

**FEDERAL PUBLIC SERVICE COMMISSION**  
**(Curriculum & Research Wing)**

**Schemes and Syllabi for Screening/Professional Tests as well as Descriptive Examination**  
**Relating to Posts Advertised under Consolidated Advertisement No. 11 & 12/2024**

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
1.	204/2024	<b>Administrative Officer (BS-17)</b> , Federal Government Educational Institutions (Cantts/ Garrisons), Directorate, Ministry of Defence.	i. Second Class or Grade 'C' Master's degree from a University recognized by HEC. ii. Two (2) years post qualification experience in Administration / Establishment / Finance & Budget.	Objective Type Test (MCQ)  <b>Part-I</b> English = 20 marks  <b>Part-II</b> General Intelligence/ Professional Test= 80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring. <b>Part-II</b> <ul style="list-style-type: none"> <li>▪ Basic Arithmetic <ul style="list-style-type: none"> <li>– Algebra</li> <li>– Ratios</li> <li>– Percentages</li> <li>– Arithmetic Means</li> </ul> </li> <li>▪ Current Affairs. <ul style="list-style-type: none"> <li>– Issues/Challenges at National and International Level during the last 5 years</li> </ul> </li> <li>▪ Basic Pakistan Affairs &amp; Islamic Studies</li> <li>▪ Basic Computer Operation in MS Office</li> <li>▪ Civil Servant Act 1973 and Rules made thereunder</li> <li>▪ PPRA Rules 2004</li> <li>▪ Rules of Business, 1973 as amended from time to time</li> <li>▪ Secretariat Instructions and Office Procedures</li> <li>▪ System of Financial Control and Budgeting 2006</li> <li>▪ Human Resource Management</li> </ul>
2.	205/2024	<b>Secondary School Teacher (SST) (Male) (BS-17)</b> , Directorate of Federal Government Educational Institutions (Cantts/ Garrisons) Schools, Ministry of Defence.	Second Class or Grade 'C' Master's Degree with B.Ed. or equivalent qualification from a University recognized by HEC. <b>OR</b> M.A (Education) / M.A (EPM) from a University recognized by HEC.	Objective Type Test (MCQ)  <b>Part-I</b> English =20 marks  <b>Part-II</b> Professional Test=80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> <ul style="list-style-type: none"> <li>▪ Perspectives of Education in Pakistan</li> <li>▪ School Administration &amp; Supervision</li> <li>▪ Planning &amp; Management in Education</li> <li>▪ Educational Psychology</li> <li>▪ Curriculum Development &amp; Assessment</li> <li>▪ Teaching Methodology</li> <li>▪ Classroom Management</li> <li>▪ Educational Measurement &amp; Evaluation</li> <li>▪ Research Techniques in Education</li> <li>▪ Educational System in Pakistan</li> <li>▪ Educational Guidance &amp; Counselling</li> </ul>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
3.	210/2024	<b>Assistant Director (BS-17)</b> , Airports Security Force, Ministry of Aviation.	Second Class or Grade 'C' Master's / Bachelor's (16 years) degree or equivalent qualification from a University recognized by HEC.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> General Intelligence/ Professional Test = 80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> ▪ Basic Arithmetic – Algebra – Ratios – Percentages – Arithmetic Means ▪ Current Affairs. – Issues/Challenges at National and International Level during the last 5 years ▪ Pakistan Affairs & Islamic Studies – Basic Level knowledge ▪ Security Measures to Maintain Law & Order
4.	216/2024	<b>Principal Technician (BS-17)</b> , A. Anesthesia B. Cardiology C. Operation Theatre D. Pathology / Laboratory E. Pharmacy (Dispenser) F. Physiotherapy G. Radiology H. Surgical Pakistan Institute of Medical Sciences (PIMS), Islamabad, Ministry of National Health Services, Regulations and Coordination.	M.Sc. in respective discipline OR B.Sc. in respective discipline with five (5) years post qualification experience in the relevant field.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test=80 marks  <b>Note:</b> Separate Paper for each category should be devised.	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> ▪ Core Courses of Relevant Speciality
5.	217/2024	<b>Assistant Agriculture Engineer (BS-17)</b> , Soil Conservation Department, Directorate of Agriculture Extension Services, Office of the Chief Commissioner, ICT, Ministry of Interior.	B.Sc. Agricultural Engineering from a University recognized by HEC with two (2) years post qualification experience in field of Agricultural Engineering.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test=80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> ▪ Irrigation System of Pakistan ▪ Drainage System ▪ Farm Mechanism ▪ Agriculture Machinery

