

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

**Scheme and Syllabi for Screening/Professional Tests as well as Descriptive Examination**  
**Relating to Posts Advertised Vide Consolidated Advertisement No. 08/2015**

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Main Topics for MCQ Test
1.	69/2015	Assistant Director/ Research Officer (BS-17), Akhtar Hameed Khan National Centre for Rural Development, Cabinet Secretariat, Establishment Division.	Second Class or Grade 'C' Master's Degree in any Social or Physical Science/Administrative Science/ Agriculture and/ or its allied field or B.E./ B.Sc. Engineering or Agriculture.	Objective Type Test (MCQ)  <b>Part-I</b> English = 20 marks  <b>Part-II</b> General Intelligence Test = 80 marks	<b>Part-I</b> Vocabulary, Grammar Usage, Sentence Structuring <b>Part-II</b> • Basic Arithmetic. • Current Affairs. • Pakistan Affairs & Islamic Studies • Everyday/General Science <b>Note : (Equal weightage for each topic at Part-II)</b>
2.	98/2015	Assistant Security Officer/ Deputy Assistant Director (BS-16), Airport Security Force, Aviation Division, Cabinet Secretariat	Bachelor's Degree.	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. • Current Affairs. • Pakistan Affairs & Islamic Studies • Everyday/General Science • Security Measures to maintain law & order <b>Note : (Equal weightage for each topic at Part-II)</b>
3.	100/2015	Ordnance Management Officer (Grade-III) (BS- 17), OS Directorate, GHQ, Ministry of Defence.	Second Class or Grade 'C' Master's Degree in Business Administration (Banking/ Finance/ Accounts)/ Commerce/ ICMA or equivalent qualification from a University recognized by the 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> • Accounting Principles & Procedures, • 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. • System of Financial Control and Budgeting, 2006 • Public Procurement Rules, 2004

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Main Topics for MCQ Test
4.	102/2015	Charge/Staff Nurse (Female) (Civilian) (BS-16), Military Hospitals, Ministry of Defence	Bachelor's Degree in Nursing or equivalent qualification recognized by the Pakistan Nursing Council <b>OR</b> i) Three years Diploma in Nursing. ii) One year Course/Certificate in Midwifery. Note: Registration with Pakistan Nursing Council is required.	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>• Basic Medical Sciences</li> <li>• General Nursing</li> <li>• Ward Administration</li> <li>• Hospitality of the Patients</li> <li>• Care vs. Cure for Health Management</li> </ul>
5.	101/2015	Assistant Private Secretary (BS-16), Finance Division	i. Second class or Grade "C": Bachelor's degree from a University recognized by HEC	<ul style="list-style-type: none"> <li>• Typing Test with minimum Speed of 50 W.P.M <b>40 Marks</b></li> <li>• Shorthand Test with minimum Speed of 100 W.P.M <b>40 Marks</b></li> <li>• Computer Literacy Test: <ul style="list-style-type: none"> <li>i Microsoft Word (Typing, Formatting) <b>10 Marks</b></li> <li>ii Microsoft Excel (Typing, Graph, Calculations) <b>10 Marks</b></li> </ul> </li> </ul>	
6.	103/2015	Assistant Private Secretary (BS-16), Geological Survey of Pakistan, Ministry of Petroleum and Natural Resources	ii. A minimum speed of 100/50 w.p.m in shorthand/typing respectively		
7.	104/2015	Assistant Private Secretary (BS-16), Naval Headquarters, Ministry of Defence	iii. Must be computer literate.		
8.	105/2015	Assistant Private Secretary (BS-16), Management Services Wing, Establishment Division			
9.	106/2015	Assistant Private Secretary (BS-16), Ministry of Ports and Shipping			

