

**GUIDELINE FOR SCHOOL
PARTNER REGARDING**

QAT

2019-2020

Academic Development Unit



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(Question Uns) دیے جائیں گے جو پنجاب یونیورسٹی بورڈ کی مددوں سے بنی منتخب کیے جائیں گے۔ نیز 30 فیصد

(Question Unseen) کا سبب یہ ہیں کہ وہ یہ سٹ بٹ نے باہر سے دیے جائیں گے بلکہ پیپر میں ہجرت کیسٹ

بٹ بورڈ سے ایسے سوالات پوچھے جائیں گے 'بس لیں طلباء' اور باقی ٹوسوٹے اور اسکے کی صلاحیت کو استعمال کرنا ہوگا۔

Note: The Pattern of Classes 2 to class 5 will remain same as previous year, While from classes 6 to 12, 30% unseen questions can be included. The unseen questions are added to test the understanding of concept of students'. Unseen does not mean out of book but means questions from same PCTB books but focusing on understanding of students.

MATHEMATICS SECTION – I

SLO: Operations on Sets

REVIEW EXERCISE 1

1. Four options are given against each statement. Encircle the correct one.
 - i. If a is not a member of the set A , then symbolically it is denoted by:

(a) $a \in A$ (b) $a \setminus A$ (c) $a \notin A$ (d) $a \cap A$
 - ii. Which of the following is not a set?

(a) $\{1, 2, 3\}$ (b) $\{a, b, c\}$ (c) $\{2, 3, 4\}$ (d) $\{1, 2, 2, 3\}$
 - iii. The number of subsets of the set $\{0\}$ is:

(a) one (b) two (c) three (d) four
 - iv. A set consisting of all subsets of the set X is called:

(a) subset (b) universal set (c) power set (d) superset
 - v. For three sets A, B and C , $(A \cup B) \cup C$ is equal to:

(a) $(A \cup B) \cap C$ (b) $(A \cap B)$ (c) $A \cup (B \cup C)$ (d) $(A \cap B) \cap C$
 - vi. For any two sets A and B , $A - B^c$ is equal to:

(a) $A \cap B^c$ (b) $A^c \cap B$ (c) $A \cap B$ (d) $A \cup B$
 - vii. If $U = \{1, 2, 3, \dots, 10\}$ and $A = \{2, 4, 6, \dots, 10\}$ and $B = \{1, 3, 5, \dots, 9\}$ then $(A - B)^c$ is equal to:

(a) U (b) B (c) A (d) ϕ
 - viii. If $P(A) = \{\phi, \{a\}, \{b\}, \{a, b\}\}$ then set A is equal to:

(a) ϕ (b) $\{a\}$ (c) $\{b\}$ (d) $\{a, b\}$
 - ix. If ϕ is an empty set, then $(\phi^c)^c$ is equal to:

(a) X (b) O (c) ϕ (d) $\{0\}$

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1.	If $A = \{2, 4, 6, \dots, 10\}$, $B = \{1, 3, 5, \dots, 9\}$ and $U = \{1, 2, 3, \dots, 10\}$ then $(A - B)^c$ is equal to:	
	اور $U = \{1, 2, 3, \dots, 10\}$ اور $A = \{2, 4, 6, \dots, 10\}$, $B = \{1, 3, 5, \dots, 9\}$ اور $(A - B)^c$ کا صحیح جواب	-1
	a) U	b) B
	c) A	d) ϕ

SAMPLE UNSEEN QUESTIONS

1.	If $U = \{1,2,3,\dots,8\}$ and $A \cup B = \{6,7,8\}$ then find $(A \cup B)^c$:	
اور $U = \{1,2,3,\dots,8\}$ اور $A \cup B = \{6,7,8\}$ ہو تو $(A \cup B)^c$ کی قیمت معلوم کریں۔		-1
a) $\{1,2,3,\dots,8\}$	b) $\{1,3,5,7\}$	
c) $\{ \}$	d) $\{1,2,3,4,5\}$	

SLO: Compound Proportion

4.1 COMPOUND PROPORTION

We have learnt in previous grades that the equality of two ratios is called a proportion. If four quantities a, b, c and d are in proportion then mathematically these are written as $a : b :: c : d$.