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
6.	218/2024	<b>Inspector (BS-16)</b> , Airports Security Force, Ministry of Aviation.	Bachelor's Degree. PHYSICAL STANDARD OF FITNESS: i. <u>Minimum Height</u> : For male 5'-6" or 168 cm and for female 5'-2" or 157 cm. ii. <u>Minimum Weight</u> : For male 106 Lbs. or 48.1 Kg and for female 45 Kg or 99.2 Lbs. iii. <u>Minimum Chest Measurement</u> : For male 32¾" or 83 cm Expanded 34¾" or 88 cm.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> General Intelligence/ Professional Test = 80 marks	<b>Part-I</b> Grammar Usage, Sentence Structuring. <b>Part-II</b> ▪ Basic Arithmetic – Algebra – Ratios – Percentages – Arithmetic Means ▪ Current Affairs. – Issues/Challenges at National and International Level during the last 5 years ▪ Pakistan Affairs & Islamic Studies – Basic Level knowledge ▪ Security Measures to Maintain Law & Order
7.	219/2024	<b>Inspector Customs / Intelligence Officer (BS-16)</b> , Revenue Division, Federal Board of Revenue.  <b>NOTE:</b> At first stage MCQs Screening Test shall be held, then on the basis of its result top merit position holders @ ten candidates per vacancy from respective quotas would be called for Descriptive Test.	i. Second Class or Grade 'C' Bachelor's degree from a recognized University with Economics, Commerce, Statistics, Accounting, Computer Science, Law, Pharmacy, Chemistry or Physics as one of the subjects or B.Sc. Engineering in any specialty. ii. Computer literacy up to the level of MS Word, MS Power Point and MS Excel.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> General Intelligence Test = 80 marks	<b>Part-I</b> Grammar Usage, Sentence Structuring <b>Part-II</b> ▪ Basic Arithmetic – Algebra – Ratios – Percentages – Arithmetic Means ▪ Current Affairs. – Issues/Challenges at National and International Level during the last 5 years ▪ Pakistan Affairs & Islamic Studies – Basic Level knowledge ▪ Basic Computer Operation in MS Office <b>Note:</b> For Pre-selected candidate, syllabus for Descriptive Test is at Page-7 below

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
8.	220/2024	<b>Civilian Store Officer, Grade-III (BS-17)</b> , Corps of EME, Ministry of Defence.	Second Class or Grade 'C' Master's degree in Business Administration (Supply Chain Management) or equivalent qualification from a University recognized by the HEC. OR Major / Captain (Retired) from EME Corps with requisite qualifications of the post.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test = 80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> <ul style="list-style-type: none"> <li>• Basic Arithmetic <ul style="list-style-type: none"> <li>– Algebra</li> <li>– Ratios</li> <li>– Percentages</li> <li>– Arithmetic Means</li> </ul> </li> <li>• Basic knowledge of I.T</li> <li>• Procedures of Receipt and Issue of Stores</li> <li>• Stores handling procedures with relation to following topics:- <ul style="list-style-type: none"> <li>– Stock Taking</li> <li>– Care and Preservation of Store items</li> <li>– Ware House Management</li> </ul> </li> <li>• Public Procurement Rules, 2004</li> </ul>
9.	221/2024	<b>Librarian (Female) (BS-16)</b> , Federal Government Educational Institutions, (Cantts/ Garrisons) Directorate, Ministry of Defence.	Second Class or Grade 'C' Bachelor's Degree with Diploma in Library Science. OR Bachelor of Library Science.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test=80 marks	<b>Part-I</b> Grammar Usage, Sentence Structuring <b>Part-II</b> <ul style="list-style-type: none"> <li>• Information Sources and Services</li> <li>• Bibliographic Control</li> <li>• Cataloguing: Theory and Practice</li> <li>• Procurement and Maintenance of Library Books</li> <li>• Digital Libraries</li> <li>• Library Automation</li> <li>• Information Storage &amp; Retrieval</li> <li>• Research Methods &amp; Techniques for Librarians</li> <li>• Public Records, Rare Material &amp; their Conservation</li> <li>• Management of Serials Publications</li> </ul>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
10.	222/2024	<b>Junior Scientific Officer (BS-17)</b> Naval Headquarters, Ministry of Defence.	Bachelor's Degree in Engineering in Electronics/ Chemical/ Electrical. <b>OR</b> i. Second Class or Grade 'C' Master's Degree in Physics/ Chemistry/ Textile Chemistry/ Metallurgy. ii. In case of Metallurgy knowledge of Ferrous and Non Ferrous materials and modern special technique. iii. In case of Textile Chemistry two (2) years post qualification experience in Textile Chemistry.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> General Science Test=80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring. <b>Part-II</b> <ul style="list-style-type: none"> <li>• Matter and its Properties</li> <li>• Atomic Structure</li> <li>• Compounds and Bonding</li> <li>• Chemical Reactions</li> <li>• Aqueous Solutions</li> <li>• Acids and Bases</li> <li>• Organic Molecules</li> <li>• Organic Products (Polymers, Oil, Soaps, Paints, Varnishes and Detergents)</li> <li>• Radioactivity and its Applications</li> <li>• Ferrous and Non Ferrous materials</li> <li>• Instrumentation (UV/Visible, FTIR, GC, HPLC, XRF, XRD, Pollution (Water and Air))</li> </ul>
11.	223/2024	<b>Assistant Manager Personnel and Administration Department (BS-16)</b> , Naval Headquarters, Ministry of Defence.	i. Second Class or Grade 'C' Bachelor's Degree with Business Administration. ii. Three (3) years post qualification experience in Establishment matters.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test=80 Marks	<b>Part-I</b> Grammar Usage, Sentence Structuring <b>Part-II</b> <ul style="list-style-type: none"> <li>▪ Principles of Management</li> <li>▪ Human Resource Planning,</li> <li>▪ Recruitment &amp; Selection,</li> <li>▪ Civil Servants Act, 1973 and Rules made thereunder</li> <li>▪ Rules of Business, 1973</li> <li>▪ Basic IT knowledge.</li> <li>▪ Basic Arithmetic,</li> <li>▪ System of Financial Control and Budgeting, 2006</li> <li>▪ Public Procurement Rules, 2004</li> </ul>
12.	224/2024	<b>Staff Welfare Officer (BS-17)</b> , Staff Welfare Organization, Establishment Division.	i. Second Class or Grade 'C' Master's degree (16 years education) in Social Work / Anthropology / Sociology. ii. Three (3) years post qualification experience in the field of Welfare / Social Work / Anthropology.	Objective Type Test (MCQ) <b>Part-I</b> English = 20 marks <b>Part-II</b> Professional Test = 80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> <ul style="list-style-type: none"> <li>▪ Community Organization and Development,</li> <li>▪ Social Research &amp; Statistics,</li> <li>▪ Organizational Behaviour and Human Resources,</li> <li>▪ Social Welfare Policy and Administration,</li> <li>▪ Criminology and its Remedial Measures,</li> <li>▪ Methods of Counselling &amp; Guidance Services</li> <li>▪ Environmental Sociology</li> <li>▪ Health Policy of the Government</li> </ul>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications/ Experience for the Posts	Test Specification	Topics of Syllabi
13.	225/2024	<b>Instructor (English) (BS-16)</b> , Staff Welfare Organization, Establishment Division.	i. Second Class or Grade 'C' Bachelor's degree (2-years) or equivalent qualification from a University recognized by the HEC. ii. At least six months Certificate in English shorthand and typing from a recognized institute.	Objective Type Test (MCQ) <u><b>Part-I</b></u> English = 20 marks <u><b>Part-II</b></u> Professional Test = 80 marks	<u><b>Part-I</b></u> Grammar Usage, Sentence Structuring. <u><b>Part-II</b></u> <ul style="list-style-type: none"> <li>▪ Communication Skills,</li> <li>▪ Presentation Skills</li> <li>▪ Teaching Methodology</li> <li>▪ Classroom Management</li> <li>▪ Testing and Evaluation</li> <li>▪ Computer Hardware/Software,</li> <li>▪ Windows 10/11,</li> <li>▪ Basic Computer Operation in MS Office</li> </ul>

