

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. 06/2018

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
1.	116/2018	Assistant Secretary (Wildlife) (BS-17), Ministry of Climate Change.	Second Class or Grade 'C' M.Sc. in Zoology OR Honours Degree or equivalent Diploma in Forestry/ Wildlife Management.	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"> • Major subdivisions of Animal Kingdom • Mendel's Law of Inheritance • Endangered species of Pakistan as per IUCN Red List • Role of Wildlife as value addition to forestry • Biodiversity and Wildlife • Ecological Concepts: Components of Ecosystem, Food Chain, Biogeo Chemical Cycles, Wildlife Conservation and Management
2.	122/2018	Computer Programmer (BS-17), National Highways & Motorway Police, Ministry of Communications.	Second Class or Grade 'C' Master's Degree in Computer Sciences. OR Second Class or Grade 'C' Bachelor's degree in Computer Engineering	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"> • Programming in PHP, Ajax and Java Script • Designing, Analyzing & Maintenance of Software • Coding, Debugging, Testing and Documenting of Application Programme • Installation and Testing Software Package • Software Development Process, • Software Architecture, • Software Maintenance & Optimization
3.	125/2018	Land Acquiring Officer (BS-16), National Highways & Motorway Police, Ministry of Communications.	i. Three (3) years post Matric Diploma in Civil Technology. ii. One (1) year post qualification experience of Land Acquisition matters/ Civil Technology.	Objective Type Test (MCQ) Part-I English =20 marks Part-II Professional Test =80 marks	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Estimation & Costing • Building Material & Building Construction, • Surveying & Levelling, , • Concrete Technology & R.C.C Structure Design, • Water Supply and Sanitary filling • Aquaculture Engineering • Highway Engineering • Land Acquisition Act of Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
4.	127/2018	Assistant Secretary (BS-16), Office of the Chief Engineering Adviser/ Chairman Federal Flood Commission, Ministry of Energy (Power Division)	<p>i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC.</p> <p>ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m.</p> <p>iii. Must be computer literate.</p>	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	<p>35 Marks</p> <p>35 Marks</p> <p>10 Marks</p> <p>10 Marks</p> <p>10 Marks</p>
5.	130/2018	Assistant Director (BS-17), Geological Survey of Pakistan, Ministry of Energy (Petroleum Division).	Second Class or Grade 'C' M.Sc. degree in Geology or equivalent qualification from a university recognized by the HEC.	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 Physical Geology • Stratigraphy • Structural Geology • Plate Tectonics • Palaeontology (Invertebrate & Vertebrate) • Geochemistry • Geological Mapping • Petroleum Geology • Engineering and Environmental Geology • Mineral and Energy Resources
6.	131/2018	Medical Officer (Male) (BS-17 Plus 25% Special Pay), Health Department, Gilgit Baltistan, Ministry of Kashmir Affairs and Gilgit Baltistan.	MBBS or equivalent qualification from a recognized University/ College by PMDC.	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"> • Core courses of MBBS Degree Program. • Health Policy of the Government • Care vs Cure for Health Management
7.	132/2018	Assistant Secretary (BS-16), Bureau of Emigration & Overseas Employment, Ministry of Overseas Pakistanis & Human Resource Development.	<p>i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC.</p> <p>ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m.</p> <p>iii. Must be computer literate.</p>	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	<p>35 Marks</p> <p>35 Marks</p> <p>10 Marks</p> <p>10 Marks</p> <p>10 Marks</p>