In fact it is a relationship between two ratios $a : b$ and $c : d$.
Proportion is of two kinds:

(i) Direct proportion
(ii) Inverse proportion

(i) **Direct proportion**
The relationship between two ratios in which increase or decrease in one quantity causes a proportional increase or decrease in the second quantity is called direct proportion.

Example 1: If the price of 12 eggs is Rs.96, how many eggs can be bought with Rs.80?

Solution: We see that as the amount decreases the number of eggs also decreases. So it is a direct proportion.

Let the number of eggs be x .

Eggs :	Eggs :	Rs. :	Rs.
12 :	x :	96 :	80

$$\Rightarrow \frac{12}{x} = \frac{96}{80}$$

$$\Rightarrow 96 \times x = 12 \times 80$$

$$\Rightarrow x = \frac{12 \times 80}{96} = 10 \text{ eggs}$$

In vertical form it can be written as:

Eggs :	Rupees
12 ↑	96 ↑
x ↑	80 ↑

$$\Rightarrow \frac{x}{12} = \frac{80}{96}$$

$$\Rightarrow x = \frac{10 \times 12^2}{1 \times 96} = 10 \text{ eggs}$$

(ii) **Inverse proportion**
The relationship between two ratios in which increase in one quantity causes a proportional decrease in the second quantity and vice versa is called an inverse proportion.

Example 2: 10 men have ration for 21 days in a camp. If 3 men leave the camp, for how many days will the ration be sufficient for the remaining men?

Solution:

Total men = 10
The men leave the camp = 3
The remaining men = 7

We see that as the number of men decreases, the ration will be sufficient for more days (days increase). So it is an inverse proportion.

Let the number of days be x

Men :	Men :	Days :	Days
10 :	7 :	21 :	x

In vertical form we can write it as:

Men	:	Days
10 ↓	:	21 ↑
7 ↓	:	x ↑

$$\Rightarrow \frac{x}{21} = \frac{10}{7}$$

$$\Rightarrow x = \frac{10 \times 21}{7} = 30 \text{ eggs}$$

Thus the ration (food) will be sufficient for 30 days.

2.	If the price of 12 eggs is Rs.96, how many eggs can be bought with Rs. 80?	
اگر 12 انڈوں کی قیمت 96 روپے ہے تو 80 روپے میں کتنے انڈے خریدے جا سکتے ہیں؟		-2
a) 5	b) 10	
c) 15	d) 20	

SAMPLE UNSEEN QUESTIONS

2.	Find the value of x, $\frac{96}{80} \uparrow : \frac{12}{x} \uparrow$
$\frac{96}{80} \uparrow : \frac{12}{x} \uparrow$ ۹۶ / ۸۰ ↑ : ۱۲ / x ↑	
a) 5	b) 10
c) 15	d) 20

SECTION – II

SLO: Solution of Simultaneous Linear Equations

Math 8.pdf
file:///D:/c%20data%20fan%202021-5-2019/Desktop/2019-2020/Books/Math%208.pdf

6. Factorization, Simultaneous Equations
elearn.punjab

EXERCISE 6.9

1. Find the solution set by using the method of equating the coefficients.

(i) $2x + 5y = -1$	(ii) $x + y = 2$
$x - 2y = 4$	$x - y = 0$
(iii) $2x + 3y = 3$	(iv) $x - 4y = 4$
$x + 5y = 5$	$4x - y = 16$
(v) $2x - 3y = 6$	(vi) $3x - 4y = 7$
$3x + 5y = 0$	$5x + y = 27$
2. Find the solution set by using the method of elimination by substitution.

