

Cantt Public Education System

A New Frontier in Learning

Summer Vacations Homework 2020

Class: XII

Dear Students,

We hope that you and your families are keeping well during ongoing health crises. It is more and more likely that schools may not open till July 2020. Therefore, we are pleased to share our plans for online instructions and homework activities.

As of 1st June 20, we will be starting a robust, interactive teaching program. The curriculum will be taught through various online platforms, video lectures and live interaction with teachers as well as carefully designed home work, which all students will complete at their own time. We shall pursue following time table:-

Group	DAYS	Timings	Subjects	Remarks
I	Monday – Day 1 Tuesday – Day 2 Wednesday – Day 3	0900 - 0940	Computer/ Biology/ Maths	Principals shall ensure availability of subject teachers to students for coaching/clarification of doubts etc
		1000 - 1040	Urdu	
		1100 - 1140	Chemistry	
		1200 -1240	P Studies	
II	Thursday - Day 4 Friday – Day 5 Saturday – Day 6	0900 - 0940	Physics	
		1000 - 1040	English	
		1100 - 1140	GK	
		1200 -1240	Islamiat	

Beloved scholars, home work for following subjects has been included in this booklet:-

Ser	Subject	Pages	
		From	To
1	English	3	26
2	Math	27	35
3	Biology	36	63
4	Physics	64	89
5	Chemistry	90	110
6	Computer	111	126
7	Pakistan Studies	127	134
8	Urdu	135	142
9	General Knowledge	143	180

Our main objective is to keep you in touch with your studies rather than to put you under unjustified burden. Therefore, a pragmatic program has been planned for your educational progression. Stay home, stay safe and stay connected with your studies.

Note:

Dear Students,

The assignment should submit after vacations. It carries 10 marks per subjects.

Regards,
Cantt Public Education System

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: ENGLISH

ENGLISH

Summer Vacations Homework 2020

Class: XII Federal Board

Introduction

1. <https://www.slideshare.net/mobile/eblast2735/genres-of-literature-63130458>
2. <https://www.slideshare.net/mobile/JanessaMaeDalimocon2/literary-devices-109593836>
3. <https://www.slideshare.net/mobile/elfaoz/introduction-to-linguistic>

Check your knowledge about literature.

1. Name the different genres of literature
2. How can you relate literature with that of life?
3. Have you ever read fiction?
4. Which is your all time favorite fiction?
5. Who is your favorite author?
6. What is sonnet?
7. Name 2 tragedies of Shakespeare.

ENGLISH WEEK-1

Day 1 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	<p style="text-align: center;"><u>Vision and Mission</u></p> <p>1.1 The Farewell Sermon (Reading Comprehension)</p> <p style="text-align: center;">1. http://pkandus.blogspot.com/2015/11/the-farewell-sermon-exercise.html</p>	Worksheet

Day 1 - Homework

Q. Answer the following questions.

1. When and where did the holy Prophet (P.B.U.H) deliver his last sermon?
2. Whom did the Holy Prophet ask to repeat the sermon sentences by sentences after him and why?
3. State in your own words what did the holy Prophet say about the sanctity of the life and property of Muslim Brethren?
4. What did the Holy Prophet instruct the people with regard to their women?
5. What did the Holy Prophet say about the superiority of one individual over another individual?
6. What did he say about Khatm-e-Nabuwat?

Day 2 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	<p><u>Vision and Mission</u></p> <p>1.2 The Farewell Sermon (Reading Comprehension)</p> <p>Grammar: Parts of Speech</p> <p>1) https://www.slideshare.net/mobile/AnsarGill/complete-slides-about-parts-of-</p> <p>2) https://www.slideshare.net/mobile/SMCTCR/englishparts-of-speech</p>	<p style="text-align: center;">Worksheet</p> <p>1) https://www.myenglishpages.com/site_php_files/grammar-exercise-parts-of-speech.php</p>

Day 2 - Homework

Parts of Speech

Q2. Identify the parts of speech used in the following sentences.

1. I bought a **beautiful** dress at the mall.

- preposition
- adjective
- noun

2. What did **she** ask you to do?

- conjunction
- preposition
- pronoun

3. I left my shoes under the kitchen table.

- adjective
- preposition
- pronoun

4. If we finish our work quickly we can go to the movies.

- adverb
- conjunction
- verb

5. On Saturdays I work from nine to five.

- verb
- preposition
- adverb

6. I want to go to a university in the United States.

- adjective
- preposition
- noun

7. I'm sure I've met your girlfriend before.

- verb
- preposition
- interjection

8. Well, I don't think I'll be home before 6.

- interjection
- preposition
- pronoun

9. Andy knocked on the door but nobody answered.

- adverb
- adjective
- conjunction

10. After lunch let's go out for a coffee.

- pronoun
- preposition
- verb

Day 3 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	<u>Vision and Mission</u> 1.3 The Farewell Sermon (Reading Comprehension) Grammar:, Noun and Its Types 1. https://www.slideshare.net/mobile/selviraveendran/types-of-nouns-26893522	Worksheet 1. https://www.englishgrammar.org/kinds-nouns-exercise-2/

Day 3 - Homework

Noun and its Types

Q3. Point out the nouns in the following sentences and state whether they are common, proper, collective or abstract.

1. The angry mob pelted stones at the police.
2. Honesty is the best policy.
3. You must always speak the truth.
4. Julie is my youngest sister.
5. Solomon was famous for his wisdom.
6. Birds make their nests in trees.
7. A committee was appointed to study the situation.
8. Nelson is known for his victory at Trafalgar.
9. The boys were congratulated on their performance.
10. He gave me a bunch of grapes.
11. The children sang the national anthem.
12. He owns a fleet of cars.
13. The lion is the king of beasts.
14. Greenland is the largest island.

ENGLISH WEEK-2

Day 1 - Overview

#	Topic	Activity / Worksheet
Unit 1	1.4 Jinnah's Vision of Pakistan (Reading Comprehension) 1) https://www.slideshare.net/mobile/Muhammad786/jinnah-vision-of-pakistan	Worksheet

Day 1 - Homework

Q1. Answer the following questions.

1. When and where MA Jinnah delivered his speech?
2. What two functions of the Constituent Assembly did MA Jinnah refer to in the beginning of his speech?
3. What did he say about the functions of Assembly?
4. Which legacy did MA Jinnah refer to in his speech?
5. What are the Quaid's view about the division of India?
6. What does he say about the minorities?
7. What kind of freedom does MA Jinnah envision for the people of Pakistan?
8. What does MA Jinnah mean by, "Hindu's would cease to be Hindus and Muslim would cease to be Muslims." Explain.

Day 2 - Overview

No of Unit	Topic	Activity / Worksheet
Unit 1	1.5 Jinnah's Vision of Pakistan (Reading Comprehension) Grammar: Narration https://www.slideshare.net/mobile/Yuniverse/direct-and-indirect-speech-themed-1	Worksheet 1) https://www.myenglishpages.com/site_php_files/grammar-exercise-reported-speech.php

Day 2 - Homework

Q2. Turn the following sentences into indirect speech.