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
8.	133/2018	Assistant Private Secretary (BS-16), Ministry of Energy (Petroleum Division).	i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC. ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m. iii. Must be computer literate.	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	35 Marks 35 Marks 10 Marks 10 Marks 10 Marks
9.	134/2018	Deputy Headmistress (BS-17), F.G. Schools, Federal Directorate of Education, Capital Administration and Development Division.	Second Class or Grade 'C' Master's degree with B.Ed/ M.Ed.	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"> • Planning & Management in Education • Educational Administration and Supervision, • Educational Psychology • Educational Guidance & Counselling • Classroom/Institutional Management • Curriculum Development • Teaching Techniques & Methodology • Testing & Evaluation • Educational Reforms in Pakistan • Perspectives of Education in Pakistan
10.	136/2018	Assistant Private Secretary (BS-16), Ministry of Foreign Affairs	i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC. ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m. iii. Must be computer literate.	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	35 Marks 35 Marks 10 Marks 10 Marks 10 Marks
11.	137/2018	Chemist (BS-17), Department of Plant Protection, Ministry of National Food Security & Research.	Second Class or Grade 'C' M.Sc. Chemistry OR Second Class or Grade 'C' M.Sc. (Agriculture) with Agricultural Chemistry as a major subject.	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"> • Basic concept of Analytical Chemistry. • Chemical Analysis of Water • Theory, Principals, uses and working of Atomic Absorption Spectrophotometer and Flame Photometer • Oxidation-Reduction Titration • Method of maintaining accuracy/precision in Chemical Analysis • Introduction to Agricultural Chemistry • Principles of Biochemistry • Chemistry of Lipids • Bio-organic Chemistry

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
12.	141/2018	Assistant Secretary (BS-16), Ministry of Law and Justice Private	i. Second Class or Grade 'C' Bachelor's degree from a University recognized by HEC. ii. Minimum shorthand speed: 100 w.p.m. and typing speed: 50 w.p.m. iii. Must be computer literate.	<ul style="list-style-type: none"> • Typing Test with minimum Speed of 50 W.P.M • Shorthand Test with minimum Speed of 100 W.P.M • Computer Literacy Test: <ul style="list-style-type: none"> i Microsoft Word (Typing, Formatting) ii Microsoft Excel (Typing, Graph, Calculations) iii Microsoft Power Point (Typing, Formatting, Inserting Objects) 	35 Marks 35 Marks 10 Marks 10 Marks 10 Marks
13.	142/2018	Inspector Inland Revenues (BS-16), Revenue Division, Federal Board of Revenue.	Second Class or Grade 'C' Bachelor's degree with Economics/ Business Administration/ Commerce/ Statistics/ Law from a university recognized by HEC.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test = 80 marks	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Functions of Federal Board of Revenue. • Fiscal Policy of Pakistan • Tax Administration/Reforms in Pakistan • Sales Tax Act 1990 as amended upto July 2017 • Federal Excise Act 2005 as amended upto July 2017 • Income Tax Ordinance 2001 as amended upto June 2017 (Chapter-III & Part IV of Chapter-X only)
14.	146/2018	Staff Nurse (BS-16), Medical Department of Pakistan Railways, (Railway Board) Ministry of Railways.	i. Registered Nurse and Registered Midwife with PNC. ii. For male one year course/ certificate in nursing related field in lieu of midwifery.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test = 80 marks	Part-I Grammar Usage, Sentence Structuring Part-II <ul style="list-style-type: none"> • Basic Medical Sciences • General Nursing • Ward Administration • Hospitality of the Patients • Care vs. Cure for Health Management
15.	149/2018	Chemist (BS-17), Geological Survey of Pakistan, Ministry of Energy (Petroleum Division).	Second Class or Grade 'C' M.Sc. degree in Chemistry with specialization in Analytical/ Inorganic/Physical or Geochemistry from a University recognized by the HEC.	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"> • Basic concept of Analytical Chemistry. • Chemical Analysis of Water • Theory, Technique and Calculation of Volumetric and Gravimetric Analysis. • Coal Analysis particularly Analysis of Proximate and Ultimate • Theory, Principles, uses and working of Atomic Absorption Spectrophotometer and Flame Photometer • Oxidation-Reduction Titration • Decomposition Techniques of Rock and Minerals • Method of maintaining accuracy/precision in Chemical Analysis

