PUNJAB EDUCATION, CURRICULUM, TRAINING AND ASSESSMENT AUTHORITY

21- E-II, Gulberg-III, Lahore

No: PECTAA/C&C Unit/2026/1238

Dated: 06.11.2026

Director (C & C)

NOTIFICATION

In pursuance of Section 9(1)(b) of the Punjab Education, Curriculum, Training and Assessment Authority Act 2025 and with the approval accorded by the Academics Committee of the Punjab Education, Curriculum, Training and Assessment Authority in its 13th meeting held on 05.11.2026, the Smart Syllabus (Accelerated Learning Programme – ALP / Deleted Topics and Exercise Questions), Pairing Schemes, and Model Papers for the Academic Session 2026-27 and BISEs Annual Examination-2027 for Grade-9 **(Annex-A)** are hereby notified for implementation across Punjab.

Director (Curriculum & Compliance)

CC:

1. PSO to the Minister, Government of the Punjab, School Education Department
2. PS to the Vice Chairperson, PECTAA / Parliamentary Secretary for School Education
3. PS to the Chairperson, Chief Minister Task Force for Examination & Assessment
4. PS to the Secretary, Government of the Punjab, School Education Department
5. PS to the Secretary, Government of the Punjab, Higher Education Department
6. PS to the Special Secretary, Government of the Punjab, SED
7. Staff Officer to the Chief Executive Officer, PECTAA
8. PS to all Managing Directors, PECTAA
9. PA to the Secretary, Punjab Boards Committee of Chairpersons (PBCC)
10. PS to the Chairperson, BISE (Lahore, Gujranwala, Rawalpindi, Sargodha, Faisalabad, Sahiwal, Multan, Dera Ghazi Khan and Bahawalpur)
11. PA to all Directors, PECTAA
12. PS to the Programme Director, PMIU
13. PS to Managing Director, Punjab Education Foundation
14. PS to the Chief Executive Officer, Punjab Education Initiatives Management Authority
15. PS to the Managing Director, Punjab Daanish Schools & Centres of Excellence Authority
16. PS to the DPI (Colleges / Secondary Education), Punjab
17. PS to the DPI (Colleges / Secondary Education), South Punjab, Multan
18. PS to all Chief Executive Officers (Education), District Education Authorities, Punjab
19. Director (IT), PECTAA for uploading the Notification and the Smart Syllabus (Accelerated Learning Programme-ALP / Deleted Topics and Exercise Questions), Pairing Schemes and Model Papers for Grade-9 on the website of PECTAA.
20. Office File

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Accelerated Learning Program (ALP) for Chemistry Grade-9 for Annual Exam- 2027

Note: All types of questions for BISE Examination paper will be prepared from the entire content of the textbook other than those topics and questions which have been excluded / deleted in the Smart Syllabus (ALP) for Chemistry-9 (Session 2026-27).

Chapter No.	Chapter Name	Topics and Questions Deleted
1	States of Matter and Phase of Change 2026-27	1.2 States of Matter (P 4-6) 1.4 Allotropic Forms of Substances (P-8) 1.8 Effect of Temperature on the Solubility of Solutes (P 11-13) **Multiple Choice Questions (MCQs): i, iv, vii, ix, x** **Short Answers Questions (SAQs): iii, v, iv, vii** **Constructed Response Questions (CRQs): i, ii, iv, v, vi, vii, viii** **Descriptive Questions (DQs): ii, iii, iv, v** Investigative Questions (IQs): ii
2	Atomic Structure	2.3 Isotopes and their Masses (Radioactive Isotopes, Applications of Radioactive Isotopes, Ionization of atoms by Radioactive Sources) (P 24-26) **Multiple Choice Questions (MCQs): iii, iv, vii, x** Short Answers Questions (SAQs): iv, v Constructed Response Questions (CRQs): iv, v **Descriptive Questions (DQs): i, ii, iii, iv** Investigative Questions (IQs): i
3	Chemical Bonding	3.6 Compare the Properties of Ionic and Covalent Compounds. (P - 44) 3.8 Nature of Bonding and Properties (P 46-48) Multiple Choice Questions (MCQs): v, ix Short Answers Questions (SAQs): ii, iv Constructed Response Questions (CRQs): v, vi Descriptive Questions (DQs): ii, iv, v Investigative Questions (IQs): i, ii
4	Stoichiometry	Multiple Choice Questions (MCQs): viii, ix, x Short Answers Questions (SAQs): ii Constructed Response Questions (CRQs): iv, v Descriptive Questions (DQs): iii Investigative Questions (IQs): i, ii
5	Energetics	Partial part of 5.3 Exothermic and Endothermic Reactions (from Last para at page 71-74) Multiple Choice Questions (MCQs): vi, vii, ix, x Short Answers Questions (SAQs): iv Constructed Response Questions (CRQs): i, iii Descriptive Questions (DQs): i, iv Investigative Questions (IQs): ii