1. John said, 'I am very busy now.'
2. He said, 'The horse has been fed.'
3. 'I know her name and address,' said John.
4. 'German is easy to learn,' she said.
5. He said, 'I am writing letters.'
6. 'It is too late to go out,' Alice said.
7. He said to me, 'I don't believe you.'
8. He says, 'I am glad to be here this evening.'
9. He said to me, 'What are you doing?'

10. 'Where is the post office?' asked the stranger.
11. He said, 'Will you listen to me?'
12. John said to Peter, 'Go away.'
13. She said to me, 'Please wait here till I return.'
14. 'Call the witness,' said the judge.
15. The speaker said, 'Be quiet and listen to my words.'

Day 3 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	1.6 Jinnah's Vision of Pakistan (Reading Comprehension) Grammar: Narration, Noun Phrases 1. https://www.slideshare.net/mobile/studentsandteachers/noun-phrases	<p style="text-align: center;">Worksheet</p> 1. https://quizizz.com/admin/quiz/5ba25be74d7c600019e8e0fa/noun-phrases

Day 3 - Homework

Q3. Identify the noun phrases in the following sentences.

1. I hope to win the first prize.
2. I tried to solve the puzzle.
3. Did you enjoy reading this book?
4. The boy wants to go home.
5. Horses prefer living in dark stables.
6. The accused refused to answer the question.
7. The boy denied stealing the money.
8. To write such rubbish is disgraceful.
9. I dislike having to punish my kids.
10. I will hate to do such a thing.

ENGLISH WEEK-3

Day 1 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	1.7 The Blades of Grass (Poem) Literary Devices (Figurative Speeches) 1) https://www.slideshare.net/mobile/binrobinson/figures-of-speech-55284676	Worksheet 1) https://www.englishgrammar.org/figures-of-speech-exercise/

Day 1 - Homework

Q. Answer the following questions.

- i, What is does God ask the little blades of grass?
 2. What does the little blades of grass say when it is addressed by God ?
 3. Why does the poet use blades of grass to communicate such a fundamental Idea ?
- Q. Find out all the figurative speeches used in the poem.

Day 2 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	1.8 The Blades of Grass (Poem) Literary Devices (Figurative Speeches) Grammar: Noun Clauses 1. https://www.slideshare.net/mobile/Abhishekwa/noun-clauses-11058863	Worksheet No 3 1. https://www.learnenglishfeelgood.com/esl-noun-clauses1.html

Day 2 - Homework

Q. Complete the following sentences by adding suitable noun clauses.

1. I cannot understand
2. They said
3. I think
4. He told me
5. hurts me.
6. You can eat
7. Can you guess?
8. I feel certain
9. I do not know
10. No one knows

Day3 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 1	1.9 The Blades of Grass (Poem) Literary Devices (Figurative Speeches) Grammar: Pronoun and its types 1. https://www.slideshare.net/mobile/virchand/types-of-pronoun	Worksheet No 1. https://www.ucl.ac.uk/internet-grammar/nouns/ex3.htm

Day 3 – Homework

Q. Complete the following sentences using the correct form of the pronoun given in the brackets.

1. Why are you shouting at? (I)
2. We are waiting for (they)
3. He shouldn't have done this to (you)
4. He loves parents more than anyone else. (he)
5. We didn't expect this from (he)
6. parents live abroad. (I)
7. He wants to marry (she)
8. The dog is happy. It has had breakfast. (it)
9. We are moving to new home next month. (we)
10. Between you and I don't trust him. (I)

ENGLISH WEEK-4

Day 1 - Overview

#	Topic	Activity / Worksheet
Unit 2	<u>Hope and Aspiration</u> 2.1 I have a Dream (Reading Comprehension) Read chapter thoroughly and attempt the worksheet below.	Worksheet

Day 1 - Homework

1. Write a note on the struggle of Martin Luther King Jr. for the Negroes.
2. What was the condition of the Negroes in his days?
3. Write ten lines on racial discrimination.
4. Write the summary of the speech.
5. What are the measures you can take to ensure justice with all the sections of the society?

Day 2 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	<u>Hope and Aspiration</u> 2.1 I have a Dream (Reading Comprehension) Grammar: Verbs and its types 1. https://www.slideshare.net/mobile/noumanriaz/verb-and-its-types	Worksheet 1. https://quizizz.com/admin/quiz/589768ab486491c12fb50fac/types-of-verbs

Day 2 - Homework

Q. Identify the types of verbs.

1. The burglar **disappeared** with the cash.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

2. The director **told** the actors, "Do your best, and we'll be a hit."

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

3. He **would** tell me if he thought we were in danger.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

4. His ability to concentrate **is** legendary.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

5. The campers **hid** inside the cabin when they saw the bear.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

6. Alexis is swimming in the state championship next week.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

7. Frustrated with the official's call, Ethan kicked the bench.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

8. The student procrastinated too long and failed to finish the project.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

9. The vegetarian burger tasted like salted cardboard.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

10. Ellen nodded to the audience and sang her song.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

11. Her brother likes bananas, but she likes peaches.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

12. Adjunct faculty are teaching in several of the lower division courses.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

13. The director told the actors, "Do your best, and we'll be a hit."

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

14. Regis Philbin, the host of "Who Wants to be a Millionaire," smiled at her answer.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

15. When the contestant completed the first test, she received another clue.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

16. Dennis became impatient when Thomas took so long choosing a movie.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

17. President Clinton pushed into the crowd and shook her hand.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

18. The hiker turned quickly toward the noise behind him.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

19. Our teacher gave each of us another chance to take the exam.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

20. After the chef completed the demonstration, she left the students to clean the kitchen.

- a. transitive verb b. intransitive verb c. linking verb d. auxiliary verb

Day 3 - Overview

#	Topic	Activity / Worksheet
Unit 2	Hope and Aspiration 2.1 I have a Dream (Reading Comprehension) Grammar: Pronoun and its Types 1) https://www.slideshare.net/mobile/speedkings/pronoun-and-its-types	Worksheet 1) http://www.grammaruntied.com/blog/?p=1922

Day 3 - Homework

Demonstrative Pronoun

Q. Choose the correct demonstrative pronoun to fill the blank, remembering that demonstratives include the words this, that, these and those.

1. I really like watching old shows. _____ are some of the best things on TV.

- Those
- That
- This
- These

2. Please hand me _____ .

- those
- that
- this
- these

3. _____ is some of the nicest weather we've had lately.