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16.	151/2018	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) Part-I English = 20 marks Part-II General Intelligence Test = 80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II • Basic Arithmetic. • Current Affairs. • Pakistan Affairs & Islamic Studies • Everyday/General Science Note : (Equal weightage for each topic at Part-II)
17.	153/2018	Medical Officer (BS-17), Federal General Hospital, Chak Shahzad, Capital Administration and Development Division	MBBS or equivalent qualification recognized by PM&DC.	Objective Type Test (MCQ) Part-I English =20 marks Part-II Professional Test =80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II • Core courses of MBBS Degree Program. • Health Policy of the Government • Care vs Cure for Health Management
18.	166/2018	Medical Officer (BS-17), Pakistan Institute of Medical Sciences (PIMS) Islamabad, Capital Administration and Development Division	MBBS or equivalent qualification recognized by PMDC.	Objective Type Test (MCQ) Part-I English =20 marks Part-II Professional Test =80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II • Core courses of MBBS Degree Program. • Health Policy of the Government • Care vs Cure for Health Management
19.	168/2018	Senior Scientific Assistant (BS-16), Naval Headquarters, Ministry of Defence.	i. Second Class or Grade 'C' Bachelor's Degree in Science with Chemistry/ Chemical Technology. ii. Three (3) years post qualification experience in the field of prescribed qualification.	Objective Type Test (MCQ) Part-I English =20 marks Part-II Professional Test =80 marks	Part-I Grammar Usage, Sentence Structuring Part-II • Thermodynamics, • Nature, Properties and States of Matter, • Gases, Liquids & Solids, • Organic Chemistry • In-Organic Chemistry

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20.	176/2018	Assistant Dental Surgeon/ Medical Officer (Dentistry) (BS-17), Pakistan Institute of Medical Sciences (PIMS) Islamabad, Capital Administration and Development Division	BDS or equivalent qualification recognized by PMDC.	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"> • Core courses of BDS Degree Program. • Health Policy of the Government • Care vs Cure for Health Management
21.	177/2018	Assistant Anaesthetist (BS-17), Pakistan Institute of Medical Sciences (PIMS) Islamabad, Capital Administration and Development Division	MBBS or equivalent qualification recognized by PMDC.	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"> • Core courses of MBBS Degree Program. • Health Policy of the Government • Care vs Cure for Health Management

Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 included in Consolidated Advertisement No. 06/2018

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 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 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 (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**Max Marks: 100****Time Allowed: 3 Hours**

Case No.	F.4-114-A/2018-R
Particulars of post	Assistant Professor (Male) (Health and Physical Education) (BS-18) Federal Government Educational Institutions (FGEI) (Cantts/ Garrisons), Ministry of Defence.
Minimum Qualification & Experience:	Ph.D. Degree in the relevant subject with one year (1) 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) year post qualification teaching experience at College/ University level.

Part-I: (Health and Physical Education) 50 Marks**I. Philosophical Basis of Physical Education**

Definition & Scope of Physical Education, Philosophy and Physical Education, Physical Education as Academic Discipline, Scientific Foundation of Physical Education, Physical Education and Recreation, Leadership in Physical Education

II. Scientific Sports Coaching

Teaching methodology for a Coach, Coach and Professional Ethics

III. Evaluation in Physical Education and Sports

Evaluation and Administration of Tests, Basic Statistics, Measurement of Physical Fitness, General Motor Ability, Cardiovascular Fitness, Rating Scales in Physical Education.

IV. Exercise Physiology

Muscular System and Exercise, Cardiovascular System and Exercise, Environment and Exercise, Nervous System and Exercise, Glandular System and Exercise, Gender Differences, Obesity, Contemporary social problems & Physical Education Curriculum

Part-II: (Professional) 50 Marks**I. Development of Curriculum and Instructional Material**

- Elements of Curriculum.
- Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives.

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. Educational Administration and Supervision

- The Concept of Administration
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire; Interview; Test; Observation; Rating Scale
- Research Proposal and Report Writing

SUGGESTED READINGS

S. No.	Title	Author
1.	Health & Physical Education.	Dr. A. Waheed Mughal
2.	Education in Physical Education.	Shamshad Ahmed
3.	Sports in Society : Issue & Controversies,	Jay Coackley
4.	Modern Measurement.	Osterlind J. Steven
5.	Introduction to Measurement in PE and Exercise Science	Margaret J. Safrit PhD, Terry M. Wood PhD
6.	Physiology of Sports	Reilly T and Williams
7.	Essentials of Exercise Physiology.	Shaver
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.4-114-B/2018-R
Particulars of post	Assistant Professor (Male) (Mathematics) (BS-18) Federal Government Educational Institutions (FGEI) (Cantts/ Garrisons), Ministry of Defence.
Minimum Qualification & Experience:	Ph.D. Degree in the relevant subject with one year (1) 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) year post qualification teaching experience at College/ University level.