**Syllabus for Descriptive Test of**  
**F.4-219/2024 (Inspector Customs/ Intelligence Officer)**

Max Marks: 100

Qualifying Standard 50%

Time Allowed: 3 Hours

**Part-I (English Essay): 40 Marks**

Candidates will be required to write an Essay in English comprising **1000 words** from a set of **four given topics**. Candidates are expected to reflect comprehensive knowledge on a selected topic. Candidate's articulation, expression and technical approach to the style of English Essay writing will be examined.

**Part-II (Current Affairs): 30 Marks**

Candidates will be expected to demonstrate knowledge on current affairs related to the following:

- CPEC and Pakistan,
- Kashmir Issue,
- Pak US relations
- Afghanistan Crisis
- Basic Economic facts related to Pakistan

**Part-III (Islamic Studies/Pakistan Studies): 30 Marks**

**I. Islamic Studies**

Introduction to Islam, Seerah of the Prophet Muhammad (PBUH) as Role Model, Status of Woman in Islam, Articles of Faith, Islamic Code of Life, Islamic Concept of Human Rights

**II. Pakistan Studies**

Parliamentary democracy in Pakistan under 1973 Constitution, Salient features of the Constitution of Pakistan 1973, Economic Challenges for Pakistan, Major social problems of Pakistan.

**SUGGESTED READINGS**

S. No.	Title	Author
1.	Pakistan and World Affairs	Shamshad Ahmad (Edition-2015)
2.	Constitution of Pakistan 1973	
3.	Kashmir in Conflict: India, Pakistan and the Unending War.	Schofield, Victoria. New York: I.B.Tauria, 2003.
4.	Modern South Asia: History, Culture, Political Economy.	Jalal, Aisha and Bose, Sugata. New York: Routledge, 1998.
5.	Federalism and Ethnic Conflict Regulation in India and Pakistan.	Adeney, Katharine. , New York: Palgrave Macmillan, 2007.
6.	Issues in Pakistan's Economy	S. Akbar Zaidi
7.	Economic Survey of Pakistan	Government Publication
<b>For Islamic Studies</b>		
8.	Introduction to Islam	Dr. Hamidullah
9.	Islam: its meaning and Message	Khurshid Ahmad
10.	Insan e Kamil	Dr Khalid Alvi
11.	Islami Tehzeeb Kay Chund Darakhshan Pehloo	Mustafa Sabali

**Schemes and Syllabi for Written Examination (Descriptive) for Posts in  
BS-20 advertised under Consolidated Advertisement No. 11/2024**