- Those
- That
- This
- These

Indefinite Pronoun Exercises

Q. Choose one of the following indefinite pronouns to fill each blank: something, everyone, anywhere

1. After the parade, _____ met up in the town square.

- something
- everyone
- anywhere

2. Would you like _____ to drink?

- something
- everyone
- anywhere

3. I searched all over, but couldn't find my notes _____ .

- something
- everyone
- anywhere

Interrogative Pronoun Exercises

Q. Select an interrogative pronoun to fill the blank in each sentence.

1. _____ flavor do you prefer?

- Whom
- Which
- Who

2. I heard someone at the door but wasn't sure _____ it was.

- what
- which
- whom

3. _____ do you want for lunch?

- what
- which
- who

Intensive Pronoun Exercises

Q. Choose the correct intensive pronoun to fill the blank, remembering that they always end in –self or –selves.

1. I slipped on the sidewalk and hurt _____ .

- himself
- themselves
- myself

2. The kids rode the rollercoaster by _____ .

- themselves
- herself
- himself

3. She bought _____ a new car.

- himself
- myself
- herself

Personal Pronoun Exercises

Q. Choose the correct personal pronoun to fill each blank.

1. _____ am learning to speak better English.

- I
- Me
- You

2. Thanks for the package! Please leave _____ on the table.

- them
- them
- it

3. Ben was surprised when _____ discovered that his friends were hiding in the living room.

- she
- he
- they

Possessive Pronoun Exercises

Q. Choose the correct possessive pronoun to fill each blank.

1. I lost _____ phone last night.

- mine
- my
- ours

2. They bought new furniture for _____ house.

- mine
- their
- ours

3. We're going to get _____ test results today.

- mine
- yours
- our

Reciprocal Pronoun Exercises

Q. Choose the correct reciprocal pronoun to fill the blank, remembering that reciprocal pronouns include each other and one another.

1. Dan and I waved hello to _____.

- each other
- one another

2. The students talked to _____.

- each other
- one another

3. The two boys threw the ball back and forth to _____.

- each other
- one another

Reflexive Pronoun Exercises

Q. Choose the correct reflexive pronoun to fill the blank.

1. I'm always talking to _____.

- themselves
- myself
- herself

2. John likes to do things by _____.

- myself
- ourselves
- himself

3. You can do it _____.

- yourself
- himself
- themselves

Relative Pronoun Exercises

Q. Choose the correct relative pronoun to fill the blank.

1. The tallest child, _____ was also oldest, was also most outgoing.

- who
- that
- whose

2. I don't recognize the song _____ is playing.

- which
- that
- who

3. I rode my bike _____ has a headlight, home in the dark.

- that
- whom
- which

ENGLISH WEEK-5

Day 1 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.2 Glory and Hope (Reading Comprehension) Read chapter thoroughly to attempt the worksheet	Worksheet

Day 1 - Homework

Q. Answer the following questions.

- 1: Who are the people Nelson Mandela is addressing and what is the occasion?
- 2: What figurative language does Nelson Mandela use to communicate his profound feelings of patriotism and sense of belonging to his homeland?
- 3: What was the situation like in South Africa before this very celebration of liberty and glory that Nelson Mandela is speaking about?
- 4: What emancipation and liberation is Nelson Mandela speaking about?
- 5: What does Nelson Mandela mean by South Africa being once the “skunk of the world”?

Day 2 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.2 Glory and Hope (Reading Comprehension) Grammar: Adverbs 1) https://www.slideshare.net/mobile/Natdanai_lorlamai/adverbs-presentation-12304791	Worksheet 1) https://www.hitbullseye.com/Adverbs-Exercises.php

Day 2- Homework

Q. Underline the adverbs in the following sentences and state their kind.

1. I went to the market in the morning.
2. The dog sat lazily in the shade of the tree.
3. The man grumbled loudly while cleaning the table.
4. I often visit my grandparents.
5. It is extremely hot today.
6. Please wait patiently.
7. The technician fixed the problem easily.
8. They serve hot pan cakes there.
9. I am waiting here for my daughter.
10. He laughed merrily.
11. We will leave today.
12. She is standing outside.

Day 3-Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.2 Glory and Hope (Reading Comprehension) Grammar: Difference between Adverbs and Adjectives <ul style="list-style-type: none">https://www.slideshare.net/mobile/Dolgorsurens/difference-adverbs-and-adjectives	Worksheet 1. http://esl.fis.edu/grammar/multi/adadv.htm

Day 3- Homework

Adverb or Adjective?

Q. Do your students know the difference between an adjective or adverb? Sometimes it can be a bit difficult to tell. You can use this worksheet to pick the appropriate adjective or adverb.

1. He's always in a rush. I don't understand why he walks so _____ (quick/quickly).
2. I prefer studying in the library. It's always _____ (quiet/quietly).
3. Michael _____ (happy/happily) took the assistant job. He had been looking for a position all summer.
4. Marta dances _____ (beautiful/beautifully). She's been taking ballet since she was five years old.
5. They speak French very _____ (good/well). They lived in France for two years.
6. My neighbor always plays _____ (loud/loudly) music on the weekends. It's so annoying.
7. Please be _____ (careful/carefully) in the hallway. The walls have just been painted.
8. Dan is very smart, but he is not a very _____ (good/well) student.
9. He reacted _____ (angry/angrily) to the news. I have never seen him so upset.
10. We didn't _____ (complete/completely) understand the teacher's instructions. Most of us did not finish the assignment.

ENGLISH WEEK-6

Day 1 – Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.3 I Dream a World(Poem) Figurative Speeches <ul style="list-style-type: none">• https://www.slideshare.net/mobile/MaryjoyElynethDuguran/rhyme-scheme-65208896• https://www.teachforamerica.org/stories/how-to-analyze-a-poem-in-6-steps	Worksheet 1. https://www.usingenglish.com/quizzes/216.html

Day 1 - Homework

Q. Answer the following questions.

1. What is the poem I Dream a World about?
2. What do the children dream in the poem I Dream a World?
3. What is the mood of the poem I Dream a World?
4. When was I Dream a World written?
5. Write a poem about your own dream.

Day 2 – Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.3 I Dream a World(Poem) Figurative Speeches Grammar: Articles <ul style="list-style-type: none">• https://www.slideshare.net/mobile/Yusufzay/articles-48591902• https://www.slideshare.net/mobile/chrisseth/articles-presentation-58372473	Worksheet 1. https://www.proprofs.com/quiz-school/storyamp.php?title=english-quiz-articles

Day 2 - Homework

Articles

Directions: Fill in the blank with the appropriate article, a, an, or the, or leave the space blank if no article is needed.

1. I want ____ apple from that basket.
2. ____ church on the corner is progressive.
3. Miss Lin speaks ____ Chinese.
4. I borrowed ____ pencil from your pile of pencils and pens.
5. One of the students said, " ____ professor is late today."
- 6 Eli likes to play ____ volleyball.
7. I bought ____ umbrella to go out in the rain.
8. My daughter is learning to play ____ violin at her school.
9. Please give me ____ cake that is on the counter.
10. I lived on ____ Main Street when I first came to town.
11. Albany is the capital of ____ New York State.
12. My husband's family speaks ____ Polish.
13. ____ apple a day keeps the doctor away.
14. ____ ink in my pen is red.
15. Our neighbors have ____ cat and ____ dog.

