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. 01/2017

S.	Case No.	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
No	F.4-				
1.	02/2017	Lecturer (Female) (BS-17), A). Physics, B). English, C). Urdu, D). Pakistan Studies, E). Sociology, F). Geography, G). Education, H). History, I). Computer Science, J). Political Science, K). Health & Physical Education, L). Home Economics M). Psychology N). Islamic Studies. Federal Government Colleges for Women, Federal Directorate of Education, Islamabad, Capital Administration and Development Division.	Second Class or Grade 'C' Master's degree or equivalent in the relevant subject.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Subject Test = 50 marks Part-III Professional Test = 30 marks Note: In Language Subjects (i.e Urdu and English), English part for 20 marks will not be included. There will be 70% subject Test and 30% Professional Test. In the subject of Education, there will be 20% English Test and 80% Subject Test. In all other subjects there will be English (20 marks), Subject Test (50 marks) and Professional Test (30 marks)	A. For Physics Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) • Mechanics • Heat and Thermodynamics, • Waves and Optics, • Electrostatic, • Electricity and Magnetism, • Modern and Quantum Physics, • Nuclear Physics, • Basic Solid State Physics, Part-III • Teaching Techniques and Methodology • Classroom Management and Discipline • Testing and Evaluation • Development of Education in Pakistan B. For English Part-I (Master's Level) (70 Marks) • English Literature 16 th to 20 th Century. • Vocabulary • Structuring of sentences. • Linguistics. • English Language Teaching. • Grammar. • Syntax. • Diction. Part-II (30 Marks) • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan.

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi	
110					C. For Urdu	
					Part-I (Master's Level) (70 Marks)	
					اردوذ فجروالغاظ	立
					ارد و جملے كا دُصاني	故
					ارد قو عد كا استعالَ	☆
					لبانيات	☆
					انیسوی اور بیسوی اسدی کاار دوادب اوراس کا تقیدی جائزه اردوادب کی نثری اصناف کا تحقیقی جائزه اردوادب کی شعری اصناف کا تحقیقی جائزه	☆ ☆ ☆
					اردوادب كي نثري اصناف كالحقيقي جائزه	☆
					اردوادب كي شعري اصناف كالتقيقي جائزه	☆
					غالبيات	☆
					اقباليات	*
					 Part-II (30 Marks) Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan. D. For Pakistan Studies Part-I Vocabulary, Grammar Usage, Sentence Structure Part-II (Masters Level) Ideology of Pakistan in light of speeches and statements of Allama Iqbal and Quaid-e-Azam Pakistan Movement 1857-1947 Key Personalities in Pakistan Movement Current Issues of Pakistan (challenges to Nation Security, Economic Challenges, Pakistan's War Terror, Pakistan's Energy problems and their ereignes The Kashmir Issue Geography of Pakistan ✓ Land and People of Pakistan ✓ Pakistan and Islamic World, ✓ Pakistan role in the region ✓ Pakistan and its Neighbouring Countries. (India, Iran and Afghanistan, ✓ Language and Cultural Heritage of Pakistan ✓ Natural Resources of Pakistan, Economic Development of Pakistan, Recent Constitutional and Legal debates, Lates Constitutional Amendments, 	onal ar on affects) encies (China,

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan E. For Sociology Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) Meaning, Characteristics and Elements of Culture Society: Meaning and Characteristics Social Contract Theory & Organismic Theory Sociological Theories (Ibn-i-Khaldun, Spencer, Max Weber, Karl Marx) Methods of Sociological Research, Social Institutions: Nature, Genesis & Function Mechanism of Social Control: Formal & Informal Social and Cultural Change & Social Policy: Processes & Effects Community organization and development Social Problems in Pakistan Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation,
					 Development of Education in Pakistan F. For Geography Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) Physical Geography Landform development, climate, oceans & seas, factor of climate and environmental change Geography of Pakistan, Human Geography (Geographic pattern of culture, Ethnicities and Nationalities, Economic Indicators, Social Indicators, Health Indicators, Renewable Resources, Recycling Resources, Sustainable resources. The Demographic Transition) Political Geography (State, National and the Nation-State Geopolitics of uneven development)

