Usage <u>Part-II</u> <ul style="list-style-type: none"> • Basic Arithmetic • General Science • Basic knowledge of I.T • Procedures of Receipt and Issue of Stores. • Procedure for Purchase of Stores. • Stores handling procedures with relation to following topics:- <ol style="list-style-type: none"> a. Stock Taking b. Care and Preservation of Stores c. Ware House Management
9.	143/2014	Editor National Bibliography (BS-17), Department of Libraries, Capital Administration and Development Division	Second Class or Grade 'C' Master's Degree in Library Science/Library and Information Science. OR Graduate with diploma in Library Science from a University or Bachelor of Library Science plus five (5) years post qualification professional experience in BS-16 otherwise eight (8) years if not in BS-16. OR Second Class or Grade 'C' Master's Degree with diploma in Library Science or Bachelor of Library Science	Objective Type Test (MCQ) <u>Part-I</u> English = 20 marks <u>Part-II</u> Professional Test=80 Marks	<u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring <u>Part-II</u> <ul style="list-style-type: none"> • Bibliography and National/International Bibliographic Control • Information Sources and Services • Classification: Theory and Practice • Cataloguing: Theory and Practice • Procurement, maintenance and issuance of library books • Editing, Printing and Publications • Library Automation/Information Storage & Retrieval • Research Methods & Techniques for Librarians • Public Records, Rare Material & their Conservation • Copyright and Depository Laws

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
10.	144/2014	Website Manager (BS-17), Federal Public Service Commission	Second Class or Grade 'C' Master Degree in Computer Science/ BCS (4 years)/ IT/ Electronics or equivalent. OR B.Sc. in Computer Engineering (software). OR Second Class or Grade 'C' Master Degree in Mathematics/ Statistics/ Physics/ Economics and one year diploma in Computer from the recognized Institution.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 Marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Introduction to Web, • Web Architecture, • Multiple Browsers, • Search Engine Optimization, • Hyper Text Markup Language (HTML), • Graphic Elements, • Page Styles and Layouts, • Web Server Functionality, • Configuring Web Server, • Relational Databases and Web, • Java Script for Web development, • Multimedia and Web, • Fundamentals of XML and XHTML, • Search and downloading of information and required data.
11.	150/2014	Senior Auditor (BS-16), Pakistan Military Accounts Department, Ministry of Defence	i. Second Class or Grade 'C' Bachelor's Degree in Business Administration (Finance/ Accounting)/ Commerce/ Economics/ Statistics/ Mathematics or equivalent qualifications from a University recognized by the Higher Education Commission. ii. Two (2) years post qualification experience in the field of Accountancy/Auditing OR i. Second Class or Grade 'C' Bachelor's Degree from a University recognized by HEC. ii. ICMA/ACMA iii. One (1) year post qualification experience in the field of Accountancy/Auditing	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 Marks	Part-I Vocabulary, Grammar Usage, Part-II <ul style="list-style-type: none"> • Accounting Principles & Procedures, • Scrutiny of Record for Audit Purpose, • Journal, ledger & Cash Book, • Annual Budget, • Adjustment & Depreciation, • Financial Planning & Cost Accounting, • Head of Accounts, Re-appropriation of Accounts and Supplementary Grant, • Settlement of Audit Objections • Preparation of Pension Documents. • Public Procurement Rules, 2004