Part-I: (Mathematics)**50 Marks****I. Vector Calculus**

Vector algebra; scalar and vector products of vectors; gradient divergence and curl of a vector; line, surface and volume integrals; Green's, Stokes' and Gauss theorems.

II. Statics

Composition and resolution of forces; parallel forces and couples; equilibrium of a system of coplanar forces; centre of mass of a system of particles and rigid bodies; equilibrium of forces in three dimensions.

III. Dynamics

- Motion in a straight line with constant and variable acceleration; simple harmonic motion; conservative forces and principles of energy.
- Tangential, normal, radial and transverse components of velocity and acceleration; motion under central forces; planetary orbits; Kepler laws;

IV. Ordinary differential equations

- Equations of first order; separable equations, exact equations; first order linear equations; orthogonal trajectories; nonlinear equations reducible to linear equations, Bernoulli and Riccati equations.
- Equations with constant coefficients; homogeneous and inhomogeneous equations; Cauchy-Euler equations; variation of parameters.
- Ordinary and singular points of a differential equation; solution in series; Bessel and Legendre equations; properties of the Bessel functions and Legendre polynomials.

V. Fourier series and partial differential equations

- Trigonometric Fourier series; sine and cosine series; Bessel inequality; summation of infinite series; convergence of the Fourier series.
- Partial differential equations of first order; classification of partial differential equations of second order; boundary value problems; solution by the method of separation of variables; problems associated with Laplace equation, wave equation and the heat equation in Cartesian coordinates.

VI. Numerical Methods

- Solution of nonlinear equations by bisection, secant and Newton-Raphson methods; the fixed- point iterative method; order of convergence of a method.
- Solution of a system of linear equations; diagonally dominant systems; the Jacobi and Gauss-Seidel methods.
- Numerical solution of an ordinary differential equation; Euler and modified Euler methods; Runge- Kutta methods.

Part-II: (Professional)

50 Marks

I. Development of Curriculum and Instructional Material

- Elements of Curriculum.
- Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives.

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. Educational Administration and Supervision

- The Concept of Administration
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire: Interview; Test; Observation; Rating Scale
- Research Proposal and Report Writing

SUGGESTED READINGS

S.No.	Title	Author
1.	An Introduction to Vector Analysis	Khalid Latif,
2.	Introduction to Mechanics	Q.K. Ghori
3.	An Intermediate Course in Theoretical Mechanics	Khalid Latif,
4.	Differential Equations with Boundary Value Problems	D. G. Zill and M. R. Cullen
5.	Elementary Differential Equations	E.D. Rainville, P.E. Bedient and R.E. Bedient
6.	Elements of Numerical Analysis	F. Ahmad and M.A Rana
7.	Mathematical Methods	S. M. Yousaf, Abdul Majeed and Muhammad Amin
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- 120 /2018-R
Particulars of post	Director (Planning) (BS-19), National Highways & Motorway Police, Ministry of Communications.
Minimum Qualification & Experience:	i. Second class or Grade 'C' Master's degree in Economics/ Business Administration/ Public Administration. ii. Twelve (12) years post qualification experience in Planning/ Management/ Transportation.

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, Control Mechanism, the process of Control, Principles of Controlling; Principles of Coordination; Machinery for Coordination; Problems of Coordination in Public Administration in Pakistan.
- VII. Civil Servant Act 1973 and Rules made thereunder;
- VIII. PPRA Ordinance 2002 and Rules 2004.

Part-II: 50 Marks(Human Resource, Financial Management,
Quality Management and Information Technology)**I. Human Resource and Financial Management**

Definition, Significance and Scope of Human Resource Management; Organization—Types 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, 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;

III. 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

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

Case No.	F.4- 135 /2018-R
Particulars of post	Deputy Director (BS-18), Management Services Wing, Establishment Division.
Minimum Qualification & Experience:	<p>i. Second Class or Grade 'C' Master's degree in Public Administration/Business Administration/Administrative Science/Economics/ Statistics/ Computer Science/ ACMA.</p> <p>ii. Five (5) years post qualification experience in Management Analysis/ Financial Management/Project Management/ Personnel Management/ Administrative Research/Collection, Analysis, Interpretation of Statistical Data and Report Writing.</p>