Day 3 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 2	2.3 I Dream a World(Poem) Figurative Speeches Grammar: Articles <ul style="list-style-type: none">• https://www.slideshare.net/mobile/Yusufzay/articles-48591902• https://www.slideshare.net/mobile/chrisseth/articles-presentation-58372473	Worksheet https://www.proprofs.com/quiz-school/storyamp.php?title=english-quiz-articles

Day 3 - Homework

Q. Choose the best answers.

1. _____ man is _____ best creature.

- A, an
- A, the
- The, the
- No article, the

2. One of Akbar's most vigorous opponents during his lifetime had been _____ outstanding scholar Sheikh Ahmed and, like Akbar, he was also venerated as _____ Perfect Man by his own disciples.

- the, the
- an, a
- an, the
- the, a

3. He wants to be _____ Shakespeare.

- the
- a
- an
- no article

4. _____ rich should pay more taxes.

- a
- the
- an
- no article

5. As _____ nation Bangladeshis are _____ religious-minded but not zealots.

- a, no article
- a, the
- the, a
- the, no article

6. 'No horizon' was directed by _____ late Steve Calan, only two years before his death.

- an
- a
- the
- no article

7. I want to buy _____ piano, but I can't play _____ piano.

- the, the
- The, a
- a, the
- a, an

8. I can do it in _____ hour and _____ half.

- a, an
- an, no article
- an, the
- an, a

9. _____ virtuous are always happy.

- No article
- The
- An
- A

10. What did you eat for _____ breakfast this morning?

- the
- a
- a or the
- none

11. Choose the correct sentence:

- An ant is an industrious beings.
- The ant is an industrious beings.
- The ant is an industrious being.
- An ant is an industrious being.

12. He saw _____ most wonderful sight.

- the
- a
- an
- none

13. The article 'the' is used _____.

- to make something specific.
- to make things general.
- has no use or meaning.
- to make a thing real.

14. Which of the following sentence is incorrect?

- The sky is blue.
- The earth is round.
- The moon shines by night.
- A sky is blue.

ENGLISH WEEK-7

Day 1 – Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 3	<u>Duty and Responsibility</u> 3.1 Lesson from the battle of Uhud (Reading Comprehension) Read chapter thoroughly to attempt the worksheet	Worksheet

Day 1 - Homework

Q. Answer the following questions.

- 1: What was the composition of the army of the Qureish that marched to Madina?
- 2: What, in the opinion of the Holy Prophet (SAW), was the best course of action with regard to the strength of the enemy?
- 3: What strategy did the Holy Prophet have in mind when he thought of allowing the enemy to besiege Madina?
- 4: What were the two opinions regarding facing the army of the Qureish?
- 5: What did the Holy Prophet (SAW) decide finally?
- 6: How did the Holy Prophet (SAW) arrange his army at Uhud in preparation for the battle?
- 7: What instructions did the Holy Prophet (SAW) give to the band of archers who were ordered to take up position on a mound?
- 8: What did the archers do when they saw the enemy retreating in defeat?
- 9: What changed the course of the battle of Uhud?
- 10: What was the confusion regarding the companion who bore resemblance to the Holy Prophet (SAW)?
- 11: Who took the wounded Holy Prophet (SAW) out of the pit to a safer place?
- 12: Who did the Holy Prophet (SAW) charge to launch a counter attack?
- 13: Who did the Holy Prophet (SAW) send his own sword to continue fighting?
- 14: What did the Abu Sufyan boast about when leaving the battleground?
- 15: How was the mistake of the archers a tactical mistake?
- 16: What did the companions of the Holy Prophet (SAW) learn from the battle of Uhud

Day 2 - Overview

<u>No of Unit</u>	<u>Topic</u>	<u>Activity / Worksheet</u>
Unit 3	Duty and Responsibility 3.1 Lesson from the battle of Uhud (Reading Comprehension) Grammar: Tenses 1. https://www.slideshare.net/mobile/aoksa/ana/english-tenses-5610444	Worksheet No 7 1) https://www.englishclub.com/esl-quizzes/grammar-5-tenses-2.php

Day 2 - Homework

Tenses Exercise

Q. Read the following sentences and change the tenses as per the given directions. You might need to make changes in the adverbs as well.

1. I will be writing my exam this time tomorrow. (Change into past continuous tense)
2. He will be waiting for us. (Change into present continuous tense)
3. I know this. (Change into simple past)
4. He will have thought about this. (Change into present perfect tense)
5. He wanted to know more about the job. (Change into simple present)
6. I am leaving for England tomorrow. (Change into future continuous tense)
7. She hadn't thought about that. (Change into simple past)
8. He will not accept this proposal. (Change into simple past)
9. He will not pass the test. (Change into future perfect tense)
10. I always wanted to be a scientist. (Change into present perfect tense)
11. She will not tolerate this injustice. (Change into simple past)
12. She did not want to go. (Change into simple present)

Day 3 - Overview

#	Topic	Activity / Worksheet
Unit 3	<p><u>Duty and Responsibility</u> 3.1 Lesson from the battle of Uhud (Reading Comprehension) Grammar: Tenses</p> <p>2. https://www.slideshare.net/mobile/aoksana/english-tenses-5610444</p> <p>3. https://www.slideshare.net/mobile/narupornsuksatit/all-12tenses-62987625</p>	<p>Worksheet No 7</p> <p>1. https://www.englishclub.com/esl-quizzes/grammar-5-tenses-2.php</p> <p>2) https://www.englishlearner.com/intermediate/tenses-quiz-1.shtml</p>

Day 3-Homework

<https://www.englishgrammar.org/tenses-exercise-16/>

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: MATHEMATICS

MATHEMATICS WEEK-1

<u>Days</u>	<u>No of Unit</u>	<u>Topic</u>	<u>Activity</u>
1 2 3	Chapter 1 st	Function and limits 1) https://www.youtube.com/watch?v=4laex0KzP50 2) https://www.youtube.com/watch?v=GzqRa8srpmM 3) https://www.youtube.com/watch?v=Dfg6GYiUwUw 4) https://www.youtube.com/watch?v=Go5LkeV5a18	Book (Ex:1.1,1.2)

Day: 1

Introduction:

- Concept of function
- Domain and range
- Graphs of algebraic function

Question:

Prove that identities.