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
12.	151/2014	Electro Medical Personnel (BS-16), Armed Forces Institute of Dentistry (AFID), Rawalpindi, Ministry of Defence	i. Post Matric, three years Diploma in Electro-medical/Mechanical ii. Five (05) years post qualification experience in the relevant field OR i. Retired Sub Maj./Sub E.M.E. ii. Five (05) years experience in the relevant field	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 Marks	Part-I Vocabulary, Grammar Usage, Part-II <ul style="list-style-type: none"> • AC-DC Converter • Functioning of Transformers • Utility of Transistor, Diode, Capacitor and ICs. • Amplification and Rectification Circuits • Flip Flop Circuits • Logic Gates • Maintenance of Wireless Equipments • Electronic Circuits
13.	152/2014	Assistant Professor (Female) (Fine Arts) (BS-18), F.G. Colleges, Directorate of Federal Government Educational Institutions (Cantts/ Garrisons), Ministry of Defence	Ph.D. Degree in the relevant subject with one (01) year post qualification teaching experience at College/ University level. OR M.Phil Degree in the relevant subject with three (3) years post qualification teaching experience at College/ University level. OR Second Class or Grade 'C' Master's Degree in the relevant subject with five (5) years post qualification teaching experience at College/ University level.	Objective Type Test (MCQ) Part-I Subject Test = 70 marks Part-II Professional Test=30 marks	Part-I (Masters Level) <ul style="list-style-type: none"> • Drawing • Painting • Printmaking • Sculpture • Ceramics • Crafts • Islamic Calligraphy • Islamic Arts Part-II <ul style="list-style-type: none"> • Teaching Techniques and Methodology, • Educational Planning and Management, • Testing and Evaluation, • Development of Education in Pakistan.
14.	153/2014	Assistant Director (BS-17), Ministry of Law, Justice and Human Rights	Second Class or Grade 'C' Master's Degree or LLB Degree or equivalent qualifications from a University recognized by the Higher Education Commission.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test=80 Marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Issues of Human Right • Human Rights in Pakistan • National Commission for Human Right Act, 2008 • United Nation Declaration of Human Rights • Measure for Prevention of Violence against Women • Prevention of Illegal Human Trafficking

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
15.	154/2014	Nautical Instructor (BS-19) Pakistan Marine Academy Karachi, Ministry of Ports and Shipping.	i) Certificate of Competency or Certificate of Service as Master of Foreign-going ships. ii) At least two (2) years post qualification experience in Command or three (3) years post qualification experience as Second-in Command/Chief Officer of ships.	Objective Type Test (MCQ) Professional Test = 100 marks	<ul style="list-style-type: none"> Professional Theoretical Instructions in the Classroom Practical Instructions in General Seamanship Training visits alongwith Cadets Planning and Development of Training Courses and Material Classroom Management and Discipline. Evaluation of the Instructional Objectives/Material
16.	155/2014	Lady Doctor (BS-17), Model Child Welfare Centre, Humak, Islamabad, Capital Administration and Development Division	i. MBBS or equivalent qualification recognized by the Pakistan Medical & Dental Council. ii. Valid Registration with PMDC on or before the closing date is required.	Objective Type Test (MCQ) <u>Part-I</u> English =20 marks <u>Part-II</u> Professional Test=80 marks	<u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring <u>Part-II</u> <ul style="list-style-type: none"> Core Courses of MBBS degree Program Health Policy of the Government. Medical Care and Cure Services

**Syllabi for Written Examination (Descriptive)
for all posts in BS-20 & 21**
(Case Nos. 128/2014, 130/2014)

PAPER: ENGLISH (100 MARKS)

There will be only one paper of 100 marks for BS-20 & BS-21 posts.

English Essay: Candidates will be required to write one Essay in English from three topics comprising approximately **2000 words**. Candidates are expected to reflect comprehensive and research based knowledge on a selected topic. Candidate's articulation, expression and technical treatment of the style of English Essay writing will be examined.

OR

Case Study: Candidates will be given real situation case studies related to advertised posts/organization concerned and will be expected from the candidates to present (i) identification of issues (ii) evaluation of issues (iii) legal or case related theories (iv) evaluation of case facts if required and (v) possible solution of the case or writing judicial order, if the case so requires.

Syllabi for Written Examination (Descriptive) for all posts in BS-18 &19

(Case Nos. 131/2014, 141/2014, 152/2014 and 154/2014)

PAPER-I: ENGLISH (100 MARKS)