Part-I: 50 Marks

(Public Administration, Office Management and Planning)

- I. **Public Administration:** Nature and scope, Role of Public Administration in a modern Welfare State;
- II. **Administrative Leadership:** Approaches to the study of Leadership, Forms of Leadership, Leadership qualities;
- III. **Administrative Accountability:** Internal and External Controls; Executive Control, Legislative Control, Judicial Control, Ombudsman, Public Opinion and Pressure Groups; Problems of Administrative Accountability in Pakistan;
- IV. **Communication Skills, Technical Writing and Presentation Skills:** Paragraph writing, Essay writing, Translation skills, Study skills, Academic skills, Academic writing, Technical Report writing, Progress report writing, Presentation skills
- V. **Planning and Management**
 - a) Project Management
Project Management, Processes Integration Management, Project Plan Development, Project Plan Execution and Overall Change Control.
 - b) Scope Management
Initiation, Scope Planning, Scope Definition, Scope Verification and Scope Change Control.
 - c) Time Management
Activity Definition, Activity Sequencing, Activity Duration Estimation, Schedule Development and Schedule Control.
 - d) Statistical Techniques
All statistical techniques related to Planning & Research
- VI. Civil Servant Act 1973 and Rules made thereunder;
- VII. PPRA Ordinance and Rules 2004.

Part-II: 50 Marks

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

I. Human Resource and Financial Management

Definition, Significance and Scope of Human Resource Management; Organization—Types 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, 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;

III. 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.	Project Management Body of Knowledge,	Project Management Institute (PMI) standards committee
6.	Human Resource Management	H.T.Graham & Roger Bennett
7.	Management	James A.F.Stoner, R.Eward Freeman, Daniel R.Gilbert Jr.
8.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
9.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson

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

Case No.	F.4-143/2018-R
Particulars of post	Associate Professor (Male) (Physics) (BS-19) Federal Government Educational Institutions (Cantts/ Garrisons), Ministry of Defence.
Minimum Qualification & Experience:	Ph.D. Degree in the relevant subject with eight (8) years post qualification teaching and administrative experience at College/ University level. OR M. Phil Degree in the relevant subject with ten (10) years post qualification teaching and administrative experience at College/ University level. OR Second Class or Grade 'C' Master's Degree in the relevant subject with twelve (12) years post qualification teaching and administrative experience at College/ University level.

Part-I: (Physics)**50 Marks****I. Mechanics**

- Vectors—Dots, Cross and triple products, Gradient, divergence and applications.
- Newtonian laws of motion; calculus based approach to kinematics, forces and dynamics, conservation law of energy; conservation of linear and angular momentum; Gravitation; planetary motion and satellites; Kepler's laws; centripetal forces
- Special theory of relativity. Mischelson—Morley experiment and Einstein's postulates; Lorentz transformation; time dilation and length contraction; equivalence of mass and energy.

II. Waves and Oscillation

- Free oscillation with one and two degrees of freedom; forced and damped oscillations and phenomenon of resonance.
- Reflection, Refraction, Interference, Diffraction and Polarization of waves; interfero-meter and Newton's rings.

III. Heat and Thermodynamics

- Perfect gas and Van der Waals equation; Three Laws of Thermodynamics, internal energy, temperature, entropy. Thermal properties of Simple system production and measurement of low temperatures; Maxwellian distribution of molecular velocities; Brownian motion; Transport phenomena. Classical Maxwell-Boltzmann Statistics and its application.

IV. Electricity and Magnetism

- Gauss' law Electric potential and Poisson and Laplace's equation Dielectric medium and Polarization; Ampere's law; Vector potential; Magnetic properties of matter; Faraday's law of electromagnetic induction; Maxwell's equations;

Poynting theorem and Poynting Vector. Maxwell's equations in integral and differential form.

V. Modern and Quantum Physics

- Operators and quantum states, time dependent and independent Schrodinger equation, angular momentum, wave mechanics, Heisenber's uncertainty relationship and indeterminacy based on commutation properties of operators, Bohr theory and quantum numbers including electron spin; Pauli's exclusion principle; Spectra of simple systems with one or two valence electrons. Lande's g factor and Zeeman effect. Raman effect; Waves and particles and De Broglie's Hypothesis.