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6	Equilibria	6.3 Changing the Physical Conditions of a Chemical Reaction (P 86-89) Multiple Choice Questions (MCQs): iii, iv, vii, x Short Answers Questions (SAQs): ii, v Constructed Response Questions (CRQs): iv, v Descriptive Questions (DQs): iii, v Investigative Questions (IQs): i, ii
7	Acid Base Chemistry	7.5 Acid Rain and its Effects (P - 102) Multiple Choice Questions (MCQs): vii, x Short Answers Questions (SAQs): v Constructed Response Questions (CRQs): ii Descriptive Questions (DQs): iv, v Investigative Questions (IQs): i
8	Periodic Table and Periodicity	8.5 Metallic Character and Reactivity (P 114-115) Multiple Choice Questions (MCQs): viii, ix Short Answers Questions (SAQs): ix, x Constructed Response Questions (CRQs): v Descriptive Questions (DQs): iv, vi Investigative Questions (IQs): ii
9	Group Properties and Elements	9.5 Physical Properties of Metals and Non-Metals (P 124-125) Multiple Choice Questions (MCQs): viii, ix Short Answers Questions (SAQs): v **Constructed Response Questions (CRQs): iii, vi, vii** Descriptive Questions (DQs): iii, vi Investigative Questions (IQs): iii
10	Environmental Chemistry	10.4 Global warming (Greenhouse Effect) (P 136-139) 10.5 Strategies to Reduce Environmental Issues (P139-141) **Multiple Choice Questions (MCQs): i, iv, viii, ix** Short Answers Questions (SAQs): ii, iii, vi, vii Constructed Response Questions (CRQs): iii, iv, v **Descriptive Questions (DQs): ii, iii, iv, v** **Investigative Questions (IQs): i, ii, iii**
11	Hydrocarbons	11.4 Important reactions (P 151-153) **Multiple Choice Questions (MCQs): iii, vi, ix, x** Short Answers Questions (SAQs): iii, viii, ix Constructed Response Questions (CRQs): iv, v, **vi** Descriptive Questions (DQs): iii, v Investigative Questions (IQs): i
12	Empirical Data Collection and Analysis	Full chapter is deleted
13	Laboratory and Practical Skills	Full chapter is deleted

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Pairing Scheme / Instructions for Preparation of Exam Paper of Chemistry for Grade-9

ESSENTIAL INSTRUCTIONS FOR PAPER SETTERS

The paper of Chemistry for Grade-9 will consist of 60 marks.

Objective Type = 12 + Subjective Type = 48 marks.

Timing of the paper will be 2 hours.

(Objective Type = 15 minutes + Subjective Type = 1:45 hours)

The paper will be made as per following details:

Part-I: Objective:

Q-1: 12 Multiple Choice Questions. The detail is as follows: **1 × 12 = 12**

Chapter No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
No. of Short Questions per Chapter	1	1	1	1	1	1	1	1	1	1	2

Part-II: Subjective:

Q-2: 5 short answer questions have to be answered out of 8. The detail is as follows: **2 × 5 = 10**

Chapter No.	**1**	**2**	**3**	**4**
No. of Short Questions per Chapter	1	2	2	3

Q-3: 5 short answer questions have to be answered out of 8. The detail is as follows: **2 × 5 = 10**

Chapter No.	**5**	**6**	**7**	**8**
No. of Short Questions	3	2	1	2

Q-4: 5 short answer questions have to be answered out of 8. The detail is as follows: **2 × 5 = 10**

Chapter No.	**9**	**10**	**11**
No. of Short Questions	3	2	3

Part-III: Subjective:

This section will contain three detailed questions bifurcated in two-parts **a & b** (carrying 5 & 4 marks respectively) and students have to attempt 2 questions. The detail is as follows: **2 × 9 = 18**

Q-5:

Chapter No.	**1**	**2**
Part	a	b

Q-6:

Chapter No.	**3**	**7**
Part	a	b

Q-7:

Chapter No.	**8**	**10**
Part	a	b

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MODEL PAPER OF CHEMISTRY FOR GRADE-9

Objective Type (Part-I)

Time allowed: 15 Min. **Max. Marks: 12**

نوٹ: ہر سوال کے چار ممکنہ جوابات A، B، C اور D دیے گئے ہیں۔ جو انتخاب آپ کے خیال میں درست ہے، اس سوال کے سامنے والے دائرے کو مار کر یا پین کی سیاہی سے بھریں۔ دو یا دو سے زیادہ دائروں کو کاٹنے یا بھرنے کی صورت میں جواب غلط تصور ہو گا۔

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle with marker or pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

(i) کیمسٹری کی وہ برانچ جو ایٹم اور مالیکول کے کردار کے بارے میں تحقیق کرتی ہے وہ۔۔۔۔۔۔۔ کہلاتی ہے۔

(i) The branch of chemistry that investigate the behaviour of substances at atomic and molecular level is called_____.