- (i) **English Essay-50 Marks:** Candidates will be required to write one Essay in English from **six topics** comprising approximately **1500 words**. Candidates are expected to reflect comprehensive and research based knowledge on a selected topic. Candidate's articulation, expression and technical treatment of the style of English Essay writing will be examined.
- (ii) **English (Composition and Précis)-50 Marks:**
The examination will test the candidate's abilities to handle Précis Writing, Reading Comprehension, Sentence Structuring, Translation, Grammar and Vocabulary, etc.
- Précis Writing (10 marks):** A selected passage with an orientation of generic understanding and enough flexibility for compression shall be given for précising and suggesting an appropriate title.
- Reading Comprehension (10 marks)**
A selected passage that is rich in substance but not very technical or discipline-specific shall be given, followed by five questions to be attempted, each carrying 2 marks.
- Grammar and Vocabulary (10 marks):** Correct usage of Tense, Articles, Prepositions, Conjunctions, Punctuation, Phrasal Verbs, Synonyms & Antonyms etc.
- Sentence Correction (5 marks):** Ten sentences shall be given each having a clear structural flaw in terms of grammar or punctuation. The candidates shall be asked to rewrite them with really needed correction only, without marking unnecessary alterations. No two or more sentence should have exactly the same problem and 2-3 sentences shall be based on correction of punctuation marks.
- Grouping of Words (5 marks):** A random list of ten words of moderate standard (neither very easy nor utterly unfamiliar) shall be given, to be grouped by the candidates in pairs of those having similar or opposite meaning, as may be clearly directed in the question.
- Pairs of Words (5 marks):** Five pairs shall be given of seemingly similar words with different meanings, generally confused in communication, for bringing out the difference in meaning of any five of them, by first explaining them in parenthesis and then using them in sentences.
- Translation (5 marks):** Ten short Urdu sentences involving structural composition, significant terms and figurative/idiomatic expressions shall be given, to be accurately translated in English.

SUGGESTED READINGS

Sr. No.	Title	Author
1.	English Grammar in Use	Raymond Murphy (Cambridge University Press)
2.	Practical English Usage	M. Swan (Oxford University Press)
3.	The Little, Brown Handbook	H. Ramsey Flower & Jane Aaron (The Little, Brown & Co; Harper Collins)
4.	A University English Grammar	R. Quirk & S. Greenbaum (ELBS; Longmans)
5.	Write Better, Speak Better	Readers Digest Association
6.	Modern English in Action	Henry Christ (D.C. Heath & Co.)

PAPER-II: PROFESSIONAL (100 MARKS)
for Assistant Professor (Female) (Fine Arts) (BS-18)
(Case No. 152/2014)

Part-I: (Fine Arts)

50 Marks

I. Drawing

- Basic design principles, concepts, media and formats.
- Knowledge and skills in the use of basic tools, techniques, and processes

II. Painting

- Basic elements of Art, concepts, media and formats and the ability to apply them to their aesthetic intent.
- Knowledge and skills in the use of basic tools, techniques, and processes

III. Printmaking

- Basic elements of art and design principles, concepts, media, and formats.
- Knowledge and skills in the use of basic tools, techniques, processes, and types of printing presses.

IV. Sculpture

- Basic elements of art and design principles with an emphasis on three-dimensional design, and the ability to apply these principles to a specific aesthetic intent.

V. Ceramics

- Knowledge and skills in the use of basic tools, techniques, and processes.
- Preparation of clay bodies and glazes, kiln stacking procedures, and firing processes.
- Knowledge of the history of ceramics

VI. Crafts

- Knowledge and skills in the use of traditional craft techniques, including Islamic Arts,
- Knowledge of various design methods and their relationship to the conceptualization, development, and completion of craft projects.
- Similarities, differences, and relationships among the various craft specializations.

VII. Islamic Calligraphy

- Importance of Calligraphy as Central to Islamic Art and its relationship to the Quran.
- Difference between handwriting and calligraphy, recognizing the purpose of calligraphy as both aesthetic and functional.

VIII. Islamic Arts

- Philosophy of Islamic art in a historical and contemporary context.
- Knowledge of Islamic Art and civilization with emphasis on philosophy, art, architecture, crafts, achievements in various fields and lifestyles.

Part-II: (Professional)**50 Marks****I. Curriculum Development and Implementation**

- Elements of Curriculum.
- Relationship of Education and Curriculum
- Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives Taxonomies of Educational Objectives, Selection of Content, Development of Curricular Materials.

II. Process of Teaching and Teaching Strategies

- Process of Classroom Communication
- Factors affecting Classroom Communication
- Barriers to Classroom Communications
- Use of Instructional Materials and Media

III. Education Assessment and Evaluation

- Concept of Classroom Assessment and Evaluation
- Distinction between Assessment, Evaluation and Measurement
- Approaches to Evaluation: Formative Evaluation; Summative Evaluation
- Types of Test: Essay Type; Objective Type: Multiple Choice, True-False Items, Matching Type; Principles of Construction of these Test
- Characteristics of a Good Test: Validity, Reliability, Objectivity, Usability