(i) $2x + 2y = 5$	(ii) $5x + 2y = 15$
$x - 2y = 3$	$-2x + y = 4$
(iii) $6x + y = 2$	(iv) $2x + 7y = 10$
$x - 4y = 15$	$3x + y = 3$
(v) $2x - 4y = -10$	(vi) $x + 8y = 15$
$y + 5x = -5$	$3x - y = 0$
3. Find the solution set by using the method of cross multiplication.

(i) $2x - 7y = 11$	(ii) $11x + 12y = 15$
$5x - 10y = 10$	$12x + 11y = -23$
(iii) $2x - 9y + 10 = 0$	(iv) $5x + y - 56 = 0$
$3x - 5y - 10 = 0$	$x + 18y - 29 = 0$
(v) $9x - 11y - 15 = 0$	(vi) $2y - 10x - 86 = 0$
$7x - 13y - 25 = 0$	$2x + 5y - 11 = 0$

6.5.2 Solving Real Life Problems Involving Two Simultaneous Linear Equations in two Variables

Example 1: A number is half of another number. The sum of 3 times of 1st number and 4 times of 2nd number is 22. Find the numbers.

- (1) Find the solution set with the method of equating the coefficients.

دو لائنوں کی قیمت عددی سرول سے باہر کی ہے خرید کے رسوم ہیں۔

$$x + 3y = -14, x - 3y = 5$$

$$2x + 3y = -14, x - 3y = 5$$

Note: Equations can be different from book.

SLO: Find Percentage Profit

The screenshot shows a PDF document with the following content:

4.3 PERCENTAGE

The percentage means "per hundred" or out of hundred". The symbol used for percentage is %.

4.3.1 Profit and Loss:

If the selling price (S.P) is higher than the cost price (C.P), then profit occurs. It can be written as

$$\text{Profit} = \text{Sale Price} - \text{Cost Price}$$

or $\text{Profit} = \text{S.P} - \text{C.P}$

If the cost price (C.P) is higher than the selling price (S.P), then loss occurs. It can be written as

$$\text{Loss} = \text{Cost Price} - \text{Sale Price}$$

or $\text{Loss} = \text{C.P} - \text{S.P}$

4.3.1.1 Find Percentage Profit and Percentage Loss

Percentage profit or loss is always expressed in terms of cost price. To find percent profit and percentage loss we will use the following formulas accordingly.

$$\text{Percentage Profit} = \frac{\text{profit}}{\text{cost price}} \times 100$$

$$\text{Percent Loss} = \frac{\text{Loss}}{\text{cost price}} \times 100$$

Example 1: Saud bought a motor-cycle for Rs. 50,000 and sold it for Rs. 56,000. Find his Percentage Profit.

Solution:

$$\text{Cost Price (C.P)} = \text{Rs. } 50,000$$

$$\text{Sale Price (S.P)} = \text{Rs. } 56,000$$

$$\text{Profit} = \text{S.P} - \text{C.P}$$

$$= 56,000 - 50,000$$

$$= \text{Rs. } 6,000$$

$$\text{Profit \%} = \frac{\text{Profit}}{\text{C.P}} \times 100$$

$$= \frac{6000}{50000} \times 100$$

$$= \frac{12}{10000} \times 100$$

$$= 12\%$$

Example 2: Hameed bought a piece of land worth Rs. 300000 and sold it for Rs. 240000. Find his profit / loss percentage?

Solution:

$$\text{Cost Price (C.P)} = \text{Rs. } 300000$$

$$\text{Sale Price (S.P)} = \text{Rs. } 240000$$

$$\text{Loss} = \text{C.P} - \text{S.P}$$

$$= 300000 - 240000$$

$$= \text{Rs. } 60,000$$

$$\text{Loss Percentage} = \frac{\text{Loss}}{\text{C.P}} \times 100$$

$$= \frac{60000}{300000} \times 100$$

$$= \frac{20}{10000} \times 100$$

$$= 20\%$$

- (2) Saud bought a motor-cycle for Rs. 50000 and sold it for Rs. 56000. Find his percentage profit.