- I) $\sinh 2x = 2 \sinh x \cosh x$
- II) $\operatorname{sech}^2 x = 1 - \tanh^2 x$
- III) $\operatorname{csh}^2 x = \operatorname{coth}^2 x - 1$

Day: 2

Introduction:

- Composition of Function

Question:

Find $f \circ g(x)$ and $g \circ f(x)$ if

- i) $f(x) = 3x^4 - 2x^2$, $g(x) = \frac{2}{\sqrt{x}}$
- ii) $F(x) = 2x + 1$, $g(x) = \frac{3}{x-1}$

Day: 3

Introduction:

Inverse function

Question

Find $f^{-1}(x)$ if

- i) $f(x) = -2x + 8$
- ii) $F(x) = 3x^3 + 7$

Activity Links

https://www.mathcity.org/fsc/fsc_part_2_mcqs/mcqs-short_questions_by_mr._parvez_khan

MATHEMATICS WEEK-2

<u>Days</u>	<u>No of Unit</u>	<u>Topic</u>	<u>Activity</u>
1 2 3	Chapter 1 st	Function and limits 1) https://fsconline.info/ex-1-3-xii/ 2) https://fsconline.info/ex-1-4-xii/	Book (Ex:1.3,1.4)

Day: 1

Introduction:

- 1) Limits of Important Function
- 2) Limit at Infinity

Question

1. Prove that $\lim_{\theta \rightarrow 0} \frac{\sin \theta}{\theta} = 1$

Day: 2

Question

1. $\lim_{\theta \rightarrow \pi} \frac{\sin x}{\pi - x}$
2. $\lim_{\theta \rightarrow 0} \frac{\tan \theta - \sin \theta}{\sin^3 \theta}$

Day: 3

Introduction:

Continuous and Discontinues

Question

$$f(x) = \begin{cases} mx & \text{if } x < 3 \\ n & \text{if } x = 3 \\ -2x + 9 & \text{if } x > 3 \end{cases}$$

Find the values of m and n, so that given function f is continuous at x=3

Activity Link

https://www.mathcity.org/doku.php?id=fsc:fsc_part_2_mcqs:mcqs_by_muhammad_imran_gureshi:online_view&cp=1&p=3&fp=Objective_Ch_1_FSC_part2_imran

MATHEMATICS WEEK-3

<u>Days</u>	<u>No of Unit</u>	<u>Topic</u>	<u>Activity</u>
1 2 3	Chapter 2 nd	Derivatives 1) https://www.youtube.com/watch?v=7Ys4y-TM9TU 2) https://www.youtube.com/watch?v=ytLv77SePTI 3) https://www.youtube.com/watch?v=SAeR4wmeVqA 4) https://www.mathcity.org/fsc/fsc_part_2_solutions/ch01	Book (Ex:2.1,2.2)

Chapter # 02 (Derivatives)

Day: 1

Introduction:

- Dependent and independent variables
- Average rate of change
- Derivative of the function

Day: 2

Introduction:

- Finding derivative from definition method
- Derivation of x^n

Question

Find by definition

i) $2x^2+1$

ii) Find $\frac{dy}{dx}$ form the first principles if $\frac{1}{\sqrt{x+a}}$

Day:3

Introduction:

- 2.2: [Finding f'\(x\) from Definition of method a](#)

Activity Link

- 1) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.1&v=m-11-12-diff-1>
- 2) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.2&v=m-11-12-diff-5>
- 3) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.3&v=m-11-12-diff-9-prob1>
- 4) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.3&v=m-11-12-diff-9-prob1>

MATHEMATICS WEEK-4

Days	No of Unit	Topic	Activity
1 2 3	Chapter 2 nd	Derivatives 1) https://fsconline.info/ex-2-3-xii/ 2) https://www.youtube.com/watch?v=ytLv77SePTI&t=340s 3) https://www.youtube.com/watch?v=4gpwrVoWzS8	Book (Ex:2.3,2.4) revision test

Day: 1

Introduction:

- Theorems on differentiation
- Derivative of constant function
- Power rule
- Derivative of a sum or a difference of function

Activity Link

<https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.1&v=m-11-12-diff-1>

<https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.2&v=m-11-12-diff-5>

<https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.3&v=m-11-12-diff-9-prob1>

<https://sabaq.pk/video-page.php?sid=punjab-math-12th-2.3&v=m-11-12-diff-9-prob1>

Day: 2

Introduction:

- Product rule
- Quotient rule

Question

1) $\frac{(x^2+1)^2}{x^2-1}$ differentiate w.r.t "x"

2) if $y = x^4 + 2x^2 + 2$, prove that $\frac{dy}{dx} = 4x\sqrt{y-1}$

Activity Link

https://www.mathcity.org/doku.php?id=fsc:fsc_part_2_mcqs:mcqs_by_muhammad_imran_ghureshi:online_view&cp=1&p=3&fp=Objective_Ch_2_FSC_part2_imran

Day: 3

Introduction:

- Chain rule
- Derivatives of inverse function
- Derivatives of implicit function

Question

1. Find $\frac{dy}{dx}$ if

2. Prove that $y \frac{dy}{dx} + x = 0$ if $x = \frac{1-t^2}{1+t^2}$, $y = \frac{2t}{1+t^2}$ $xy+y^2=2$

MATHEMATICS WEEK-5

Day	No of Unit	Topic	Activity
1 2 3	Chapter 3	Integration 1) https://www.youtube.com/watch?v=lidOfS3jMAQ 2) https://www.youtube.com/watch?v=lidOfS3jMAQ 3) https://www.youtube.com/watch?v=bNrS0LBHyxA 4) https://www.youtube.com/watch?v=THQFeOBBVvM 5) https://www.youtube.com/watch?v=4FgnulJ6mGs 6) https://www.youtube.com/watch?v=3icppWUuDLk	Book (3.1,3.2) https://classnotes.xyz/class-12-notes-maths-integration-exercise-3-2/

Day: 1

Introduction: Integration

- Differential of variable
- Distinguishing between the dy and δy
- Finding $\frac{dy}{dx}$ by using differentials
- Simple application of differentials

Question

- Find δy and dy
 $Y = x^2 - 1$ when x changes from 3 to 3.02
- Use differentials to approximate the values of $\cos 29$

Day: 2

Introduction:

- Integration as anti-derivative

Question

1. $\int (3x^2 - 2x + 1) dx$

2. $\int (2x + 3)^3 dx$

Day: 3

Introduction:

- Theorem on anti-Derivatives

Question

1. $\int \frac{ax+b}{ax^2+2bx+c} dx$

2. $\int \sin(a + b)x dx$

MATHEMATICS WEEK-6

Day	No of Unit	Topic	Activity
1 2 3	Chapter 3	Integration 1) https://www.youtube.com/watch?v=ljbr230GNc4 2) https://www.youtube.com/watch?v=ljbr230GNc4 3) https://www.youtube.com/watch?v=nEM9e2aslco	Book (3.3) https://classnotes.xyz/class-12-notes-maths-integration-exercise-3-3/ https://www.mathcity.org/fsc/fscpart2mcqs revision test

Day: 1

Introduction:

Integration

- Integration by method of substitution

Question

1. $\int \frac{-2x}{\sqrt{4-x^2}} dx$
2. $\int \frac{1}{x \ln x} dx$
3. show that $\int \frac{dx}{\sqrt{x^2-a^2}} = \ln(x + \sqrt{x^2 - a^2}) + c$

Day: 2 & 3

Introduction:

Question

Evaluate the integrals

1. $\int \frac{\cos x}{\sin x \ln \sin x} dx$
2. $\int \frac{x}{4+2x+x^2} dx$
3. $\int \frac{\sqrt{2}}{\sin x + \cos x} dx$

Activity Links

- 1) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-3.1&v=m-11-12-integral-1>
- 2) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-3.1&v=m-11-12-integral-2>
- 3) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-3.2&v=m-11-12-integral-5>
- 4) <https://sabaq.pk/video-page.php?sid=punjab-math-12th-3.3&v=m-11-12-integral-19>

MATHEMATICS WEEK-7

Day	No of Unit	Topic	Activity
1	Chapter 3	Integration	Book (3.3)
2		1) https://www.youtube.com/watch?v=JtcbMXAI-jl	revision test
3		2) https://www.youtube.com/watch?v=uKCfK1OYACo	
	3) https://www.youtube.com/watch?v=1sYMbtBOXMU		

Day: 1

Introduction:

Integration

Question

- $\int x \sin x \, dx$
- $\int x^2 \ln x \, dx$

Activity Link

<https://www.youtube.com/watch?v=DaElrvE1uRw>

<https://www.youtube.com/watch?v=1sYMbtBOXMU>

Day: 2

Question

Evaluate the following integrals

- $\int \tan^4 x \, dx$
- $\int x^3 e^{5x} \, dx$
- $\int e^{-x} \sin 2x \, dx$

Activity Link

<https://www.youtube.com/watch?v=DaElrvE1uRw>

Day: 3

Question

Evaluate the following integrals

- $\int \sqrt{a^2 - x^2} \, dx$
- $\int \sqrt{x^2 - a^2} \, dx$
- $\int e^x \left(\frac{1}{x} + \ln x \right) dx$

Activity Link

<https://www.youtube.com/watch?v=I9YMLajzLo8>

<https://www.youtube.com/watch?v=-0ukikGfo7U>

<https://www.youtube.com/watch?v=m-T5ruPKXck>

https://www.mathcity.org/doku.php?id=fsc:fsc_part_2_mcqs:mcqs_by_muhammad_imran_ghureshi:online_view&cp=1&p=3&fp=Objective_Ch_3_FSC_part2_imr

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: BIOLOGY

BIOLOGY WEEK-1

Day 1- Overview:

Chapter No.	Topic	Activity
14 Respiration	<ul style="list-style-type: none">Mechanism of breathing https://youtu.be/wdDLZXub-8oControl of breathing https://youtu.be/Db0DhV6SGTU	<ul style="list-style-type: none">https://www.khanacademy.org/science/health-and-medicine/human-anatomy-and-physiology/lung-introduction/e/lung-quizhttps://www.biologycorner.com/anatomy/respiratory/respiratory-crossword.html

Day 1 – Homework:

→ Solve the quiz:

<https://www.khanacademy.org/science/health-and-medicine/human-anatomy-and-physiology/lung-introduction/e/lung-quiz>

→ Solve the respiratory system crossword puzzle:

<https://www.biologycorner.com/anatomy/respiratory/respiratory-crossword.html>

Day 2 – Overview:

Chapter No.	Topic	Activity
14 Respiration	<ul style="list-style-type: none">Transport of gases <ol style="list-style-type: none">https://youtu.be/AAjFTmArESIhttps://youtu.be/GA0q5T1pya0https://youtu.be/akgoaN3trFM	<ul style="list-style-type: none">https://study.com/academy/practice/quiz-worksheet-carbon-dioxide-transport-in-the-blood.html

Day 2 – Homework:

→ Solve the quiz:

<https://study.com/academy/practice/quiz-worksheet-carbon-dioxide-transport-in-the-blood.html>

Day 3 – Overview:

Chapter No.	Topic	Activity
14 Respiration	<ul style="list-style-type: none">Respiratory disorders <ol style="list-style-type: none">1) https://youtu.be/3j0qF5SqV4Y2) https://youtu.be/OdfR5oXFA4M	<ul style="list-style-type: none">https://study.com/academy/practice/quiz-worksheet-respiratory-system-disorders.html

Day 3 – Homework:

→ Solve the quiz:

<https://study.com/academy/practice/quiz-worksheet-respiratory-system-disorders.html>

→ **Short questions:**

- How the contraction & relaxation of human lungs takes place?
- What is chloride shift?
- Write the causes, symptoms and treatment of sinusitis & pulmonary tuberculosis.

→ **Extensive questions:**

- Explain the transport of Carbon dioxide in blood?

Weekly Assessment

Select the correct answer:

i. The process in which air is removed out of the lungs is called:

- a) inspiration
- b) Expiration
- c) tidal volume
- d) none of these

ii. _____% of CO₂ is carried as carboxyhaemoglobin.

- a) 42%
- b) 50%
- c) 23%
- d) 15%

iii. The force that causes air to flow into the lungs during inspiration and out of the lungs during expiration is:

- a) diaphragm movements
- b) surface tension
- c) muscle contraction
- d) atmospheric pressure

iv. When we exhale the _____ relax and return to their resting positions.

- a) ribs
- b) diaphragm & intercostal muscles
- c) intercostal muscles
- d) diaphragm

v. The symptoms of upper respiratory infection include:

- a) cough
- b) sore throat
- c) sneezing & coughing
- d) all of these

vi. The rate at which we inhale and exhale is controlled by the respiratory center, within the _____ in the brain.

- a) Medulla Oblongata
- b) Pons
- c) Cerebellum
- d) Cerebrum

vii. Symptoms of TB in the lungs may include

- a) bad cough that lasts 3 weeks or longer
- b) weight loss & loss of appetite
- c) fever & night sweats
- d) all of these

viii. Pulmonary TB is caused by the bacterium:

- a) Listeria
- b) Mycobacterium tuberculosis
- c) Campylobacter
- d) Clostridium perfringens

ix. Inspiration takes place when the volume of thoracic cavity _____ and the air pressure _____

- a) increases: decreases
- b) decreases: increases
- c) increases: also increases
- d) none of these

x. How is most of the Oxygen transported in blood?

