

2016 (S) Roll No: \_\_\_\_\_  
INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

CHEMISTRY PAPER-II

TIME ALLOWED: 3.10 Hours

SUBJECTIVE

MAXIMUM MARKS: 83

NOTE: - Write same question number and its part number on answer book,  
as given in the question paper.

SECTION-I

2. Attempt any Eight parts.

8 × 2 = 16

- (i) Ionic character of halides decreases from left to right in a periodic table.
- (ii) Lanthanides contraction controls the atomic size of 6<sup>th</sup> and 7<sup>th</sup> periods.
- (iii) Alkali and Alkaline earth metals are among the reactive elements of the periodic table. Explain.
- (iv) How Gypsum is converted into Plaster of Paris?
- (v) CO<sub>2</sub> is non polar in nature, explain.
- (vi) Give the name and formula of different oxides of Boron.
- (vii) How does Nitrogen differ from other elements of its group?
- (viii) Why does Aqua Regia dissolve Gold and Platinum?
- (ix) What are Freons and Teflon?
- (x) Arrange the following ions in order of increasing size:-  $\bar{F}$ ,  $C\bar{l}$ ,  $B\bar{r}$ ,  $\bar{I}$
- (xi) Under what conditions does Aluminum Corrode? Explain.
- (xii) What are Chelates? Explain with suitable example.

3. Attempt any Eight parts.

8 × 2 = 16

- (i) Write formulas of (i) Naphthalene (ii) Anthracene
- (ii) What is cis – trans Isomerism? Give an example.
- (iii) Why  $Pi(\pi)$  bond is more reactive than sigma ( $\sigma$ ) bond?
- (iv) With equation give polymerization of Ethene.
- (v) How Benzene is prepared from Ethyne? Give reaction.
- (vi) Write chemical equation for combustion of Benzene.
- (vii) How Grignard's reagent is prepared? Give chemical reaction also.
- (viii) Give reaction for preparation of primary amine from Alkyl Halide.
- (ix) How Methanol and Ethanol can be distinguished?
- (x) Draw structure of Bakelite.
- (xi) How Acid Rain is produced?
- (xii) Define C.O.D.

4. Attempt any Six parts.

6 × 2 = 12

- (i) How will you convert Acetaldehyde into Crotonaldehyde?
- (ii) What is Iodoform Test?
- (iii) Convert CH<sub>3</sub>COOH into Ethanol and Ethane.
- (iv) What is Strecker Synthesis? Give reaction involved.
- (v) Give chemical equation for the synthesis of Nylon 6, 6.
- (vi) What is meant by Primary and Secondary structure of Proteins?

P.T.O

INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

## CHEMISTRY PAPER-II

TIME ALLOWED: 20 Minutes

MAXIMUM MARKS: 17

OBJECTIVE

**Note:** You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

- (1) \_\_\_\_\_ element has highest value of Ionization Energy.  
(A) *K* (B) *Mg* (C) *Na* (D) *He*
- (2) \_\_\_\_\_ element is collected at Cathode during the electrolysis of aqueous solution of *NaCl*.  
(A) *Na* (B) Hydrogen (C) Oxygen (D) Chlorine
- (3) Bauxite is the mineral of:-  
(A) *B* (B) *Na* (C) *Al* (D) *K*
- (4) \_\_\_\_\_ catalyst is used in contact process.  
(A) *Fe<sub>2</sub>O<sub>3</sub>* (B) *Ag<sub>2</sub>O* (C) *SO<sub>3</sub>* (D) *V<sub>2</sub>O<sub>5</sub>*
- (5) \_\_\_\_\_ is the strongest acid.  
(A) *HClO<sub>4</sub>* (B) *HClO<sub>3</sub>* (C) *HClO<sub>2</sub>* (D) *HClO*
- (6) The coordination number of *Pt* in  $[PtCl(NO_2)(NH_3)_4]$  is:-  
(A) 4 (B) 2 (C) 6 (D) 8
- (7) The Hybridization of Carbon atom in Methane is:-  
(A) *sp* (B) *sp<sup>3</sup>* (C) *sp<sup>2</sup>* (D) *dsp<sup>2</sup>*
- (8) Preparation of vegetable ghee involves:-  
(A) Hydrogenation (B) Halogenation (C) Hydroxylation (D) Dehydrogenation
- (9) During nitration of Benzene, the active nitrating agent is:-  
(A) *NO<sub>2</sub>* (B) *NO<sub>2</sub><sup>+</sup>* (C) *NO<sub>3</sub>* (D) *HNO<sub>3</sub>*
- (10) \_\_\_\_\_ is not a Nucleophile.  
(A) *H<sub>2</sub>O:* (B) *H<sub>2</sub>S:* (C) *NH<sub>3</sub>.* (D) *BF<sub>3</sub>*
- (11) Rectified Spirit contains Alcohol about:-  
(A) 85 % (B) 95 % (C) 90 % (D) 80 %
- (12) \_\_\_\_\_ compound will not give iodoform test on treatment with *I<sub>2</sub> / NaOH*.  
(A) Acetaldehyde (B) Acetone (C) Butanone (D) 3 – pentanone
- (13) The solution of \_\_\_\_\_ acid is used for seasoning of food.  
(A) Formic Acid (B) Acetic Acid (C) Benzoic Acid (D) Carbonic Acid
- (14) The reaction between Fat and *NaOH* is called:-  
(A) Saponification (B) Esterification (C) Hydrogenolysis (D) Fermentation
- (15) \_\_\_\_\_ zones through which the charge passes in a Rotary Kiln.  
(A) 4 (B) 3 (C) 2 (D) 5
- (16) Peroxyacetylnitrate (PAN) is an irritant to human beings and it affects:-  
(A) Eyes (B) Nose (C) Stomach (D) Ears
- (17) Ecosystem is a smaller unit of:-  
(A) Lithosphere (B) Hydrosphere (C) Atmosphere (D) Biosphere

INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

## CHEMISTRY PAPER-II

TIME ALLOWED: 20 Minutes

OBJECTIVE

MAXIMUM MARKS: 17

**Note:** You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

- (1) \_\_\_\_\_ is the strongest acid.  
(A)  $HClO_4$  (B)  $HClO_3$  (C)  $HClO_2$  (D)  $HClO$
- (2) The coordination number of  $Pt$  in  $[PtCl(NO_2)(NH_3)_4]$  is:-  
(A) 4 (B) 2 (C) 6 (D) 8
- (3) The Hybridization of Carbon atom in Methane is:-  
(A)  $sp$  (B)  $sp^3$  (C)  $sp^2$  (D)  $dsp^2$
- (4) Preparation of vegetable ghee involves:-  
(A) Hydrogenation (B) Halogenation (C) Hydroxylation (D) Dehydrogenation
- (5) During nitration of Benzene, the active nitrating agent is:-  
(A)  $NO_2$  (B)  $NO_2^+$  (C)  $NO_3$  (D)  $HNO_3$
- (6) \_\_\_\_\_ is not a Nucleophile.  
(A)  $H_2\ddot{O}$  (B)  $H_2\ddot{S}$  (C)  $\dot{N}H_3$  (D)  $BF_3$
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(A)  $K$  (B)  $Mg$  (C)  $Na$  (D)  $He$
- (15) \_\_\_\_\_ element is collected at Cathode during the electrolysis of aqueous solution of  $NaCl$ .  
(A)  $Na$  (B) Hydrogen (C) Oxygen (D) Chlorine
- (16) Bauxite is the mineral of:-  
(A)  $B$  (B)  $Na$  (C)  $Al$  (D)  $K$
- (17) \_\_\_\_\_ catalyst is used in contact process.  
(A)  $Fe_2O_3$  (B)  $Ag_2O$  (C)  $SO_3$  (D)  $V_2O_5$

INTERMEDIATE PART-II (12<sup>th</sup> CLASS)

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Q.No.1

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(A) Hydrogenation (B) Halogenation (C) Hydroxylation (D) Dehydrogenation
- (2) During nitration of Benzene, the active nitrating agent is:-  
(A)  $NO_2$  (B)  $NO_2^+$  (C)  $NO_3$  (D)  $HNO_3$
- (3) \_\_\_\_\_ is not a Nucleophile.  
(A)  $H_2\ddot{O}:$  (B)  $H_2\ddot{S}:$  (C)  $\ddot{N}H_3$  (D)  $BF_3$
- (4) Rectified Spirit contains Alcohol about:-  
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- (4) \_\_\_\_\_ element has highest value of Ionization Energy.  
(A) K (B) Mg (C) Na (D) He
- (5) \_\_\_\_\_ element is collected at Cathode during the electrolysis of aqueous solution of NaCl.  
(A) Na (B) Hydrogen (C) Oxygen (D) Chlorine
- (6) Bauxite is the mineral of:-  
(A) B (B) Na (C) Al (D) K
- (7) \_\_\_\_\_ catalyst is used in contact process.  
(A) Fe<sub>2</sub>O<sub>3</sub> (B) Ag<sub>2</sub>O (C) SO<sub>3</sub> (D) V<sub>2</sub>O<sub>5</sub>
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**BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,**  
**MULTAN** ✓ Supply  
**OBJECTIVE KEY FOR INTER (PART I / II) ANNUAL Examination, 2016**  
 Name of Subject Chemistry Session 2014-16.

Q. Nos.	Paper Code	Paper Code	Paper Code	Paper Code
	8481	8483	8485	8487
1.	D	A	A	A
2.	B	C	B	A
3.	C	B	D	D
4.	D	A	B	D
5.	A	B	D	B
6.	C	D	B	C
7.	B	B	A	D
8.	A	D	A	A
9.	B	B	A	C
10.	D	A	D	B
11.	B	A	D	A
12.	D	A	B	B
13.	B	D	C	D
14.	A	D	D	B
15.	A	B	A	D
16.	A	C	C	B
17.	D	D	B	A
18.				
19.				
20.				