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Main Topics for MCQ Test
10.	108/2015	Assistant Director (Geology) (BS-17) Geological Survey of Pakistan, Ministry of Petroleum and Natural Resources	Second Class OR Grade 'C' M.Sc. degree in Geology OR equivalent qualification from a University recognized by the 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>• Introduction to Physical Geology</li> <li>• Stratigraphy</li> <li>• Structural Geology</li> <li>• Plate Tectonics</li> <li>• Palaeontology (Invertebrate &amp; Vertebrate)</li> <li>• Geochemistry</li> <li>• Geological Mapping</li> <li>• Petroleum Geology</li> <li>• Engineering and Environmental Geology</li> <li>• Mineral and Energy Resources</li> </ul>
11.	110/2015	Charge/ Staff Nurse (Female) (BS-16), Federal Government Polyclinic, Islamabad, Capital Administration and Development Division.	Registered Nurse and Registered Midwife with PNC.	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>• Basic Medical Sciences</li> <li>• General Nursing</li> <li>• Ward Administration</li> <li>• Hospitality of the Patients</li> <li>• Care vs. Cure for Health Management</li> </ul>
12.	112/2015	Assistant Chief Administrative Officer (BS-17), GHQ, Ministry of Defence, (Defence Division).	Second Class or Grade 'C' Master's Degree in Business Administration/ Public Administration or equivalent 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>• Accounting Principles &amp; Procedures,</li> <li>• Journal, ledger &amp; Cash Book,</li> <li>• Annual Budget,</li> <li>• Adjustment &amp; Depreciation,</li> <li>• Financial Planning &amp; Cost Accounting,</li> <li>• Head of Accounts, Re-appropriation of Accounts and Supplementary Grant,</li> <li>• Settlement of Audit Objections</li> <li>• Preparation of Pension Documents.</li> <li>• System of Financial Control and Budgeting, 2006</li> <li>• Public Procurement Rules, 2004</li> </ul>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Main Topics for MCQ Test
13.	116/2015	Cameraman (Male) (BS-16), GHQ, Ministry of Defence, (Defence Division).	i. Intermediate ii. Three (3) years post qualification experience in cinematography with a Film Studio/ Film Production Unit, Producing Newsreels and documentary Films in Digital System/ 16mm and 35mm.	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> • Functions of Still/Movie Cameras • Use of Densitometer • Functions of O.B. Van • Operation of Photographic, Rotary, and Movie Cameras • Techniques for Quality output of Cameras • Safety of Cameras.
14.	117/2015	Programmer Analyst (BS-17), Ministry of Defence, (Defence Division).	Second Class or Grade 'C' Master's Degree in Computer Science/ Geographical Information System or equivalent from a University recognized by HEC. <b>OR</b> Second Class or Grade 'C' Bachelor's Degree in Computer Science/BIT (04 years duration) or equivalent 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> • Programming in PHP, Ajax and Java Script • Designing, Analyzing, Maintenance & Testing of Software • Coding, Debugging, Testing and Documenting of Application Programme • Installation and Testing Software Package • Software Development Process, • Software Architecture, • Software Maintenance & Optimization
15.	118/2015	Social Welfare Officer (BS-17), National Commission for Child Welfare and Development, Ministry of Law, Justice and Human Rights.	Second Class or Grade 'C' Master's Degree in Social Work.	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> • Community Organization and Development, • Social Research, • Social Statistics, • Organizational Behaviour and Human Resource, • Social Welfare Policy and Administration, • Criminology and its Remedial Measures,
16.	123/2015	Inspector (Investigation) (BS-16), Federal Investigation Agency, Ministry of Interior.	Second Class or Grade 'C' Bachelor's degree from a University recognized by the HEC.	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. • Current Affairs. • Pakistan Affairs & Islamic Studies • Everyday/General Science <b>Note : (Equal weightage for each topic at Part-II)</b>

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

### PAPER-I: ENGLISH (100 MARKS)

- (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 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, 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 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.)
7.	Exploring the World of English	Syed Saadat Ali Shah

**PAPER-II: PROFESSIONAL (100 MARKS)**  
**Assistant Fisheries Development Commissioner (BS-18)**  
**Ministry of Ports and Shipping**  
(Case No. 107/2015)

**MINIMUM QUALIFICATION:** M.Sc. (Fisheries)/Marine Biology or M.Sc. Zoology/ Biology with specialization in fisheries.

**EXPERIENCE:** Five (5) years post qualification experience in Marine/Inland Fisheries or Aquaculture Technology.

**Professional: 100 Marks**

**I. Animal Diversity-Chordata**

- Hemichordates and Invertebrate Chordates: Evolutionary Perspective: Phylogenetic Relationships and considerations.
- Fishes: Structural and functional adaptations of fishes.
- Amphibian: Movement onto land and early evolution of terrestrial vertebrates.
- Reptiles: Characteristics of reptiles, adaptations in reptilians.
- Birds: Migration and navigation, adaptations.
- Mammal: Structural and functional adaptations of mammals.

**II. Principles of Animal Life**

- The chemical basis of animal life: Brief introduction to bio-molecules; carbohydrates, lipids, proteins and nucleic acids.
- Tissues Types: epithelial, connective, muscle and nervous tissue; organs and organ systems.
- Ecological Concepts: Interactions, Concepts and components of ecosystem, Food chain, Food web, Biogeochemical cycles, Forest, Biomes, Wildlife conservation and management, Environmental pollution, Green house effect, Acid rain, Global warming.
- Evolution: Darwinian evolutionary theory based on natural selection and the evidence, Microevolution: Genetic variation and change within species, Macroevolution: Species and speciation (Allopatric, Parapatric and Sympatric speciation)

**III. Animal Form and Function**

- Digestion and Nutrition: Feeding mechanism, Digestion, Organization and regional function of alimentary canals, Regulation of food intake, Nutritional requirements
- Internal Fluids and Respiration: Internal fluid environment, Composition of blood, Circulation and respiration mechanisms
- Chemical Coordination: Endocrine System; Vertebrate endocrine glands and types of hormones, Mechanism of hormones action,
- Animal behavior: Learning, Habituation, Insight learning, latent learning, classical learning: Control of Behavior; social behaviour.