- a) dissolved plasma
- b) bound to haemoglobin
- c) as bicarbonate
- d) dissolved in water

BIOLOGY WEEK-2

Day 1 – Overview:

Chapter No.	Topic	Activity / worksheet
15 Homeostasis	<ul style="list-style-type: none">Feedback mechanism <ol style="list-style-type: none">1) https://youtu.be/Y62wUaZqTh0	<ul style="list-style-type: none">https://www.pearlandisd.org/cms/lib/TX01918186/Centricity/Domain/1182/Homeostasis%20Worksheet.pdf

Day 1 – Homework:

→ Solve the worksheet:

<https://www.pearlandisd.org/cms/lib/TX01918186/Centricity/Domain/1182/Homeostasis%20Worksheet.pdf>

Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
15 Homeostasis	<ul style="list-style-type: none">Structure & function of kidney <ol style="list-style-type: none">1) https://youtu.be/if-sGv6ILyw2) https://youtu.be/eTIS8UELAI43) https://youtu.be/BUBbZI3MfGU4) https://youtu.be/muZiQFtCppE	<ul style="list-style-type: none">https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-urinary-system/quiz-anatomy-of-the-kidneyshttps://www.khanacademy.org/test-prep/mcat/organ-systems/the-renal-system/e/renal-system-questions

Day 2 – Homework:

→ Solve the quiz:

1) <https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-urinary-system/quiz-anatomy-of-the-kidneys>

2) <https://www.khanacademy.org/test-prep/mcat/organ-systems/the-renal-system/e/renal-system-questions>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
15 Homeostasis	<ul style="list-style-type: none">Disorders of Urinary Tract <ol style="list-style-type: none">1) https://youtu.be/UxVUZzkZ2PI2) https://youtu.be/ANAWCbaP65A <ul style="list-style-type: none">Dialysis <ol style="list-style-type: none">1) https://youtu.be/d6MyCoO2Chq	<ul style="list-style-type: none">https://www.abpschools.org.uk/topic/homeostasis-kidneys/10/1

Day 3 – Homework:

→ Solve the quiz:

<https://www.abpschools.org.uk/topic/homeostasis-kidneys/10/1>

Weekly Assessment

→ Select the correct answer:

i. Which of the following will cause a decrease in ADH production?

- | | |
|-------------------|------------------------------------|
| a) dehydration | b) an increase in osmotic pressure |
| c) drinking water | d) abnormally low blood pressure |

ii. Detection of change and signaling for effector's response to control system is a:

- | | |
|----------------------|-----------------------|
| a) negative feedback | b) inter-coordination |
| c) positive feedback | d) feedback mechanism |

iii. In nephron, most of the reabsorption takes place in the:

- | | |
|--------------------|--------------------|
| a) distal tubule | b) ascending limb |
| c) proximal tubule | d) descending limb |

iv. Which of the following is recovered from collecting duct of nephron?

- | | |
|------------|-------------------|
| a) glucose | b) water |
| c) NaCl | d) potassium ions |

v. Urethritis is the infection of:

- | | |
|------------|------------------|
| a) ureter | b) kidneys |
| c) urethra | d) none of these |