VI. Nuclear Physics

- Structure of Nuclei; Radioactivity, Methods of detection, Phenomenon of fission; reactor and nuclear power, nuclear fusion and its application.

Part-II: (Professional)

50 Marks

I. Development of Curriculum and Instructional Material

- Elements of Curriculum.
- Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives.

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. Educational Administration and Supervision

- The Concept of Administration
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire; Interview; Test; Observation; Rating Scale
- Research Proposal and Report Writing

SUGGESTED READINGS

S. No.	Title	Author
1.	Perspectives of Modern Physics.	A. Beiser.
2.	Fundamentals of Physics.	Halliday & Resnick
3.	Introduction to Electromagnetic Fields and Waves.	D. Corson & P. Lorrain.
4.	Heat and Thermodynamics.	D. Zemansky
5.	Introduction to Quantum Mechanics	D. Griffiths
6.	Modern Physics	Serway, Moses, Moyer.
7.	Solid State Physics	C. Kittel
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.4-144/2018-R
Particulars of post	Rehabilitation Specialist (BS-18), Armed Forces Institute of Rehabilitation Medicine, Ministry of Defence.
Minimum Qualification & Experience:	i. MBBS with FCPS in Rehabilitation Medicine from CPSP. ii. Five (5) years post FCPS experience as Specialist in a Govt. Organization.

Part-I: (Qualification Based)**50 Marks**Core courses of **MBBS Degree****Part-II: (Professional)****50 Marks**Core courses of FCPS in **Rehabilitation Medicine**.

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

Case No.	F.4-145/2018-R
Particulars of post	Assistant Professor (Mathematics) (BS-18), Military College Jhelum, Ministry of Defence.
Minimum Qualification & Experience:	Ph.D. Degree in the relevant subject with one (1) 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 from a university recognized by HEC with five (5) year post qualification teaching experience at College/ University level.

Part-I: (Mathematics)**50 Marks****I. Vector Calculus**

Vector algebra; scalar and vector products of vectors; gradient divergence and curl of a vector; line, surface and volume integrals; Green's, Stokes' and Gauss theorems.

II. Statics

Composition and resolution of forces; parallel forces and couples; equilibrium of a system of coplanar forces; centre of mass of a system of particles and rigid bodies; equilibrium of forces in three dimensions.

III. Dynamics

- Motion in a straight line with constant and variable acceleration; simple harmonic motion; conservative forces and principles of energy.
- Tangential, normal, radial and transverse components of velocity and acceleration; motion under central forces; planetary orbits; Kepler laws;

IV. Ordinary differential equations

- Equations of first order; separable equations, exact equations; first order linear equations; orthogonal trajectories; nonlinear equations reducible to linear equations, Bernoulli and Riccati equations.
- Equations with constant coefficients; homogeneous and inhomogeneous equations; Cauchy-Euler equations; variation of parameters.
- Ordinary and singular points of a differential equation; solution in series; Bessel and Legendre equations; properties of the Bessel functions and Legendre polynomials.

V. Fourier series and partial differential equations

- Trigonometric Fourier series; sine and cosine series; Bessel inequality; summation of infinite series; convergence of the Fourier series.
- Partial differential equations of first order; classification of partial differential equations of second order; boundary value problems; solution by the method of separation of variables; problems associated with Laplace equation, wave equation and the heat equation in Cartesian coordinates.

VI. Numerical Methods

- Solution of nonlinear equations by bisection, secant and Newton-Raphson methods; the fixed- point iterative method; order of convergence of a method.
- Solution of a system of linear equations; diagonally dominant systems; the Jacobi and Gauss-Seidel methods.
- Numerical solution of an ordinary differential equation; Euler and modified Euler methods; Runge- Kutta methods.

Part-II: (Professional)

50 Marks

I. Development of Curriculum and Instructional Material

- Elements of Curriculum.
- Curriculum Development Process: Need Assessment, Formulation of Aims and Objectives.