Case No.	F.4-211/2024-R
Particulars of post	<b>Fisheries Development Commissioner (BS-20)</b> , Ministry of Maritime Affairs.
Minimum Qualification & Experience:	<p>i. Ph.D. or M.Phil. / MS or Second Class or Grade 'C' Master's or Bachelor's (4 years education) degree in Fisheries &amp; Aquaculture/ Marine Biology or Zoology with Specialization in fisheries or equivalent qualification from a University recognized by the HEC.</p> <p>ii. Thirteen (13) years post qualification experience in case of Ph.D. or Fifteen (15) years post qualification experience in case of M.Phil/ MS. or Seventeen (17) years post qualification experience in case of Master's or Bachelor's (4 years education) degree in the field of Marine/ Inland Fisheries or Aquaculture Technology.</p>

**PAPER: PROFESSIONAL (100 MARKS)**

**Analysis Paper:** Candidates will be required to analyse a situation related to advertised post and suggest/draw suitable solution comprising approximately **1000 words**. Candidate's research based knowledge as well as articulation, expression and technical treatment of the situation 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) case related theories (iv) evaluation of case facts if required and (v) possible solution of the case, if the case so requires.



## Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 (other than Doctors) included in Consolidated Advertisement No. 11 & 12/2024

### PAPER-I: ENGLISH

Max Marks: 100

Time Allowed: 3 Hours

- (i) **English Essay-50 Marks:** Candidates will be required to write an Essay in English comprising **1500 words** from a set of **six given topics**. Candidates are expected to reflect comprehensive and research based knowledge on a selected topic. Candidate's articulation, expression and technical approach to 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 précisising 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, each carrying 2 marks.
- Grammar and Vocabulary (10 marks):** Correct usage of Tense, Articles, Prepositions, Conjunctions, Punctuation, Phrasal Verbs, Synonyms and 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 sentences 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
2.	Practical English Usage	M. Swan
3.	Practical English Grammar and Composition	S.C. Gupta
4.	Improve your Punctuation & Grammar	Marion Field
5.	The Little, Brown Handbook	H. Ramsey Flower & Jane Aaron
6.	A University English Grammar	R. Quirk & S. Greenbaum
7.	Write Better, Speak Better	Readers Digest Association
8.	Modern English in Action	Henry Christ
9.	Exploring the World of English	Syed Saadat Ali Shah

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-206/2024-R
Particulars of post	<b>Civilian Store Officer (Grade-II) (BS-18)</b> , Corps of EME, Ministry of Defence.
Minimum Qualification & Experience:	M.Phil. in Engineering Management or equivalent qualification from a University recognized by the PEC with three (3) years post qualification experience relating to Store Supply and Logistics / Management / Accounts matters in a Government / Semi-Government / Autonomous / Public / Private Organization.  <b>OR</b> Second Class or Grade 'C' Master's degree in Business Administration (Supply chain Management) or equivalent qualification from a University recognized by the HEC with five (5) years post qualification experience relating to Store Supply and Logistics / Management / Accounts matters in a Government / Semi-Government / Autonomous / Public / Private Organization. OR Colonel / Lieutenant Colonel (Retired) from EME Corps with requisite qualification and experience of the post.

**Part-I: 25 Marks (MCQ)**

- 25 MCQ Questions on Part-II & III.

**Part-II: 50 Marks (Descriptive)**

(Public Administration, Office Management &amp; Professional)

- I. **Public Administration:** Nature and scope, Role of Public Administration in a modern Welfare State; Issues & Challenges of Public Administration in Pakistan;
- II. **Administrative Accountability:** Internal and External Controls; Executive Control, Legislative Control, Judicial Control, Ombudsman, Public Opinion and Pressure Groups; Problems of Administrative Accountability in Pakistan;
- III. **Planning:** Types of Plans, Planning Process; Principles of Planning, Planning Machinery in Pakistan;
- IV. PPRA Ordinance 2002 and Rules 2004.
- V. Procedures for Receipt and Issue of Stores
- VI. Stores procedures with relation to following topics:-
  - Stock Taking
  - Care and Preservation of Military Stores
- VII. Ware House Management
- VIII. Inventory Management

**Part-III: 25 Marks (Descriptive)**

(Human Resource, Financial Management and Quality Management)

**I. Human Resource and Financial Management**

Definition, Significance and Scope of Human Resource Management; Organization—Types of Organization, Theory of Organization, Principles of Organization, Organization of the Federal and Provincial Governments, Public Sector Enterprises; Approaches to

Human Resource Management. Personnel Administration—Tools of Personnel Management: Selection, Training, Promotion, Compensation, Discipline; Communication, Communication Channels and Principles of Public Relations; Human Behaviour and Organizations Administration.—Elements of Financial Administration, Performance Programmed Budgeting, Capital Budget, Principles of Budgeting, Auditing and Accounting.

## II. Basic Concept of Quality Management

ISO-9000, ISO-13000, other certifications regarding quality measurement; management, management for Results, Setting Performance Goals and Targets; Job Analysis: Job Description, Job Specification, Performance Evaluation;

### SUGGESTED READINGS

S. No.	Title	Author
1.	An Introduction to the Public Administration	E.N. Cladden
2.	Public Administration for a Welfare State	Paul Ableby
3.	Warehouse Distribution & Operation Handbook	Mulcahy, D.E.
4.	Inventory Control and Management	Walters, D.
5.	The Bureaucracy of Pakistan	Charles F. Kennedy
6.	Human Resource Management	H.T.Graham & Roger Bennett
7.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-207/2024-R
Particulars of post	<b>Works Manager, Grade-II (BS-18)</b> , Corps of EME, Ministry of Defence.
Minimum Qualification & Experience:	B.Sc. Engineering in Electrical / Mechanical / Electronics / Telecommunication / Chemical / Metallurgical / Aeronautical from a University recognized by the PEC with Five (5) years post qualification experience in the relevant field of Engineering works in a Government / Semi-Government / Autonomous / Public / Private Organization. OR Lieutenant Colonel / Major (Retired) from EME Corps with requisite qualifications and experience of the post.