(a) Physical chemistry فزیکل کیمسٹری (b) Inorganic chemistry ان آرگینک کیمسٹری

(c) Organic chemistry آرگینک کیمسٹری (d) Biochemistry بائیو کیمسٹری

(ii) ایلیمنٹس کے تیسرے شیل میں زیادہ سے زیادہ کتنے الیکٹرونز موجود ہو سکتے ہیں؟

(ii) How many electrons can be accommodated at the most in the third shell of the elements?

(a) 8 (b) 18

(c) 10 (d) 32

(iii) کس آئیونک کمپاؤنڈ کا میلٹنگ پوائنٹ سب سے زیادہ ہو گا؟

(iii) Which ionic compound has the highest melting point?

(a) NaCl (b) KCl

(c) LiCl (d) RbCl

(iv) ایلومینیم آکسائیڈ (Al_2O_3) کے 204 گرام میں Al کا ماس کتنا ہو گا؟

(iv) What is the mass of Al in 204 g of aluminium oxide, Al_2O_3?

(a) 26 g (b) 27 g

(c) 54 g (d) 108 g

(v) کون سا ہائیڈروجن ہیلائڈ اینڈوتھرمک ری ایکشن کے نتیجے میں بنتا ہے؟

(v) Formation of which hydrogen halide from the elements is an endothermic reaction?

(a) HCl (b) HF

(c) HBr (d) HI

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(vi) کوبالٹ کلورائیٹ ڈائی ہائیڈریٹ کا رنگ ۔۔۔۔۔۔ ہوتا ہے:

(vi) The colour of cobalt chloride dihydrate is_____.

(a) Purple جامنی (b) Blue نیلا

(c) Pink گلابی (d) Yellow پیلا

(vii) کیلشیم ہائیڈرو آکسائیڈ کو پانی میں حل کریں تو کتنے ہائیڈرو آکسائیڈ آئنز بناتا ہے؟

(vii) How many hydroxide ions, calcium hydroxide will release in water?

(a) 1 (b) 2

(c) 3 (d) 0

(viii) نائٹروجن کا ایٹم اپنے بیرونی شیل میں کتنے الیکٹرونز حاصل کر سکتا ہے؟

(viii) How many electrons can nitrogen accept in its outermost shell?

(a) 2 (b) 3

(c) 4 (d) 5

(ix) کون سا ہیلوجن ایسڈ عام درجہ حرارت پر ان سٹیبل ہے؟

(ix) Which halogen acid is unstable at room temperature?

(a) HCl (b) HF

(c) HBr (d) HI

(x) ماحول میں آرگان کتنے فیصد پائی جاتی ہے؟

(x) What is the percentage of Argon in atmosphere?

(a) 0.934 (b) 21.0

(c) 78.0 (d) 0.04

(xi) کونسی دوسری میٹل کو الکائل ہیلائیڈز کو ریڈیوس کرنے کے لیے استعمال کیا جاتا ہے؟

(xi) Which other metal can be used to reduce alkyl halides?

(a) Al (b) Mg

(c) Ni (d) Co

(xii) آرگینک کمپاؤنڈز میں کون سا ایلیمنٹ کاربن ایٹم کے ساتھ اکثر موجود ہوتا ہے؟

(xii) Which other atom is always present along with carbon atom in all organic compounds?

(a) Oxygen (b) Nitrogen

(c) Hydrogen (d) Halogen

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Subjective Type (Part-II)

Time allowed: 1:45 hrs. **Max. Marks: 48**

Q. 2: Write short answers to any five (05) questions: **(2×5=10)**

کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھیے:

(i) انوائر مینٹل کمیسٹری کی اہمیت بیان کریں۔

(i) Write the importance of environmental chemistry.

(ii) $^{210}_{83}Bi$ میں کتنے نیوٹرونز موجود ہوتے ہیں؟

(ii) How many neutrons are present in $^{210}_{83}Bi$?

(iii) اٹامک نمبر اور ماس نمبر میں فرق بیان کریں۔

(iii) Differentiate between atomic number and mass number.

(iv) HF ایک مائع ہے اور HCl ایک گیس، ایسا کیوں ہے؟

(vi) Why HF is a liquid while HCl is a gas?

(v) نائٹرک ایسڈ کا ڈاٹ اور کراس فارمولہ سٹرکچر لکھیں۔

(v) Write down dot and cross formula of HNO_3.