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. Educational Administration and Supervision

- The Concept of Administration
- Educational Supervision

V. Research Methods in Education

- Scientific Method and its Application in Education
- Sampling Techniques:
- Research Instruments: Questionnaire: Interview; Test; Observation; Rating Scale
- Research Proposal and Report Writing

SUGGESTED READINGS

S.No.	Title	Author
1.	An Introduction to Vector Analysis	Khalid Latif,
2.	Introduction to Mechanics	Q.K. Ghori
3.	An Intermediate Course in Theoretical Mechanics	Khalid Latif,
4.	Differential Equations with Boundary Value Problems	D. G. Zill and M. R. Cullen
5.	Elementary Differential Equations	E.D. Rainville, P.E. Bedient and R.E. Bedient
6.	Elements of Numerical Analysis	F. Ahmad and M.A Rana
7.	Mathematical Methods	S. M. Yousaf, Abdul Majeed and Muhammad Amin
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- 148 /2018-R
Particulars of post	Deputy Draftsman (BS-19), Ministry of Law and Justice.
Minimum Qualification & Experience:	<ul style="list-style-type: none"> i. Second Class or Grade "C" Bachelor's Degree in Law or equivalent qualification from a University recognized by HEC. ii. Twelve (12) years experience of work in drafting statutes and statutory rules, notifications, legislations and other legal instruments and vetting of legal documents.

LAW: 100 Marks**I. Definitions of Crime****II. All Provisions of:**

- i. Concept of arbitration, arbitration with or without intervention of court and in civil suits.
- ii. Establishment of Civil Courts with their Original & Appellate Jurisdiction.
- iii. The Code of Civil Procedure, 1908
- iv. Pakistan Panel Code, 1860
- v. Qanun-e-Shahdat Order, 1984
- vi. Criminal Procedure Code, 1898

SUGGESTED READINGS

S. No.	Title	Author
1.	Pakistan Panel Code, 1860	M. Mahmood
2.	Criminal Procedure Code, 1898	Shaukat Mahmood
3.	Law of Evidence	Justice (R) Khalid ur Rahman Khan
4.	Qanun-e-Shahdat Order, 1984	as adapted from Principles and Digest of the Law of Evidence by M. Monir
5.	The Code of Civil Procedure, 1908	Aamir Raza A. Khan
6.	The Arbitration Laws in Pakistan	M. Mahmood
7.	Civil Courts Ordinance, 1962	Nisar Ahmad Nisar

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

Case No.	F.4-160/2018-R
Particulars of post	Assistant Professor (BS-18), Pakistan Institute of Medical Sciences (PIMS) Islamabad, Capital Administration and Development Division.
Minimum Qualification & Experience:	<p>i. MBBS or equivalent Medical qualification recognized by PMDC. OR M.Sc. of a recognized University in case of Basic Science in the relevant subject. (for non Medical graduates).</p> <p>ii. POST GRADUATE QUALIFICATIONS: (i) D.Sc., Ph.D., FCPS, MD, M.S., M.Phil etc. in the respective subjects. (ii) FCPS/ MD with DPH (for Public Health Institution only). OR equivalent qualification recognized by PMDC. (iii) Qualification should be in the respective speciality and not the general qualification. (iv) For all Basic Science subjects, a non medical graduate is eligible provided a Medical Graduate with requisite qualification is not available. (v) Candidates possessing D.Sc./ Ph.D., Degree the thesis or major subjects/ courses should be related to the subject in which they are applying. (vi) Candidates without a basic medical qualification are eligible for appointment as Assistant Professor Provided they possess at least D.Sc./ Ph.D., Degrees and provided a medical graduate with the requisite qualification is not available.</p> <p>iii. EXPERIENCE: (i) Five years teaching or practical experience before or after the postgraduate qualification in the relevant subject for the holders of higher postgraduate qualification like FCPS etc. in order of preference as: 1ST PREFERENCE: Teaching experience. 2ND PREFERENCE: Practical experience after postgraduate qualification. 3RD PREFERENCE: Practical experience before postgraduate qualification. (ii) Credit shall be given to the original published research work in Standard Medical Journal.</p>

For (A) Psychiatry**Part-I: (Qualification Based)****50 Marks**Core courses of **MBBS Degree****Part-II: (Professional)****50 Marks**Core courses of Specialization in **Psychiatry**.**For (B) Rheumatology****Part-I: (Qualification Based)****50 Marks**Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Rheumatology**.