**Part-I: 25 Marks (MCQ)**

- 25 MCQ Questions on Part-II & III.

**Part-II (Engineering) (Subjective) : 50 Marks****I. Electricity & Electronics:**

Electricity & Magnetism; Electrical potential, Resistance, Laws of resistance, Conductance, Conductivity, Impedance, Ohm law, Resistance in series and in parallel, practical resistors, work, power, Energy, Joule's law of electric field intensity, Gauss's Theorem, Capacitor, Capacitance, Capacitors in parallel and series. Force on a conductor in a magnetic field, electrical and magnetic circuits, leakage flux, Relation between magnetism and electricity, Induced emf, induced current and directions, Faraday's laws of electromagnetic inductions, Lenz's law, dynamically induced emf, Self inductance, mutual inductance and inductance in series/parallel, magnetic hysteresis, Energy stored in magnetic field, Generation of alternating currents and voltages.

**II. Electrical Machines:**

DC Motors: Shunt, Series and Compound Motors, Speed and Torque Relations. Transformers: Principle, Construction, Voltage transformation ratio, Step-up/step-down transformers, Copper & Iron Losses, Transformer connections; delta and star.

AC Motors: Induction motor, Synchronous motor, Performance, Efficiency. Single phase and three phase Motors.

Generators: Principle, Construction, Different components of generators. AC Generators, DC Generators.

**III. Electronics:**

Transistors: types, calculations of voltages and currents in simple transistor circuits.

Amplifier & Oscillators: Working and classification of amplifiers, Class A and Class B Amplifiers, Feedback Amplifiers, Types of Feedback, RC Oscillators.

Integrated Circuits: OP Amps, timers, flip flop, converters, filters.

Telecommunications: EM theory, antennas, antenna gain, free space loss, fading. Modulations (AM, FM, PM, PWM, Delta, FSK, ASK, PSK), Error correction, Demodulation, Detectors, Transmitter, Receivers.

DSP and Controls; filters, stability, Z-transform, Nyquist criteria, S domain, transfer functions.

**IV. Power Systems:**

Power network analysis, Polyphase circuits, Transients, Transmission Lines, Losses.

**V. Costing, Accounting and Budgeting:**

Net present value, Net future value, cash flows, auditing, income statement, balance sheet, taxation, financial risk management, cost analysis.

**VI. Project Management:**

Time lines, milestones, resources allocation, dependency, Gant Charts,

**VII. Inventory Management:**

FIFO models, LIFO models, Identification Schemes, Inventory management systems.

**VIII. Quality Management Systems:**

QA models. Deming, Juran Crosby, Quality circles, management responsibility, quality planning, purchasing, design process and design validation, quality audit, corrective and preventive measures.

**Part-III: 25 Marks (Descriptive)**

(Human Resource, Financial Management and Information Technology)

**I. Human Resource and Financial Management**

Definition, Significance and Scope of Human Resource Management; Organization—Types of Organization, Theory of Organization, Principles of Organization, Organization of the Federal and Provincial Governments, Public Sector Enterprises; Approaches to Human Resource Management. Personnel Administration—Tools of Personnel Management: Selection, Training, Promotion, Compensation, Discipline; Communication, Communication Channels and Principles of Public Relations; Human Behaviour and Organizations Administration.—Elements of Financial Administration, Performance Programmed Budgeting, Capital Budget, Principles of Budgeting, Auditing and Accounting.

**II. Information Technology and MS Office**

Fundamentals of Computer: CPU, Memory Devices, Types of Computers, Characteristics of Computer and related material; Application Software: Microsoft Word, Microsoft Power Point, Microsoft Excel; Search Engines, Web Design, Email, Internet Surfing, Social Networking (Facebook, Twitter, etc); General Introduction to Virus and Antivirus utilities; Programming Languages

**SUGGESTED READINGS**

S. No.	Title	Author
1.	Electrical Technology	B.L. Tharaja
2.	Electronic Devices and Circuits.	Bogart
3.	DC Machines	P.C. Sen
4.	Semiconductors	Manzar Saeed
5.	Modern Digital and Analog Communication	B.P.Lathi
6.	Computers, tools for an Information age,	H.L. Captron, Addison Wesley
7.	Handbook of Engineering Management	Dennis Lock.
8.	Human Resource Management	H.T.Graham & Roger Bennett
9.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.
10.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
11.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson

**PAPER-II: PROFESSIONAL****Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-208/2024-R
Particulars of post	<b>Resettlement Officer (BS-18)</b> , AFIRM, Ministry of Defence.
Minimum Qualification & Experience:	i. Master in Social Work from a University recognized by HEC. ii. Five (5) years post qualification experience in the field of Resettlement or Vocational Trainings in any Government Organization.