IV. Education Administration and Supervision

- The Concept of Administration
- Educational Planning and Organization in Pakistan
- Approaches to Educational Administration: Democratic; Authoritarian; Laissez-faire
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire; Interview; Test; Observation; Rating Scale
- Type of Research: Basic/Applied Research; Historical Research; Descriptive Research; Correlation Research; Causal-Comparative Research; Experimental Research; Action Research; Qualitative and Quantitative Research
- Research Proposal and Report Writing

SUGGESTED READINGS

S. No.	Title	Author
1.	Printmakers Today,	Jeffrey B. Snyder
2.	Painting In Pakistan,	Hassan, Ijaz ul
3.	Islamic Art & Spirituality,	Nasr, Seyyed Hossein
4.	Sculpture Today	Beaumont, M, et al
5.	Image and Identity.	Akbar Naqvi

S. No.	Title	Author
6.	Research in Education	JW Best
7.	Integrating Education Technology into Teaching	Roblyer
8.	Curriculum Development	S. M. Suhail
9.	Educational Measurement and Evaluation	S. M. Suhail
10.	Educational Administration	S. M. Suhail

PAPER-II: PROFESSIONAL (100 MARKS)
for Assistant Professor (Male) (Commerce) (BS-18)
 (Case No. 131/2014)

Part-I: (Commerce)

50 Marks

- I. **Introduction to Business Finance:** Nature and Scope of a Business Entity, Contemporary Challenges posed to a Business; Common Legal Forms of a Business Entity. Meaning, Nature and Scope of Finance and Financial Management; Common Modes (Types) of Business Finance – Short-, Medium-, and Long-Term Financing; Nature and Scope of Financial Markets and Institutions; Features and Classification of Financial Markets; Financial Management Techniques for Decision-making
- II. **Auditing:** Nature and Purpose of Auditing, Audit Planning and Control, Audit Procedures and Techniques, Audit Evidence and Documentation, Completion of an Audit, Performance of Audit, The Reporting of Audit, Internal Audit:
- III. **Role and Responsibilities of an Auditor:** Auditor's professional and legal Rights, Responsibilities & Duties, and Liabilities; Auditor's Opinion and Report, and their classification (Types); - as specified under the Companies Ordinance 1984, and in the handbook of IFAC.
- IV. **Fundamental Accounting Principles, Concepts, Assumptions and Conventions:** Nature and Scope of Accounting, Accrual/Matching Concept, Consistency of Presentation and Comparability, True and Fair View, Neutrality, Materiality, Prudence, Completeness, Understandability and Usefulness, Going Concern, and Substance over Form.
- V. **Cost Accounting:** Concepts and Scope of Cost Accounting, Cost Classification and Flows, Material Costing and Control, Labour Costing and Control, Factory Overhead Costing and Control, Types of Costing Systems
- VI. **Managerial Economics:** The Nature and Scope of Managerial Economics, Optimization Techniques and new Management Tools, Demand Theory, Demand Estimation, Demand Forecasting, Production and Cost Analysis, Cost Theory and Estimation, Linear Programming, Risk Analysis
- VII. **Financial Management:** Elements of Financial Administration, Performance and Programmed Budgeting, Capital Budget, Principles of Budgeting, Auditing and Accounting.

Part-II: (Professional)

50 Marks

- I. **Curriculum Development and Implementation**
 - Elements of Curriculum.
 - Relationship of Education and Curriculum
 - Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives Taxonomies of Educational Objectives, Selection of Content, Development of Curricular Materials.

II. Process of Teaching and Teaching Strategies

- Process of Classroom Communication
- Factors affecting Classroom Communication
- Barriers to Classroom Communications
- Use of Instructional Materials and Media

III. Education Assessment and Evaluation

- Concept of Classroom Assessment and Evaluation
- Distinction between Assessment, Evaluation and Measurement
- Approaches to Evaluation: Formative Evaluation; Summative Evaluation
- Types of Test: Essay Type; Objective Type: Multiple Choice, True-False Items, Matching Type; Principles of Construction of these Test
- Characteristics of a Good Test: Validity, Reliability, Objectivity, Usability

IV. Education Administration and Supervision

- The Concept of Administration
- Educational Planning and Organization in Pakistan
- Approaches to Educational Administration: Democratic; Authoritarian; Laissez-faire
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire; Interview; Test; Observation; Rating Scale
- Type of Research: Basic/Applied Research; Historical Research; Descriptive Research; Correlation Research; Causal-Comparative Research; Experimental Research; Action Research; Qualitative and Quantitative Research
- Research Proposal and Report Writing