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
NO	1.7				 Statistical Geography, Climatology/Metrology, Environmental Geography, GIS Techniques, Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan G. For Education
					Part-I (20 marks)
					Vocabulary, Grammar Usage, Sentence Structuring
					Part-II (80 marks)
					 Definition and Purpose of Education , Educational Reforms in Pakistan, Philosophy of Education, Sociology of Education, Educational Psychology, Educational Guidance & Counselling, Educational Planning & Management, Educational Administration and Supervision, Curriculum Development & Instructions, Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan Issues related to Education in Pakistan H. For History
					Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) The Prophetic Age (570-632) The Pious Caliphate (632-660) Political System of Islam under the Prophet (PBUH) and the Pious Caliphate (Nature of Islamic State, Form of Govt, Function of Islamic State, Caliphate Shura or the Consultative body and its role)

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi Institutional Development of the Muslim Civilisation (Umayyad, Abbasid, Crusades, Ottoman Empire) Muslim Freedom Movement in India (1857-1947) Ideology of Pakistan The Kashmir Issue Pakistan and Neighbouring Countries Research Methodology & Philosophy of History Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan I. For Computer Science Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) Computer Hardware/Software, Data Communication & Networking, C/C++ Language, Visual Basic, Operating System Unix/Linux Windows XP, 2000, Oracle/PLSQL, System Analysis & Design. Web Programming, Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan J. For Political Science
					Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level)
					 Western Political Thought (Plato, Aristotle, Machiavelli, Montesquieu, Hobbes, Locke, Rousseau, Marx, Lenin, Frances Fukuyama) Muslim Political Thought (Al-Farabi, Al-Mawardi, Imam Ghazali, Ibn Khaldun, Shah Waliullah, Allama Muhammad Iqbal)

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
No	F.4-				State System: Nature and Emergence, Islamic Concept Political Institutions and Role of Government Political Ideologies (Capitalism, Marxism, Communism/Socialism, Fascims, Nationalism, Islamic Political Ideology) Government and Politics in Pakistan: Analysis of 1956, 1962, 1973 Constitutions and Constitutional Amendments History of International Relations: Post World War-II Period. Comparative Study of Political System (Turkey, India, Malaysia and China) Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan K. For Health & Physical Education Part-I Vocabulary, Grammar Usage, Sentence Structuring. Part-II (Masters Level) Philosophy of Physical Education, Curriculum Development in Physical Education, Rules of games, Basics of Human Anatomy Administrative and Management in Sports, Sports Nutrition, Trauma and Rehabilitation, Research Methodology in Physical Education Test, Measurement and Evaluation in Physical Education & Sports Athletic Injuries, Handicap Sports Organization Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation
					 Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					L. For Home Economics
					Part-I
					Vocabulary, Grammar Usage, Sentence Structuring
					Part-II (Masters Level)
					Introduction to Home Economics
					 Fundamentals of Food and Nutrition
					Meal Management & Food Preservation in Early Childhood
					Nutrition Health and Prevention
					Entrepreneurship for home based industry
					House Keeping Management
					Methods of Research in Home Economics
					Childcare and Development Guidance
					Family Problems and Intervention strategies
					Textiles and Clothing
					Part-III
					Teaching Techniques and Methodology
					Classroom Management and Discipline
					Testing and Evaluation
					Development of Education in Pakistan
					M. For Psychology
					Part-I
					Vocabulary, Grammar Usage, Sentence Structuring
					Part-II (Masters Level)
					Nature and Scope of PsychologyBiological basis of Behaviour
					Developmental Psychology
					Social Psychology
					Educational Psychology
					Counseling Psychology
					Abnormal and Clinical Psychology
					 Organizational/Industrial Psychology
					Forensic Psychology
					Psychological Testing and Assessment
					Research Methodology Rest III.
					Part-III • Teaching Techniques and Methodology
					Teaching Techniques and MethodologyClassroom Management and Discipline
					Testing and Evaluation
					Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					N. <u>For Islamic Studies</u> <u>Part-I</u> Vocabulary, Grammar Usage, Sentence Structuring <u>Part-II</u> (Masters Level)
					ہے قرآن کا بنیادی موضوع/ متن ہے سیرت النبی اللہ اللہ اللہ اللہ اللہ اللہ اللہ الل
					اسلام کے نمایاں پہلو اسلام کے نمایاں پہلو اسلامی عقائد کے انفرادی اوراجتا عی اثر ات انسانی حقوق _ اسلام کی نظر میں اسلام اورعصر حاضر کے چیلینجو اسلامی نظام حکمر انی کا ڈھانچہ اسلامی نظام حکمر انی کا ڈھانچہ اسلامی ضابطہ حیات Part-III • Teaching Techniques and Methodology
					Classroom Management and DisciplineTesting and EvaluationDevelopment of Education in Pakistan
2.	03/2017	Public Relations Officer (BS-16), Board of Investment, Prime Minister's Office.	 i. Second Class or Grade 'C' Bachelor's Degree ii. Five (5) years post qualification experience in protocol and Public Relation Work. 	Objective Type Test (MCQ) Part-I English = 20 marks Part-II General Intelligence/ Professional Test = 80 marks	Part-I Grammar Usage, Sentence Structuring Part-II (Bachelor's Level) Basic Arithmetic. (Review make it more profound) Current Affairs. Pakistan Affairs & Islamic Studies Everyday/General Science Concept of Public Relations Public relation in Pakistan Public relations and publicity