(vi) مول اور ایوو گیڈرو نمبر میں کیا فرق ہے؟

(vi) What is the difference between a mole and Avogadro's number?

(vii) 1.5 گرام پانی میں کتنے مالیکیولز ہوں گے؟

(vii) How many molecules are present in 1.5 g H_2O?

(viii) بیریم نائیٹرائڈ کا کیمیائی فارمولا لکھیں۔

(viii) Write down the chemical formula of barium nitride.

Q. 3: Write short answers to any five (05) questions: **(2×5=10)**

کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھیے:

(i) انتھالپی اور انتھالپی چینج میں کیا فرق ہے؟

(i) What is the difference between enthalpy and enthalpy change?

(ii) بانڈ کا ٹوٹنا ایک اینڈوتھرمک عمل کیوں ہے؟

(ii) Why is breaking of a bond an endothermic process?

(iii) ہمارے جسم میں گلاکوجن کیا کام کرتی ہے؟

(iii) What is the role of glycogen in our body?

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(iv) ڈائنامک ایکولبریم اور سٹیٹک ایکولبریم میں کیا فرق ہے؟

(iv) How is dynamic equilibrium different from the static equilibrium?

(v) کمبشن ری ایکشنز عام طور پر اریور سیبل کیوں ہوتے ہیں؟

(v) Why are combustion reactions generally irreversible?

(vi) کیلشیم میٹل کس طرح سے سلفیورک ایسڈ سے ری ایکٹ کرتی ہے۔؟

(vi) How does calcium metal react with dilute H_2SO_4?

(vii) لفظ پیریاڈک کی کیا اہمیت ہے؟

(vii) What is the significance of the word periodic?

(viii) پیریاڈک ٹیبل میں ایلیمنٹس کو ترتیب دینے کے لیے اٹامک نمبر کا انتخاب کیوں کیا گیا ہے؟

(viii) Why is atomic number chosen to arrange the elements in the periodic table?

Q. 4: Write short answers to any five (05) questions: (2×5=10)

کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھیے:

(i) آئیوڈین عام درجہ حرارت پر ٹھوس حالت میں کیوں پائی جاتی ہے؟

(i) Why does iodine exist in the solid state at room temperature?

(ii) پیریاڈک ٹیبل میں کوئی سے تین ایلیمنٹس کے نام بتائیں جو مائع حالت میں پائے جاتے ہیں۔

(ii) Name any three elements in the periodic table which exist as liquids.

(iii) نوبل گیسز کی تین خصوصیات بیان کریں۔

(iii) Write any three properties of Noble gases.

(iv) ماحولیاتی تعلیم کا سب سے اہم مقصد کیا ہے؟

(iv) What is the main objective of environmental education?

(v) کاربن مونو آکسائڈ کے نقصان دہ اثرات کیا ہیں؟

(v) What are the harmful effects of carbon monoxide?

(vi) آرگینک اور ان آرگینک کمپاؤنڈز کا موازانہ کریں؟

(vi) Differentiate between an organic and an inorganic compound.

(vii) آرگینک کمپاؤنڈز ہمارے لیے کس طرح فائدہ مند ہو سکتے ہیں؟

(vii) How are organic compounds useful for us?

(viii) نیفتھا کو گرم کرنے سے کیا ہوتا ہے؟

(viii) What does happen when naphtha is heated?

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Subjective Type (Part-III)

نوٹ: کوئی سے دو سوالات کے جوابات لکھیے۔

Note: Attempt any two questions.

Q. 5: (a) Write differences between elements, compounds and mixtures? **(5)**

(الف) ایلیمنٹس، کمپاؤنڈز اور مکسچرز کے درمیان فرق بیان کریں۔

(b) Explain Bohr's atomic model. **(4)**

(ب) بوہر اٹامک ماڈل کی وضاحت کریں۔

Q. 6: (a) Explain the formation of an ionic bond and a covalent bond **(5)**

(الف) آئیونک اور کوویلنٹ بانڈز کیسے بنتے ہیں تفصیل سے لکھیں۔

(b) Explain Arrhenius concept of acids and bases. **(4)**

(ب) ایسڈز اور بیسز کے بارے میں آرہینیس کے نظریات کی وضاحت کریں۔

Q. 7: (a) Explain the variation in the following properties in the periods giving reasons. **(5)**

i- Atomic radius ii- Ionization energy

(الف) پیریڈز میں درج ذیل خصوصیات کیسے تبدیل ہوتی ہیں؟ وجہ بتائیں۔

(i) اٹامک ریڈیس (ii) آئنونائزیشن انرجی

(b) Describe harmful effects of the major pollutants present in the air. **(4)**

(ب) ہوا میں موجود اہم آلودہ اشیا کے نقصان دہ اثرات کا تفصیل سے جائزہ لیں۔

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