**Part-I: 25 Marks (MCQ)**

25 MCQ Questions on Part-II.

**Part-II: (Qualification Based) (Descriptive) 75 Marks**

- I. **Society:** Meaning and characteristics. Community; meaning and characteristics. Individual and society. Relationship between individual and society. Two main theories regarding the relationship of man and society (i) the social contact theory and (ii) the organismic theory. Social and cultural evolution of society.
- II. **Social and Cultural Change and Social Policy:** Processes of Social and Cultural Change-discovery, Inhibitions to social and cultural change in Pakistan, Social planning and directed social and cultural change, Effect of Industrialization, Urbanization, Modernization and Modern Means of Communication on Social Change.
- III. **Community:** The rural community, Traditional Characteristics of rural life, The urban community, Rural – Urban convergence, Urbanism, Future of cities in Pakistan.
- IV. **Social Institutions:** The nature and genesis of institutions, The process of institutionalization, Functions of Social Institutions: Family, Religion, Education, Economy and Politics.
- V. **Sociological Theory:** Three sociological perspectives: Structural Functionalism, Symbolic interactions and Conflict. Theorists: Ibn-i-Khaldun, Spencer, August Comte, Emile Dukheim, Max Weber, Karl Marx, Parson.
- VI. **Methods of Sociological Research:** Scientific Method, Steps in research, Types of Questionnaire Research Design, Surveys, Observation and Case Studies.
- VII. **Social Problems in Pakistan:** High population growth rate, Rural –urban migration. Issues of technical/vocational training, Deviance and street crime, Unemployment, illiteracy and School drop out, Smuggling, Prostitution, Poverty, Drug Addiction, Child Labour and Abuse, Bonded Labour, Social customs and Traditions affecting Women in Pakistan, Violence Against Women and Domestic Violence, Issues concerning the Elderly in Pakistan.
- VIII. **Human Growth and Personality Development:** Meaning and significance of human growth, Basic assumptions of human behaviour, Approaches to the study of human development, Principles of human development, Factors influence human growth/development , Phases of human development Levels of functioning of human mind and behaviour perspectives, Components of human personality, Theories of personality development, Concepts of abnormal behaviour, Role of Nature & Nurture in Personality Development

**SUGGESTED READINGS**

<b>S.No.</b>	<b>Title</b>	<b>Author</b>
1.	Sociology : A down to earth approach	James M. Henslin
2.	Methods of Social Research	Baily
3.	Master of Sociological Thought	Lewis A.Coser
4.	Feudal System in Pakistan	Nawab Haider Naqvi
5.	The Sociology of Rural Life	Lynn Smith, T.
6.	Sociology-Social Structure and Social Conflict	Kerbo, Harold R. (1989).
7.	An Introduction to the History of Sociology	Barnes, H.E. (Ed.) (1966)
8.	Pakistani Society	Akbar Ahmad, S.

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-212/2024-R
Particulars of post	<b>Fellow (BS-18)</b> , National Institute of Population Studies, Ministry of National Health Services, Regulations & Coordination.
Minimum Qualification & Experience:	(i) Second Class or Grade 'C' Master's degree in Economics/Statistics/Sociology / Anthropology / Demography from a University recognized by the HEC. (ii) Two international research publications. (iii) Five (5) years post qualification experience in the relevant field.

**Part-I: 25 Marks (MCQ)**

- 25 MCQ Questions on Part-II.

**Part-II: 75 Marks (Descriptive)**

(Professional related to Population &amp; Demographic Principles)

**I. Population Welfare**

Definition, meaning and explanation of Population Welfare, Importance of Population Welfare as a discipline, Historical perspective of Population Planning in Pakistan, Population Structure and Characteristics: Age and Sex, Gender and Marital Status, Educational Status, Ethnic and Religious Composition, Occupation/economic condition, Urban-rural, Religious Perspectives about Population Welfare, Policies of Population Welfare with Special Reference to Pakistan, Factors affecting Population welfare: Birth rate, Death rate, Growth rate, Fertility, Mortality, Migration, Natural and man-made calamities, Cultural patterns;

**II. Theories of Population:**

- a. Malthus Theory
- b. Demographic Transition Theory

- III. Over population and under-population as social problem
- IV. Approaches to Population Control
- V. Role of Professional Social Worker in Population Planning
- VI. Population pyramid and transition from high to low fertility rate
- VII. Main features of Population and housing census 2017
- VIII. Qualitative and Quantitative research difference
- IX. Challenges of field survey
- X. Difference between gender equality and gender equity
- XI. Steps involved in standard research proposal
- XII. Concept of Mean, Median, Mode and Range
- XIII. Cross-section vs longitudinal studies advantages and challenges
- XIV. Use of research studies in decision making and implementation
- XV. Demographic dividend and economic growth in Pakistan



**SUGGESTED READINGS**

<b>S. No.</b>	<b>Title</b>	<b>Author</b>
1.	Population Theories and their Economic Interpretation.	Coontz, S. (2013).
2.	The Population Welfare Programme in Pakistan.	Iqbal, M. A. K. (1985).
3.	Islam, the State and Population.	Jones, G. W. & Karim, M. S. (2005).
4.	Demography: The Study of Human Population.	Lundquist, J. H. Anderton, D. L. & Yaukey, D. (2014).
5.	Involvement of NGOs in Population Welfare Programme of Pakistan.	Rehman, A. (1994).
6.	Demography and Population Problems.	Sharma, R. K. (2004).
7.	Introduction to Social Work and Social Welfare: Empowering People.	Zastrow, C. (2009).