S.	Case No.	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
No	F.4-				
3.	04/2017	Deputy Assistant Director (BS-16), Board of Investment, Prime Minister's Office.	 i. Second Class or Grade 'C' Bachelor's Degree. ii. Five (5) years post qualification experience in Personnel Administration/ Secretariat work. 	Objective Type Test (MCQ) Part-I English = 20 marks Part-II Professional Test = 80 marks	Part-I Grammar Usage, Sentence Structuring. Part-II DDO Hand Book Financial Management, Rules of Business Secretariat Instructions & Office Procedure General Financial Rules (Vol-I & II) Civil Servants Act 1973 and Rules made thereunder Public Procurement Rules, 2004
4.	05/2017	Assistant Director (BS-17), Board of Investment, Prime Minister's Office.	i. Second Class or Grade 'C' Master's Degree or equivalent in one of the following subjects: Economics/ Commerce/ Business Administration/ Public Administration/ Physics/ Chemistry/ International Relations/ Chemicals/ Electronics/ Mechanical Engineering. ii. Two (2) years post qualification experience in the field of Industrial Production/ Financial and economic analysis of investment proposals/ Marketing, Management Development/ Economic Policy and Planning/ Industrial Policy Investment Promotion in Commercial/ Industrial Government/ Semi Government Organization/ Private firms of repute.	Objective Type Test (MCQ) Part-I English =20 marks Part-II Professional Test = 80 marks	Part-I Vocabulary, Grammar Usage, Sentence Structuring. Part-II Investment Policy of Pakistan Investment Opportunities in Pakistan in different Sectors Financial and Economic Analysis of Investment proposals Public Private Partnership and Investment opportunities Investment Climate for foreign Investment, Economic Policy and Planning Industrial Policy of the Government Methods of Investment Promotion Functions of Board of Investment