SUGGESTED READINGS

S. No.	Title	Author
1.	Fundamentals of Accounting Principles	Wild. Larson. Chiappetta
2.	Principles of Accounting, and Advanced Accounting	Sohail Afzal
3.	Cost Accounting	Nisar ur Din.
4.	Advanced Auditing	Prof. Dr. Khuaja Amjad Seed
5.	Research Methods for Business	Sekaran Uma
6.	Managerial Economics	Micheal Baye
7.	Research in Education	JW Best
8.	Integrating Education Technology into Teaching	Roblyer
9.	Curriculum Development	S. M. Suhail
10.	Educational Measurement and Evaluation	S. M. Suhail
11.	Educational Administration	S. M. Suhail

PAPER-II: PROFESSIONAL (100 MARKS)
for Deputy Director (BS-18)
 (Case No. 141/2014)

Part-I: 20 Marks
 (Basic Concepts only)

- I. Public Administration
- II. Human Resource Management
- III. Financial Management
- IV. Information Technology and MS Office

Part-II: 80 Marks
 (Professional)

- I. **Concept of Integrated Agriculture:** Components of natural resources as bases for agriculture production (Land, Water, biological, Environmental, Solar, Energy)
- II. **Challenges in Pakistan's Agriculture:** Present scenario and future prospects. Analytical overview: issues and strategies for improvement of crop management, livestock management, fisheries, cottage industry, resource management and rural development. Institutions and policies: issues and options.
- III. **Elements of Climate and their Relationship with Crop Growth:** Farming Systems, biological nitrogen fixation, soil profile, structure and texture, soil fertility, soil erosion and conservation, water logging and salinity
- IV. **Genetic Improvement for Crop Production:** GMO crops, Seed production technology.
- V. **Horticulture:** Floriculture, landscaping, pests and diseases of agriculture crops and their control, integrated pest management.
- VI. **Rainfed and Irrigated Agriculture:** Agriculture mechanization, land tenure and land reforms, role of agriculture in national economy.

Suggested Reading

S.No.	Title	Author
1.	An Introduction to the Public Administration	E.N.Cladden
2.	Human Resource Management	H.T.Graham & Roger Bennett
3.	System of Financial Control and Budgeting, 2006	Published by Finance Division
4.	Understanding Computers: Today and Tomorrow	Deborah Morley, Charles Parker
5.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson
6.	Participatory Rural Development in Pakistan	Khan, M. H
7.	Agriculture in Pakistan	Khan M. H.
8.	Fundamentals of Soil Science	Henry D. Foth
9.	Manual of Plant Production	Abdul Manan.
10.	Principles of Field Crop Production	Martin., J.H. & Leonard, W.H.

S.No.	Title	Author
11.	Diseases of Field Crops	Dickson, J.G
12.	Irrigation Principles & Practices	Isrealson, O.W. Vaughn, E. Hansen.
13.	A Text Book of Plant Pathology	A.V.S.S. Sambamurti
14.	The Principles of Agronomy.	Harris, Franklin Stewart

PAPER-II: PROFESSIONAL (100 MARKS)
for Nautical Instructor (BS-19)
 (Case No. 154/2014)

Part-I: 20 Marks
 (Basic Concepts only)

- I. **Public Administration**
- II. **Human Resource Management**
- III. **Financial Management**
- IV. **Information Technology and MS Office**

Suggested Reading

S.No.	Title	Author
1.	An Introduction to the Public Administration	E.N.Cladden
2.	Human Resource Management	H.T.Graham & Roger Bennett
3.	System of Financial Control and Budgeting, 2006	Published by Finance Division
4.	Understanding Computers: Today and Tomorrow	Deborah Morley, Charles Parker
5.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson

Part-II: 80 Marks
 (Professional)

- I. Course Contents of **Certificate of Competency** or **Certificate of Service as Master of Foreign Going Ships**
- II. Pakistan Merchant Shipping Ordinance, 2001
- III. Mercantile Shipping (Safety Convention Certificate) Rules 1967.
- IV. Port Act 1908 (Relevant Portion)
- V. Lighthouse Act 1927
- VI. Coasting Vessels Act XIX of 1838