For (C) Transplant Surgery**Part-I: (Qualification Based) 50 Marks**

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Transplant Surgery**.

For (D) Liver Transplant Hepatology Surgery**Part-I: (Qualification Based) 50 Marks**

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Liver Transplant Hepatology Surgery**.

For (E) General Medicine**Part-I: (Qualification Based) 50 Marks**

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **General Medicine**.

For (F) General Surgery**Part-I: (Qualification Based) 50 Marks**

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **General Surgery**.

For (G) Paeds Surgery

Part-I: (Qualification Based)

50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional)

50 Marks

Core courses of Specialization in **Paeds Surgery**.

For (H) Anaesthesia

Part-I: (Qualification Based)

50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional)

50 Marks

Core courses of Specialization in **Anaesthesia**.

For (I) Pathology

Part-I: (Qualification Based)

50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional)

50 Marks

Core courses of Specialization in **Pathology**.

For (J) Paeds Oncology

Part-I: (Qualification Based)

50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional)

50 Marks

Core courses of Specialization in **Paeds Oncology**.

For (K) Paeds Medicine

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Paeds Medicine.**

For (L) Paeds Medicine (PM&R)

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Paeds Medicine (PM&R)**

For (M) Gynae

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Gynaecology**

For (N) Cardiac Surgery

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Cardiac Surgery.**

For (O) Cardiology**Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Cardiology**.**For (P) Bone Marrow****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Bone Marrow**.**For (Q) Nephrology****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Nephrology**.**For (R) ENT****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **ENT**.

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

Case No.	F.4-164/2018-R
Particulars of post	Senior Registrar (BS-18), Pakistan Institute of Medical Sciences (PIMS) Islamabad, Capital Administration and Development Division.
Minimum Qualification & Experience:	<p>i. MBBS or equivalent qualification recognized/registered by PMDC. OR M.Sc. from a recognized University in case of Basic Science subjects in the relevant subject. (for non Medical graduates).</p> <p>ii. Postgraduate qualification such as FCPS/ M.S/M.D in the respective subject or equivalent qualifications recognized/registered by the PMDC.</p> <p>iii. EXPERIENCE: Five years teaching or practical experience in the relevant speciality before or after postgraduate qualification. 1ST PREFERENCE: Teaching experience. 2ND PREFERENCE: Practical experience after postgraduate qualification. 3RD PREFERENCE: Practical experience before postgraduate qualification.</p> <p>NOTE: Credit shall be given to the original published research work in Standard Medical Journal.</p>

For (A) Nephrology**Part-I: (Qualification Based)****50 Marks**Core courses of **MBBS Degree****Part-II: (Professional)****50 Marks**Core courses of Specialization in **Nephrology**.**For (B) Neurology****Part-I: (Qualification Based)****50 Marks**Core courses of **MBBS Degree****Part-II: (Professional)****50 Marks**Core courses of Specialization in **Neurology**.

For (C) General Medicine**Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **General Medicine.****For (D) General Surgery****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **General Surgery.****For (E) Neurosurgery****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Neurosurgery.****For (F) Plastic Surgery****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Plastic Surgery.**

For (G) Radiology

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Radiology**.

For (H) Pathology

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **Pathology**.

For (I) ENT

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **ENT**.

For (J) EAC

Part-I: (Qualification Based) 50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional) 50 Marks

Core courses of Specialization in **EAC**.

For (K) Anaesthesia**Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Anaesthesia**.**For (L) Transplant Hepatology and Surgery****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Transplant Hepatology and Surgery**.**For (M) Paeds Surgergy****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Paeds Surgergy**.**For (N) Gynae/OBS****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Gynae/OBS**.

For (O) Neonatology**Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Neonatology**.**For (P) Cardiac Surgery****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Cardiac Surgery**.**For (Q) Cardiology****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Cardiology**.**For (R) Dermatology****Part-I: (Qualification Based) 50 Marks**Core courses of **MBBS Degree****Part-II: (Professional) 50 Marks**Core courses of Specialization in **Dermatology**.

For (S) Orthopaedic.

Part-I: (Qualification Based)

50 Marks

Core courses of **MBBS Degree**

Part-II: (Professional)

50 Marks

Core courses of Specialization in **Orthopaedic.**

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