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
5.	09/2017	Lecturer (Male) (BS-17), A). Commerce B). Political Science, C). English, D). Economics, E). History, F). Islamic Studies, G). Urdu H). Persian, Federal Government Colleges for Men, Federal Directorate of Education, Islamabad, Capital Administration and Development Division	Second Class or Grade 'C' Master's degree or equivalent in the relevant subject.	Objective Type Test (MCQ) Part-I English = 20 marks Part-III Subject Test = 50 marks Part-IIII Professional Test = 30 marks Note: In Language Subjects (i.e Urdu, English and Persian), English part for 20 marks will not be included. There will be 70% subject Test and 30% Professional Test. In all other subjects there will be English (20 marks), Subject Test (50 marks) and Professional Test (30 marks)	A. For Commerce Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) Auditing Cost Accounting Managerial Economics Financial Management Operations and Production Management Research Methods in Business Computer Application in Business Islamic Principles of Banking & Finance Corporate Law E-Commerce Specialized financial Institutions Investment Analysis and Portfolio Management Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan B. For Political Science Part-I Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level) Western Political Thought (Plato, Aristotle, Machiavelli, Montesquieu, Hobbes, Locke, Rousseau, Marx, Lenin, Frances Fukuyama) Muslim Political Thought (Al-Farabi, Al-Mawardi, Imam Ghazali, Ibn Khaldun, Shah Waliullah, Allama Muhammad Iqbal) State System: Nature and Emergence, Islamic Concept Political Institutions and Role of Government Political Institutions and Role of Government Political Ideologies (Capitalism, Marxism, Communism/ Socialism, Fascims, Nationalism, Islamic Political Ideology)

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					 Government and Politics in Pakistan: Analysis of 1956, 1962, 1973 Constitutions and Constitutional Amendments History of International Relations: Post World War-II Period. Comparative Study of Political System (Turkey, India, Malaysia and China)
					Part-III Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan C. For English
					Part-I (Master's Level) (70 Marks) • English Literature 16 th to 20 th Century. • Vocabulary • Structuring of sentences. • Linguistics. • English Language Teaching. • Grammar. • Syntax. • Diction.
					Part-II (30 Marks) • Teaching Techniques and Methodology, • Classroom Management and Discipline, • Testing and Evaluation, • Development of Education in Pakistan. D. For Economics
					Part-I Vocabulary, Grammar Usage, Sentence Structuring. Part-II (Masters Level) Micro Economics: Determination of market demand and supply Macro Economics: Basic Economic Concepts International Trade: Theories, Trade Restrictions & Trade Policy,

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					 Economic Development: Historical growth development process and Theories, Structural Issues WTO and Developing Economies, Monetary Theory & Public Finance, Agriculture Development in Pakistan Industrial Development in Pakistan Energy Crises and Policy in Pakistan Interest Free Banking in Pakistan Planning Experience in Pakistan
					Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan E. For History Part-I
					Vocabulary, Grammar Usage, Sentence Structuring Part-II (Masters Level)
					 The Prophetic Age (570-632) The Pious Caliphate (632-660) Political System of Islam under the Prophet (PBUH) and the Pious Caliphate (Nature of Islamic State, Form of Govt, Function of Islamic State, Caliphate Shura or the Consultative body and its role) Institutional Development of the Muslim Civilisation (Umayyad, Abbasid, Crusades, Ottoman Empire) Muslim Freedom Movement in India (1857-1947) Ideology of Pakistan The Kashmir Issue Pakistan and Neighbouring Countries Research Methodology & Philosophy of History
					Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi
					F. For Islamic Studies
					Part-I Vocabulary, Grammar usage, Sentence Structuring
					Part-II (Masters Level)
					☆ قرآن کا بنیادی موضوع/ متن ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ ﷺ
					🖈 سيرت البي الله الله الله الله الله الله الله الل
					الله الله الله الله الله الله الله الله
					میں مذہب کی تشریح۔
					🖈 تعارف إسلام
					 ☆ تعارف اسلام ☆ انسانی زندگی میں دین کی اہمیت ☆ اسلام کے نمایاں پہلو ☆ اسلام کے نمایاں پہلو ☆ اسلامی عقائد کے انفر ادبی اوراجماعی اثر ات
					☆ اسلام کے نمایا ں پہلو
					🖈 اسلامی عقا ئد کے انفر ادی اوراجتماعی اثر ات
					ہ انسانی حقوق۔اسلام کی نظر میں ہ اسلام اورعصر حاضر کے چیلینجز ہے
					🖈 اسلام اورعصر حاضر کے چیلینجز
					ہے ہمانا ہور سرحا رہے ہر ﷺ اسلامی نظام حکمرانی کاڈھانچہ ﷺ سرکاری ملاز مین کی ذمہداریاں
					🖈 سر کاری ملاز مین کی ذ مه داریا ن
					🖈 اسلامی ضابطه ء حیات
					Part-III Teaching Techniques and Methodology Classroom Management and Discipline Testing and Evaluation Development of Education in Pakistan