ایک سو ساٹھ سو روپے میں خریدی اور 56000 روپے میں فروخت کر دی۔ سود کا فی صد معلوم کریں۔

SAMPLE UNSEEN QUESTIONS

- (2) Saud bought a motor-cycle for Rs. 50000 and sold it after one month, he gain profit Rs. 6000. Find his percentage profit.

سودے ایک سو ساٹھ سو روپے میں خریدی اور ایک مہینے بعد فروخت کر دی، اس کو 6000 روپے کا حاس ہوا۔ سود کا

فیصد: _____

ENGLISH

Q. Write an application to the Head master/ Headmistress/ Principal of your school asking permission to leave school because you are not feeling well. Use correct punctuation, grammar and spelling.

(Note: This question can consist of Application writing/ Story writing/ Dialogue writing from any seen or unseen topic.)

Q. Life is full of dreams. Explain your dreams in a Paragraph and explain that they are related to the vision of your life. Use correct punctuation, grammar and spelling.

Following hints may give you some help.

- The importance of dreams in life
- Your dream of life
- Vision of life
- Reasons of having such dreams

(Note: This question can consist of Paragraph writing/ Summary writing/ or Creative writing from any seen or unseen topic. Although topics will be related to the themes and SLOs given in the text book of relevant class.)

Q. Village is quiet and calm place. Write a paragraph on “My Village”.

Following hints may give you some help.

- Name, Location and Population of village
- Your feelings about your village
- Any special attraction

Use correct punctuation, grammar and spelling.

Unseen Version will be like this:

Q. Look at the picture write a paragraph on it.



Following hints may give you some help.

- Name, Location and Population of village
- Your feelings about your village
- Any special attraction

Use correct punctuation, grammar and spelling.

Q. Write a paragraph on “Road Signals are made for our safety”. Use correct punctuation, grammar and spelling.

(Note: This question can consist of Paragraph writing/ Summary writing/ or Creative writing from any seen or unseen topic. Although topics will be related to the themes and SLOs given in the text book of relevant class.)

اردو

(خط) دوست نے ام ایب ظ میں کہا تھا کہ اعلان کیا ہے گا کہ پرمباربادی کی ہے۔
وہ کہتا ہے کہ وہ ان لوگوں کو اس سے ہی پہچان سکتا ہے، دوست نے ام ایب میں اسی ہر روزی ہ مظاہرہ
میرول سے اعلان میں اول پور میں حاصل کرے پر مباربادی چیں کریں۔
(سون) : سائنس کے کرشمے کے عنوان پر ایک مضمون لکھیں۔
اے دوست! اس سوال کے ہی پہچان سکتا ہے، اے کی اجازت ہے کہ وہ ہم کو بتائے کہ کیا ہے؟

GENERAL SCIENCE

1.	Which one of the following is an example of a physical change?	-1
(a) breaking a wooden stick	(b) frying an egg	
(c) toasting a bread	(d) burning a candle	

2.	In the chemical formula of CO₂, which of the following is shown by subscript 2?	-2
(a) there are two carbon atoms	(b) there are two CO ₂ molecules	
(c) there are two oxygen ions	(d) there are two oxygen atoms	

SAMPLE UNSEEN QUESTIONS

1.	Which one of the following is an example of a physical change?	-1
(a) Converting of milk into yogurt	(b) cutting of paper into pieces	
(c) cooking of meat	(d) burning of wood	

2.	In the chemical formula of H₂O, which of the following is shown by subscript 2?	-2
(a) there are two hydrogen atoms	(b) there are two H ₂ O molecules	
(c) there are two oxygen ions	(d) there are two oxygen atoms	

Q. Write a note on plastics?

SAMPLE UNSEEN QUESTIONS

Q. How plastics are manufactured? What are its uses and how they become a source of pollution?

سوال: پلاسٹک کی ساخت اور اس کے استعمال اور آلودگی کے بارے میں لکھیں۔

SAMPLE UNSEEN QUESTIONS

سوال: پلاسٹک کی ساخت اور اس کے استعمال اور آلودگی کے بارے میں لکھیں۔