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-215/2024-R
Particulars of post	<b>Head of Department (Electronics) (Female) (BS-18)</b> , Government Polytechnic Institute For Women, Islamabad, Ministry of Federal Education & Professional Training.
Minimum Qualification & Experience:	i. Bachelor's degree in Electronics or an equivalent qualification from a recognized University. ii. Five (5) years post qualification teaching experience in the field of Electronics in BS-16 and above or equivalent in Educational Institutions in Government / Semi-Government / Reputable Private Organization.

**Part-I: 25 Marks (MCQ)**

25 MCQ Questions on Part-II &amp; III.

**Part-II: (Electronics) (Descriptive) 50 Marks**

- I. **Electricity & Electronics:** Electricity & Magnetism; Electrical potential, Resistance, Laws of resistance, Conductance, Conductivity, Impedance, Ohm law, Resistance in series and in parallel, practical resistors, work, power, Energy, Joule's law of electric field intensity, Gauss's Theorem, Capacitor, Capacitance, Capacitors in parallel and series. Force on a conductor in a magnetic field, electrical and magnetic circuits, leakage flux, Relation between magnetism and electricity, Induced emf, induced current and directions, Faraday's laws of electromagnetic inductions, Lenz's law, dynamically induced emf, Self inductance, mutual inductance and inductance in series/parallel, magnetic hysteresis, Energy stored in magnetic field, Generation of alternating currents and voltages.
- II. **Electrical Machines**  
DC Motors: Shunt, Series and Compound Motors, Speed and Torque Relations.  
Transformers: Principle, Construction, Voltage transformation ratio, Step-up/stepdown transformers, Copper & Iron Losses, Transformer connections; delta and star.  
AC Motors: Induction motor, Synchronous motor, Performance, Efficiency. Single phase and three phase Motors.  
Generators: Principle, Construction, Different components of generators. AC Generators, DC Generators.
- III. **Quality Management Systems:** QA models. Deming, Juran Crosby, Quality circles, management responsibility, quality planning, purchasing, design process and design validation, quality audit, corrective and preventive measures.

**Part-III: (Professional) 25 Marks (Descriptive)**

- I. **Development of Curriculum and Instructional Material**
  - Elements of 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. Educational 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. Research Methods in Education**

- Research Instruments: Questionnaire: Interview; Test; Observation; Rating Scale
- Research Proposal and Report Writing.

**SUGGESTED READINGS**

<b>S. No.</b>	<b>Title</b>	<b>Author</b>
1.	Manufacturing Processes for Engineering Materials	Kalpakgjian
2.	Electrical Technology	B.L. Tharaja
3.	Electronic Devices and Circuits.	Bogart
4.	DC Machines	P.C. Sen
5.	Semiconductors	Manzar Saeed
6.	Handbook of Engineering Management	Dennis Lock.
7.	Total Quality Management	Dale H. Besterfield, Mary Gesterfield
8.	Research in Education	JW Best
9.	Integrating Education Technology into Teaching	Roblyer
10.	Curriculum Development	S. M. Shahid
11.	Educational Measurement and Evaluation	S. M. Shahid
12.	Educational Administration	S. M. Shahid

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-226/2024-R
Particulars of post	<b>Deputy Director (BS-18)</b> , Staff Welfare Organization, Establishment Division.
Minimum Qualification & Experience:	<p>i. Second Class or Grade 'C' Master's or Bachelor's (4 years duration) degree in Statistics / Economics / Commerce / Business Administration / Public Administration / Human Resource Management or equivalent qualification from a University recognized by the HEC.</p> <p>ii. Five (5) years' post qualification experience in administration / management and accounts from a Public or Private Sector Organization.</p>

**Part-I: 25 Marks (MCQ)**

- 25 MCQ Questions on Part-II & III.

**Part-II: 50 Marks (Descriptive)**

(Public Administration, Office Management &amp; Professional)

- I. **Public Administration:** Nature and scope, Role of Public Administration in a modern Welfare State;
- II. **Bureaucracy:** Concept of Bureaucracy, Theories of Bureaucracy, Ecology of Bureaucracy; Bureaucracy; of Pakistan as a Change Agent;
- III. **Administrative Leadership:** Approaches to the study of Leadership, Forms of Leadership, Leadership qualities;
- IV. **Administrative Accountability:** Internal and External Controls; Executive Control, Legislative Control, Judicial Control, Ombudsman, Public Opinion and Pressure Groups; Problems of Administrative Accountability in Pakistan;
- V. **Controlling and Co-Ordination:** Forms of Controls, Control Mechanism, the process of Control, Principles of Controlling; Principles Coordination; Machinery for Coordination; Problems of Coordination in Public Administration in Pakistan.
- VI. Civil Servant Act 1973 and Rules made thereunder;
- VII. Rules of Business 1973;
- VIII. Secretariat Instructions and Office Procedures;
- IX. Public Procurement Ordinance and Rules 2004.