S. No	Case No. F.4-	Particulars of Post(s)	Qualifications for Posts	Test Specification	Topics of Syllabi	
110	11-				G. For Urdu Part-I (Master's Level) (70 Marks)	
						☆
					اردود برها خاط اردوجیلے کا ڈھائیے ارد قو عد کا استعال انہویں اور بیسویں صدی کا اردوادب اور اس کا تقیدی جائز ہ اردوادب کی نثری اصناف کا تحقیقی جائز ہ اردوادب کی شعری اصناف کا تحقیقی جائز ہ غالبیات	*
					ارد قو عد کا استعمال	*
					لبانات	*
					انيسوس اوربيسو سيصدى كااردوادب اوراس كانتقيدي حائزه	*
					اردوادب كينثري اصناف كأتحقيقي جائزه	*
					اردوادب كي شعري اصناف كالتحقيق جائز د	*
					غالبيات	*
					اقباليات	*
	44/0047	T1-A-l:		Objective Type Test (MCO)	Part-II (30 Marks) Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan. H. For Persian Part-I (Master's Level) (70 Marks) Classical Persian Prose and Poetry Modern Persian Literature, History of Persian Language and Literature, Study of Iranian History and Culture, Iqbal's Persian Poetry and Thoughts. Part-II (30 Marks) Teaching Techniques and Methodology, Classroom Management and Discipline, Testing and Evaluation, Development of Education in Pakistan.	
6.	14/2017	Test Administrator (BS-17), National Education Assessment System (NEAS), Ministry of Federal Education and Professional Training.	Second Class or Grade 'C' Master's degree.	Objective Type Test (MCQ) Part-I English = 20 marks Part-II General Intelligence Test = 80 marks	Part-I Vocabulary, Grammar Usage, Sentence Struct Part-II Basic Arithmetic. Current Affairs. Pakistan Affairs & Islamic Studies Everyday/General Science Note: (Equal weightage for each topic at Part-I	·

Scheme and Syllabus for Written Examination (Descriptive) for Posts in BS-20 advertised under Consolidated Advertisement No. 01/2017

Case No.	F.4-15/2017-R
Particulars of	Fisheries Development Commissioner (BS-20), Ministry
post	of Ports & Shipping.
Minimum	i. M.Sc. (Fisheries)/ Marine Biology or M.Sc. (Zoology)/
Qualification &	(Biology) with specialization in fisheries.
Experience:	ii. Seventeen (17) years post qualification experience in
	Marine/ Inland Fisheries or Aquaculture Technology.

PAPER: ENGLISH (100 MARKS)

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

OR

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

Schemes and Syllabi for Written Examination (Descriptive) for All Posts in BS-18 & BS-19 included in Consolidated Advertisement No. 01/2017

PAPER-I: ENGLISH

Max Marks: 100 Time Allowed: 3 Hours

(i) <u>English Essay-50 Marks:</u> 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 disciplinespecific 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.

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	

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-01/2017-R
Particulars of post	Associate Anaesthetist (BS-18), Federal General Hospital, Chak
	Shahzad Islamabad, Cabinet Division.
Minimum Qualification	i. MBBS degree recognized by PM&DC.
& Experience:	ii. Postgraduate higher diploma in the relevant field recognized by
	PM&DC with 3 years post graduate experience.
	OR
	Postgraduate lower diploma in the relevant field recognized by
	PM&DC with 5 years post graduate experience.