#### IV. Principles of Fish Biology

- **Fish morphology:** Head (size, shape, and orientation); Scales (types, arrangements, coloration, scale less fishes); Operculum; Fins, fin rays and fin spine (dorsal, pectoral, caudal, anal); Barbel (upper lip barbels, lower lip barbels); **Anatomy:** Skeleton (skull, backbone, spines); Brain and spinal cord; Gills (Number, size, arrangements); Vital organs (heart, liver, kidney); Viscera and mesenteries (swim bladder, stomach, spleen, pancreas, intestine, gonads).
- **Systematic:** Identification of fishes up to; Families; Order; Genus; Species; Feeding groups of fishes; Herbivore; Plankton eater; Larvivore; Carnivore; Voracious; **Ecology of fishes:** Freshwater; Brackish water ; Marine

#### SUGGESTED READINGS

S.No.	Title	Author
1.	Integrated Principles of Zoology.	Hickman, Jr. C.P., Keen, S. L, Larson, and Eisenhour, D.J.
2.	Zoology	Miller, S. A. and Harley, J. B.
3.	Biology	Campbell, N.A.
4.	Evolution. 2nd Edition	Douglas Futuyma
5.	Kestin Farmed Fish Quality, 2002	Kestin, S. C. and Warris, P.D.
6.	Aquaculture	Brenabe, G.
7.	Text book of Fish Culture: Breeding and Cultivation. 1973	Huet M.
8.	Animal behavior: An Evolutionary Approach. 9 <sup>th</sup> Edition	John Alcock

**PAPER-II: PROFESSIONAL (100 MARKS)**  
**Director (BS-19), Directorate of Dock Workers Safety H.Qs.**  
**Ministry of Ports and Shipping**  
 (Case No. 109/2015)

**MINIMUM QUALIFICATION/ EXPERIENCE:** (i) Bachelor's Degree in Mechanical or Electrical Engineering.(ii) Twelve (12) years post qualification experience in testing the lifting appliances/ inspection of loading/discharging of Cargo on Ports in Semi-Government/ Government Organization. (iii) Knowledge of Labour Laws/ Dock Labourers Act and the Pakistan Dock Labourers Regulations.

**Part-I: 20 Marks**

**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. Laws about Ports and Shipping**

Labour Laws, Dock Labourers Act, Pakistan Dock Labourers Regulations

**Part-II (Engineering): 80 Marks**

**I. Mechanical Engineering Fundamentals (40 Marks)**

Mechanics and Strength of Materials: Concept of Stress and Strain, bending, torsion, geometric properties of areas, principal stresses, Tensile testing, Stress- Strain curve, True Stress & Strain, Shear Stress & Strain, Concept of elastic and plastic deformation, Yield & ultimate Tensile strengths, Elongation, Toughness and Resilience, Ductility and Malleability, Hardness Testing, Brinell and Rock well Hardness test, bending moment,

Fluid Mechanics: Properties and basics of fluid mechanics, loss of head, power transformation by fluids, pumps, turbines. Fluid static's, Fluid dynamics, Types of flow: Turbulent and Laminar, Reynold's number.

Manufacturing: Different manufacturing processes like Casting, Forging, Machining, Rolling, Extrusion, Wire-drawing, welding, Turning (lathe), Milling, Shaping, Gear cutting, Drilling, Fitting.

**II. Electricity & Electronics (30 Marks)**

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.

### III. Electrical Machines (10 Marks)

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.

### SUGGESTED READINGS

S. No.	Title	Author
1.	Human Resource Management	H.T.Graham & Roger Bennett
2.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.
3.	Fluid mechanics with engineering applications	Finnemore/ Franzini.
4.	Schaum Outline Series; Strength of Materials	Williym A. Nash
5.	Fluid Mechanics	Lewitt
6.	Manufacturing Processes for Engineering Materials	Kalpakgjian
7.	Electrical Technology	B.L. Tharaja
8.	Electronic Devices and Circuits.	Bogart
9.	DC Machines	P.C. Sen
10.	Semiconductors	Manzar Saeed

**PAPER-II: PROFESSIONAL (100 MARKS)**  
**Deputy Chief Administrative Officer (BS-18), GHQ,**  
**Ministry of Defence, (Defence Division).**  
(Case No. 115/2015)

**MINIMUM QUALIFICATION:** Second class or Grade 'C' Master's Degree in Business Administration/ Public Administration or equivalent from a university recognized by HEC.

**EXPERIENCE:** Five (5) years post qualification experience in administration.

**Part-I: 50 Marks**

(Public Administration & Office Management)

- 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. **Planning:** Types of Plans, Planning Process; Principles of Planning, Planning Machinery in Pakistan;
- VI. **Controlling and Co-Ordination:** Forms of Controls, Controls, Control Mechanism, the process of Control, Principles of Controlling; Principles Coordination; Machinery for Coordination; Problems of Coordination in Public Administration in Pakistan.
- VII. Civil Servant Act 1973 and Rules made thereunder;
- VIII. Federal Public Service Commission Ordinance 1977 and Rules made there under;
- IX. Rules of Business 1973;
- X. Secretariat Instructions and Office Procedures;
- XI. PPRA Ordinance and Rules 2004.

**Part-II: 50 Marks**

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

**III. Human Resource and Financial Management (30 Marks)**

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 (10 Marks):**

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 (10 Marks):**

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**

<b>S. No.</b>	<b>Title</b>	<b>Author</b>
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 Abbleby
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