**Part-III: 25 Marks (Descriptive)**

(Human Resource, Financial Management, Quality Management and Information Technology)

**III. Human Resource and Financial Management**

Definition, Significance and Scope of Human Resource Management; Organization—Types of Organization, Theory of Organization, Principles of Organization, Organization of the Federal and Provincial Governments, Public Sector Enterprises; Approaches to Human Resource Management. Personnel Administration—Tools of Personnel Management: Selection, Training, Promotion, Compensation, Discipline; Communication, Communication Channels and Principles of Public Relations; Human Behaviour and Organizations Administration.—Elements of Financial Administration,

Performance Programmed Budgeting, Capital Budget, Principles of Budgeting, Auditing and Accounting.

#### IV. Basic Concept of Quality Management

ISO-9000, ISO-13000, other certifications regarding quality measurement; management, management for Results, Setting Performance Goals and Targets; Job Analysis: Job Description, Job Specification, Performance Evaluation;

#### V. Information Technology and MS Office

Fundamentals of Computer: CPU, Memory Devices, Types of Computers, Characteristics of Computer and related material; Application Software: Microsoft Word, Microsoft Power Point, Microsoft Excel; Search Engines, Web Design, Email, Internet Surfing, Social Networking (Facebook, Twitter, etc); General Introduction to Virus and Antivirus utilities; Programming Languages

### SUGGESTED READINGS

S. No.	Title	Author
1.	An Introduction to the Public Administration	E.N. Cladden
2.	Bureaucracy: Modern Society	Pebr, M. Blau.
3.	Public Administration for a Welfare State	Paul Ableby
4.	The Bureaucracy of Pakistan	Charles F. Kennedy
5.	Human Resource Management	H.T.Graham & Roger Bennett
6.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.
7.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
8.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson

**FEDERAL PUBLIC SERVICE COMMISSION**  
**(Curriculum & Research Wing)**

**Schemes and Syllabi for Written Examination (Descriptive) for all Posts of Doctors in BS-18 & BS-19 included in Consolidated Adv. No. 11 & 12/2024**

**PAPER-I: MBBS (Common for all posts of Doctor in BS-18 & 19)**

Max Marks: 100

Time Allowed: 3 Hours

**Part-I: (MCQ)**

**25 Marks**

25 MCQ Questions on Part-II

**Part-II: (Qualification Based) (Descriptive)**

**75 Marks**

Core courses of **MBBS Degree**

**PAPER-II: PROFESSIONAL**

Max Marks: 100

Time Allowed: 3 Hours

Case No.	F.4-209/2024-R
Particulars of post	<b>General Staff Officer, Grade-I (Classified Radiologist) (BS-19),</b> Diagnostic Radiology Department, Armed Forces Institute of Radiology and Imaging, Ministry of Defence.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> <li>i. MBBS or equivalent qualification from a University recognized by PM&amp;DC.</li> <li>ii. FCPS (Radiology) or equivalent qualification recognized/ registered by the PM&amp;DC.</li> <li>iii. Seven years post qualification working experience at any renowned medical imaging setup.</li> </ul>

**Part-I: (MCQ)**

**25 Marks**

25 MCQ Questions on Part-II.

**Part-II: (Professional) (Descriptive)**

**75 Marks**

Core courses of FCPS in **Radiology**

**PAPER-II: PROFESSIONAL****Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-213/2024-R
Particulars of post	<b>Senior Radiologist (BS-19)</b> , National Institute of Rehabilitation Medicine, Islamabad, Ministry of National Health Services, Regulations & Coordination.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> <li>i. MBBS or equivalent qualification recognized by Pakistan Medical and Dental Council.</li> <li>ii. PM&amp;DC Level-III or Level-II (a) or Level-II (b) qualification in respective subject (i.e. Diagnostic Radiology / Radiology) or other equivalent qualification in the specialty recognized / registered by the PM&amp;DC.</li> <li>iii. Seven (7) years post qualification clinical experience with Level-III qualifications. OR Ten (10) years post qualification clinical experience with Level-II (a) or II (b), qualifications.</li> </ul>

**Part-I: (MCQ)****25 Marks**

25 MCQ Questions on Part-II.

**Part-II: (Professional) (Descriptive)****75 Marks**Core courses of Specialization in **Diagnostic Radiology/Radiology****PAPER-II: PROFESSIONAL****Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-214/2024-R
Particulars of post	<b>Senior Pathologist (BS-19)</b> , National Institute of Rehabilitation Medicine, Islamabad, Ministry of National Health Services, Regulations & Coordination.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> <li>i. MBBS or equivalent qualification recognized by Pakistan Medical and Dental Council.</li> <li>ii. PM&amp;DC Level-III or Level-II (a) or Level-II (b) qualification in respective subject (i.e. Hematology / Histopathology / Pathology) or other equivalent qualification in the specialty recognized / registered by the PM&amp;DC.</li> <li>iii. Seven (7) years post qualification clinical experience with Level-III qualifications. OR Ten (10) years post qualification clinical experience with Level-II (a) or II (b) qualifications.</li> </ul>

**Part-I: (MCQ)****25 Marks**

25 MCQ Questions on Part-II.

**Part-II: (Professional) (Descriptive)****75 Marks**Core courses of Specialization in **Hematology / Histopathology / Pathology**