Part-I: (Qualification Based) 50 Marks

Core courses of MBBS Degree

Part-II: (Professional) 50 Marks

Core courses of Post Graduate Lower Diploma in Anaesthesia.

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-06/2017-R
Particulars of post	Assistant Draftsman (BS-18), Law and Justice Division, Ministry
	of Law, Justice and Human Rights
Minimum	i. Second Class or Grade 'C' Bachelor's Degree in Law or
Qualification &	Equivalent qualification, from a university recognized by HEC.
Experience:	ii. 05 years post qualification experience of work in drafting
	statutes and statutory rules, notifications, legislations and
	other legal instruments and vetting of legal documents

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

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

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-07/2017-R
Particulars of post	Legislative Translation Officer (BS-18), Ministry of Law, Justice
	and Human Rights.
Minimum Qualification & Experience:	 i. Bachelor's Degree in Law and Urdu as an elective subject at Bachelor level from a University/ College recognized by the HEC.
	ii. Five (5) years post qualification experience of translation from English to Urdu.

Translation of some selected portions from English to Urdu and Urdu to English from the following Statutes:

- i. The Code of Civil Procedure, 1908
- ii. Pakistan Panel Code, 1860
- iii. Qanun-e-Shahdat Order, 1984
- iv. Criminal Procedure Code, 1898
- v. Civil Courts Ordinance, 1962

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

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-08/2017-R
Particulars of post	Senior Mining Geologist (BS-18), Geological Survey of Pakistan, M/O Petroleum and Natural Resources
Minimum Qualification & Experience:	 i. Second Class or Grade 'C' M.Sc. Degree in Geology with specialization in Mining Geology/Economic Geology or equivalent from a University recognized by the HEC.
	ii. Five (5) years post qualification research experience in the field of Geology.
	iii.Must have published at least three (3) research papers in the fields of Geology.

Geology: 100 Marks

I. Mineral and Energy Resources

Introduction of geological exploration/prospecting. Brief description of hydrocarbons, coal, gemstones, copper, lead, zinc, iron, gold, chromite, manganese, salt, gypsum, bauxite, sulphur, barite, fluorite, clays, phosphorite, building and dimension stones, industrial rocks and minerals, radioactive minerals and rocks with special reference to economic mineral deposits in Pakistan.

Origin, occurrence, and depositional environments of coal; coal Constitution and kinds of coals. Coal rank, grade and calorific value. Coal deposits of Pakistan with reference to Thar Coal. Geothermal energy resources of Pakistan.

II. Mining Geology and Mineral Economics

Terms and definitions of mine workings. Openings through adits, shafts, inclines, vertical cross cuts. Choices of mining methods and modes of extraction. Structural controls in mining: bedding, faults, joints folds, fractures and intrusion. Correlation of data Spatial relationship of seams. Surface and underground, mapping methods. Calculation of grade ad tonnage of ore. Gases in mines, spontaneous combustion. Rock pressure and support, collapse of working faces, pillars, longwall timbering, benches, safety measures. Waste disposal management, impact of mining on land. Water, air and biological resources. Remedies, long term planning and rehabilitation. Estimation of ore reserves/ore resources: Factors affecting mine size grade and distribution of ore body, or reserves, prediction and estimation of cost. Expenditure: Capital cost, equipment cost, infrastructure cost and mine excavation cost, operation cost, power and fuel charges, labour charges, maintenance of plant and equipment, drilling and blasting charges, haulage, ore, grade control, high grade mining priority,

Development decisions based on economic evaluation

III. Engineering and Environmental Geology

Rock and soil mechanics and its application in civil engineering; Rock mass characteristics; Geotechnical studies of rocks and soils; Geological factors and

strength of rocks; Study of geological factors in relation to the construction of buildings and foundations, roads, highways, tunnels, dams and bridges; Application of geophysical methods for site investigation; Construction materials; Mass movement, their causes and prevention.