**سرٹیفکیٹ بابت تصحیح سوالیہ پرچہ / مارکنگ Key**

ہم نے مضمون: chemistry پرچہ: II گروپ: سکیم انٹر میڈیٹ / مضمون: 2016 کا سوالیہ پرچہ تصحیح / معروضی (Subjective & Objective) کو بنظر عمیق چیک کر لیا ہے یہ پرچہ سلیبس کے عین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی غلطی نہ ہے۔ ہم نے سوالیہ پرچہ کا اردو اور انگریزی Version بھی چیک کر لیا ہے یہ Version آپس میں مطابقت رکھتے ہیں اور سلیبس (Syllabus) کے مطابق بھی ہیں۔ نیز اس پرچہ کی Key کی بابت بھی تصدیق کی جاتی ہے کہ یہ بھی درست بنائی گئی ہے اس میں بھی کسی قسم کی کوئی غلطی نہ ہے۔ مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات وصول کر کے ان کا بغور مطالعہ کر لیا ہے اور ان کی روشنی میں Key بنائی ہے۔

PREPARED & CHECKED BY

Sr.No	Name	Designation	Institution	Mobile No.	Signature.
1-	Khalid Mateen	Associate prof	Govt Emerson College Multan	0322-6114844	
2-	TARIQ SHEHZAD	Assistant Prof.	Govt Emerson College Multan	0334-6270969	
3-	Mirza Saleem Bori	Asst. Prof.	Govt A.H.G College Multan	63346039724	

# ثانوی و اعلیٰ ثانوی تعلیمی بورڈ، ملتان

2-11-2016 مضمون: Chemistry پرچہ II گروپ

جملہ ہدایات برائے مارکس Key نیچے دی گئی ہیں (مارکس کی)

انٹرمیڈیٹ فرسٹ ایئر سالانہ امتحان 2016ء

## Section-I

- Q 2 (i) Correct answer 02 marks  
 (ii) Correct answer 02 marks  
 (iii) Correct answer 02 marks  
 (iv) Correct answer 02 marks  
 (v) Correct answer 02 marks  
 (vi) Two names & two formulas  $\frac{1}{2} \times 4 = 02$   
 (vii) Any four differences  $\frac{1}{2} \times 4 = 02$   
 (viii) Correct answer with equations 1+1  
 (ix) Correct answer 1+1  
 (x) Correct answer 02 marks.  
 (xi) Correct answer 02 marks  
 (xii) Correct definition = 01 mark  
 One Example = 01 mark.

- Q 3 (i) Correct formulas = 1+1 mark  
 (ii) Correct definition = 01 mark  
 One example = 01 mark  
 (iii) Correct answer = 02 marks  
 (iv) Correct equation = 02 marks  
 along with conditions  
 (v) Correct equation = 02 marks  
 along with conditions  
 (vi) Correct equation = 02 marks  
 (vii) Preparation = 01 mark  
 Chemical Reaction = 01 mark  
 (viii) Two marks for correct preparation  
 (ix) 02 marks for correct identification  
 (x) Correct structure = 02 marks  
 (xi) Correct answer = 02 marks  
 (xii) Correct definition = 02 marks

- Q 4 (i) Correct conversion = 02 marks.  
 (ii) Correct answer with equation = 01+01 mark.  
 (iii) Correct conversions = 01+01 mark  
 (iv) Correct equation = 02 marks

# ثانوی و اعلیٰ ثانوی تعلیمی بورڈ، ملتان

موضوع: Chemistry پرچہ: II گروپ: 2-11-2016

جنرل ہدایات برائے مارکنگ Key نیوکیسم اولڈ نیکیسم (مارکنگ سکیم)

انٹر پارٹ فرسٹ اسکیڈ ساکنڈا ضمنی امتحان 2016ء

- (v) Correct equation = 02 marks
- (vi) Correct answer = 01+01 mark.
- (vii) Definition = 01 mark , Information = 01 mark.
- (viii) Correct answer = 02 marks
- (ix) Correct answer = 02 marks.

## Section-II

Q5 (a) Correct description = 04 marks

b) Description = 01 mark , Diagram = 01 mark.  
Correct Equations = 02 marks

Q6 (a) 01 mark for each method =  $(01 \times 4) = 04$  marks  
(b) Any four points  $01 \times 4 = 04$  marks

Q7 (a) Description = 03 marks , Equation = 01 mark  
(b) Correct explanation = 04 marks

Q8 (a) Equation = 01 mark , Mechanism = 03 marks

(b) Definition = 01 marks , Three examples =  $1 \times 3 = 03$  marks

Q9 (a) Definition = 01 mark , Classification = 03 marks with examples

b) Explanation = 02 marks , Resonance structures = 02 marks.

Q10 i) } Group identification = 01 mark  
ii) } Radical identification = 01 marks  
iii) } Two Confirmatory Tests =  $1\frac{1}{2} \times 2 = 03$  marks

iv) Any five points  $(1 \times 5) = 05$  marks

v) Material = 01 mark.

Equation = 01 mark

Procedure = 03 marks.

Avoid fractional marking, Please.

1- Khalid Mateen  
Govt. Emerson College Multan.  
0322-6114844.

2. Tariq Shehzad  
Govt. Emerson College Multan  
0334-6070969

Mirza Saleem Bhai Q. 10/11/16  
College Multan  
0334-6039724