IV. Economic and Applied Geology

Metallic and Non-metallic mineral resources of Pakistan. Mineral-based industries. Overview of Recodec Copper. Radioactive minerals and their occurrences in Pakistan. Gemstones of Pakistan

Geology of Reservoirs, Dams .Highways and Tunnels. Major natural hazards and their Impact on the environment with special reference to Pakistan.

S. No.	Title	Author
1.	Geology of Pakistan	Bender, F.K. & Raza, H.A.,
2.	Techniques in Mineral Exploration	Reedman, J.H.
3.	Exploration and Mining Geology	Peters, W.E.,
4.	Mining Geology	Mckinstry, H.B.,
5.	Environmental Geology	Montgomery, C.W.,
6.	Economic Geology: Principles and Practice	Walter L. Pohl
7.	Energy Resources	Brown and Skipsy
8.	Pakistan Energy Yearbook 2012	Ministry of Petroleum and Natural Resources Hydrocarbon Development Institute of Pakistan. Islamabad

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-10/2017-R		
Particulars of post	Deputy Engineering Adviser (Power) / Government Inspector of Electricity (BS-19), Office of the Chief Engineering Adviser/ Chairman Federal Flood Commission, Ministry of Water and Power.		
Minimum Qualification & Experience:	 i) Bachelor's Degree in Electrical Engineering or an equivalent qualification from a recognized University/ Institution. ii) Twelve (12) years post qualification experience in Planning, Design or operation of Hydroelectric or Thermal Power Stations or High Voltage Transmission Systems, or distribution systems in BS-17 and above or equivalent in a Government / Semi-Government / reputable private organization. 		

Engineering: 100 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:

<u>DC Motors:</u> 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.

<u>AC Motors:</u> Induction motor, Synchronous motor, Performance, Efficiency. Single phase and three phase Motors.

<u>Generators:</u> Principle, Construction, Different components of generators. AC Generators, DC Generators.

III. Power Systems:

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

IV. Costing, Accounting and Budgeting:

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

V. Project Management:

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

VI. Inventory Management:

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

VII. Quality Management Systems:

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

S.No.	Title	Author
1.	Electrical Technology	B.L. Tharaja
2.	Electronic Devices and Circuits.	Bogart
3.	DC Machines	P.C. Sen
4.	Handbook of Engineering Management	Dennis Lock.
5.	Total Quality Management	Dale H. Besterfield, Carol Besterfield- Michna, Glen H. Besterfield, Mary Gesterfield-Sacre

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-11/2017-R
Particulars of post	Test Development Specialist (BS-18), National Education
	Assessment System (NEAS), Ministry of Federal Education and
	Professional Training.
Minimum Qualification	i) Second class or Grade 'C' Master's degree.
& Experience:	ii) Five (5) years post qualification experience in the field of
·	Educational Administration.

Part-I: 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, 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;

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

Part-II: 50 Marks

(Educational Administration & Professional)

I. Development of Curriculum and Instructional Material

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

II. Process of Teaching and Teaching Strategies

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

III. 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 Planning and Organization in Pakistan
- Approaches to Educational Administration: Democratic; Authoritarian; Laissezfaire
- Educational Supervision

V. Research Methods in Education

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

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.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
4.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson
5.	Research in Education	JW Best
6.	Integrating Education Technology into Teaching	Roblyer
7.	Curriculum Development	S. M. Shahid
8.	Educational Measurement and Evaluation	S. M. Shahid
9.	Educational Administration	S. M. Shahid

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-12/2017-R	
Particulars of post	Deputy Director (BS-18), National Education Assessment System	
	(NEAS), Ministry of Federal Education and Professional Training.	
Minimum Qualification	i) Second Class or Grade 'C' Master's degree.	
& Experience:	ii) Five (5) years post qualification experience in the field of	
-	Educational Administration.	

Part-I: 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, 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;

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

Part-II: 50 Marks

(Educational Administration & Professional)

I. Development of Curriculum and Instructional Material

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

II. Process of Teaching and Teaching Strategies

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

III. 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 Planning and Organization in Pakistan
- Approaches to Educational Administration: Democratic; Authoritarian; Laissezfaire
- Educational Supervision

V. Research Methods in Education

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

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.	Understanding Computer: Today and Tomorrow	Deborah Morley, Charles Parker
4.	MS Office 365 Handbook: 2013 Edition	Kevin Wilson
5.	Research in Education	JW Best
6.	Integrating Education Technology into Teaching	Roblyer
7.	Curriculum Development	S. M. Shahid
8.	Educational Measurement and Evaluation	S. M. Shahid
9.	Educational Administration	S. M. Shahid

Max Marks: 100 Time Allowed: 3 Hours

Case No.	F.4-13/2017-R	
Particulars of post	Psychometrician (BS-18), National Education Assessment System	
•	(NEAS), Ministry of Federal Education and Professional Training.	
Minimum Qualification	i) Second Class or Grade 'C' Master's degree.	
& Experience:	ii) Five (5) years post qualification experience in the field of	
	Psychometrics/ Data Analysis.	

Professional: 100 Marks

I. Psychological Measurement and Tests

Tests and Samples of Behavior, Types of Tests, Origin of Psychometrics, Definition of Measurement, Measuring Behavior, Psychometrics and Its Importance to Research and Practice.

II. Criterion, Content, and Construct Validity

Criterion Validity, Essential Elements of a High-Quality Criterion, Statistical Estimation of Criterion Validity, Correction for Attenuation, Limitations to Using the Correction for Attenuation, Partial Correlation, Coefficient of Multiple Determination and Multiple Correlation, Multiple Linear Regression, Regression Analysis for Estimating Criterion Validity: Development of the Regression Equation, Unstandardized Regression Equation for Multiple Regression

III. Scaling

A Brief History of Scaling, Psychophysical versus Psychological Scaling, Why Scaling Models are Important, Types of Scaling Models, Stimulus-Centered Scaling, Thurstone's Law of Comparative Judgment, Response-Centered Scaling, Scaling Models Involving Order, Guttman Scaling, The Unfolding Technique, Subject-Centered Scaling, Data Organization and Missing Data, Incomplete and Missing Data

IV. Test Development

Guidelines for Test and Instrument Development, Item Analysis, Item Difficulty, Item Discrimination, Point-Biserial Correlation, Biserial Correlation, Phi Coefficient, Tetrachoric Correlation, Item Reliability and Validity, Standard Setting, Standard-Setting Approaches, The Nedelsky Method, The Ebel Method, The Angoff Method and Modifications, The Bookmark Method, Ethical Issues in Assessment

V. Reliability

Conceptual Overview, The True Score Model, Probability Theory, True Score Model, and Random Variables, Properties and Assumptions of the True Score Model, True Score Equivalence, Relationship between Observed and True Scores, The Reliability Index and Its Relationship to the Reliability Coefficient, Summarizing the Ways to Conceptualize Reliability, Coefficient of Reliability, Reliability of Difference Scores, Standard Error of Measurement and Prediction

VI. Norms and Test Equating

Norms, Norming, and Norm-Referenced Testing, Standard Scores Under Linear Transformation, Percentile Rank Scale, Interpreting Percentile Ranks, Normalized zor Scale Scores, Common Standard Score Transformations or Conversions, Test

Score Linking and Equating, Techniques for Conducting Equating: Linear Methods, Equipercentile Equating, Test Equating Using IRT, IRT True Score Equating, Observed Score, True Score, and Ability.

VII. Development of Curriculum and Instructional Material

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

VIII. 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

IX. Educational Administration and Supervision

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

S. No.	Title	Author
1.	Psychometric Methods: Theory into Practice	Larry R. Price
2.	Psychometric Tests for Dummies	Liam Healy
3.	Ultimate Psychometric Tests	Mike Bryan
4.	Curriculum Development	S. M. Shahid
5.	Educational Measurement and Evaluation	S. M. Shahid
6.	Educational Administration	S. M. Shahid