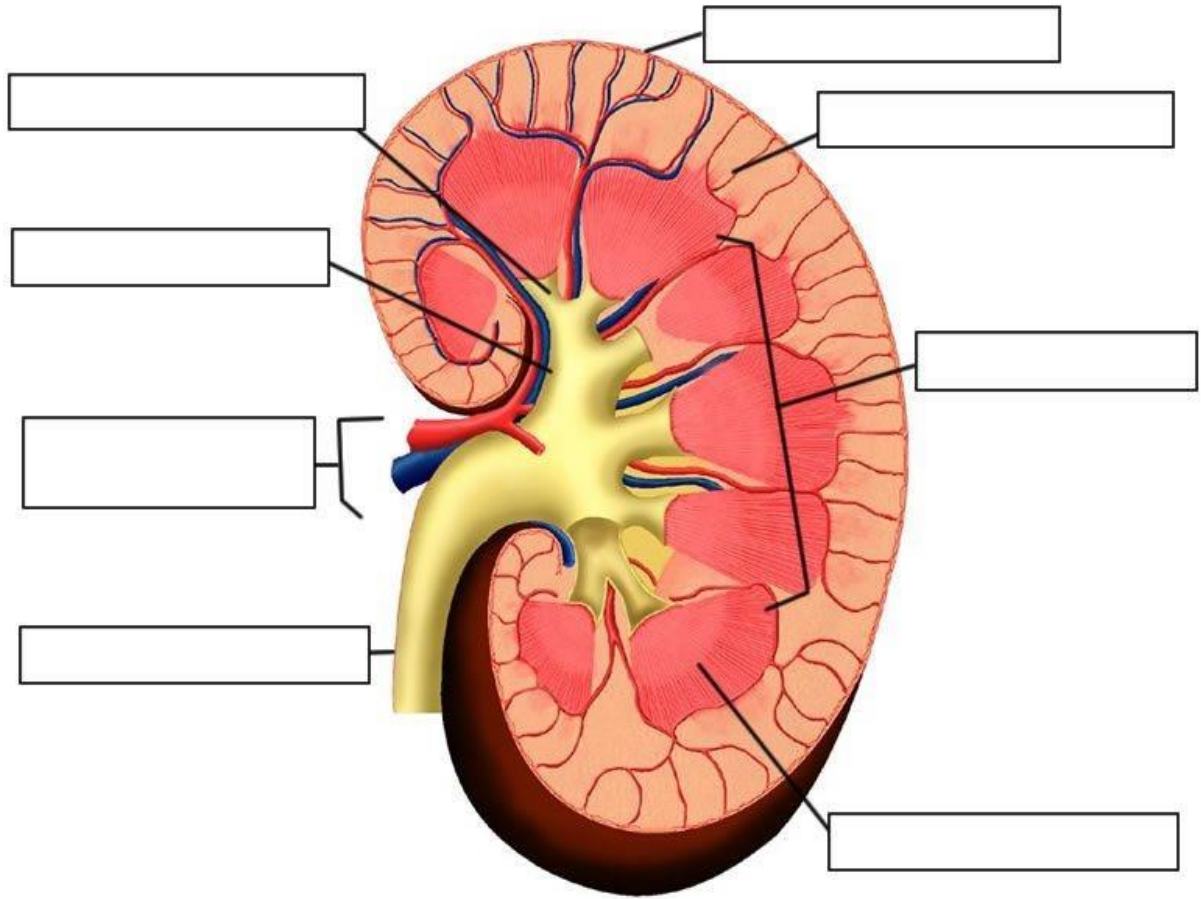
→ **Short questions:**

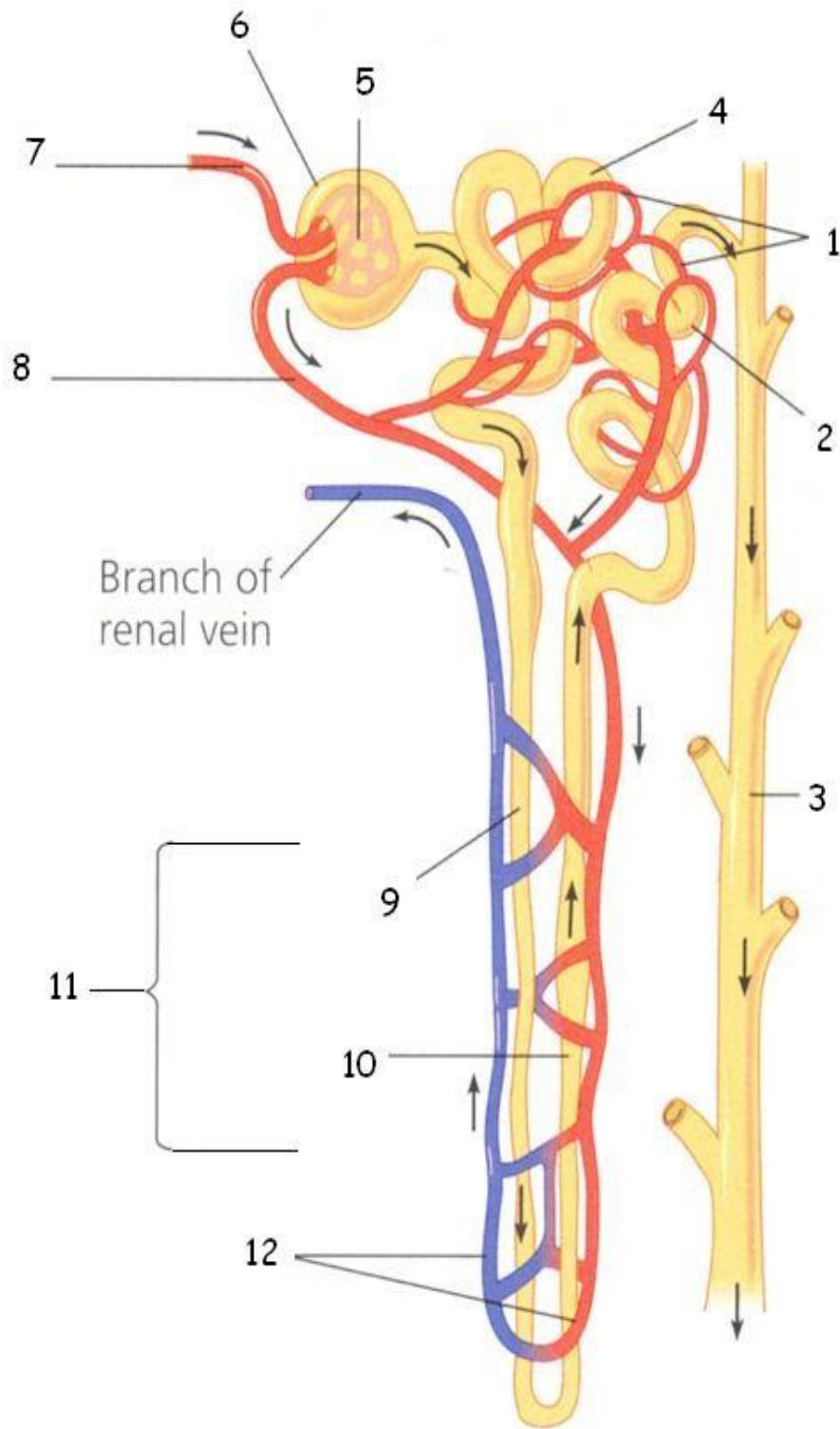
- i.** How homeostasis is maintained by negative feedback? Explain with example.
- ii.** Explain that concentration of urine is regulated by counter-current and hormonal mechanism.
- iii.** List the urinary tract infections and the bacteria responsible.
- iv.** How reabsorption is a selective process?
- v.** What are the causes of kidney failure?

→ **Extensive questions:**

- i.** Explain in detail the mechanism of dialysis.
- ii.** Describe the blood circulation to human nephron.
- iii.** Discuss the urine formation.

→ Label the diagram:





BIOLOGY WEEK-3

Day 1 – Overview:

Chapter No.	Topic	Activity / worksheet
16 Support & movement	<ul style="list-style-type: none">• Division of human skeleton <ol style="list-style-type: none">1) https://youtu.be/mjBmaO7-f8Y2) https://youtu.be/jtYH00EcrYM3) https://youtu.be/6q-xReW2Kxg4) https://youtu.be/_ntHpTLZ1M05) https://youtu.be/oRlq72hZ8DY6) https://youtu.be/TVK0jr2aluk	<ul style="list-style-type: none">• https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-skeletal-system/quiz-skull-cranium-and-facial-bones• https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-skeletal-system/quiz-organization-of-the-skeleton

Day 1 – Homework:

→ Solve the quiz:

- 1) <https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-skeletal-system/quiz-skull-cranium-and-facial-bones>
- 2) <https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-skeletal-system/quiz-organization-of-the-skeleton>

Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
16 Support & movement	<ul style="list-style-type: none">• Structure of skeletal muscles <ol style="list-style-type: none">1) https://youtu.be/Dwu9ZpbJjgM2) https://youtu.be/BE0Dvq31Vdg3) https://youtu.be/VoSz0Zhaeil	<ul style="list-style-type: none">• https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/muscle-tissue/quiz-structure-of-skeletal-muscle

Day 2 – Homework:

→ Solve the quiz:

<https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/muscle-tissue/quiz-structure-of-skeletal-muscle>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
16 Support & movement	<ul style="list-style-type: none">Sliding filament model <ol style="list-style-type: none">1) https://youtu.be/96JEWoDfEDM2) https://youtu.be/jxWMWuY_Svw3) https://youtu.be/Bf2JkPxTDPw	<ul style="list-style-type: none">https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/muscle-tissue/quiz-muscle-contractionhttps://www.biologycorner.com/worksheets/sliding-filament.html

Day 3 – Homework:

→ Solve the quiz:

<https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/muscle-tissue/quiz-muscle-contraction>

→ Solve the worksheet:

<https://www.biologycorner.com/worksheets/sliding-filament.html>

→ Short questions:

- How many facial bones are present in human? Write their names.
- List the major parts of skeletal muscle fiber and write the functions of each part.
- Write the structure of skeletal muscles.
- What are true ribs, false ribs and floating ribs?
- Complete the table:

	Made up of seven bones which are tightly attached to form the ankle.
Metacarpals	
	First cervical vertebra
	A long bone on the inner side of the forearm, & slightly bigger than radius
Hyoid bone	

→ **Extensive questions:**

- Explain the ultra-structure of skeletal muscles.
- Explain the sliding filament model of muscle contraction.

Weekly Assessment

→ Select the correct answer:

i. Which one is not a bone of axial skeleton:

- a) ribs
- b) sternum
- c) pelvic
- d) cranium

ii. Which of the following is not an unpaired bone?

- a) mandible
- b) vomer
- c) sphenoid
- d) nasal

iii. Seven vertebrae lie in the neck region, called:

- a) lumbar region
- b) thoracic region
- c) pelvic region
- d) cervical region

iv. Pelvic girdle is composed of three pair of fused bones:

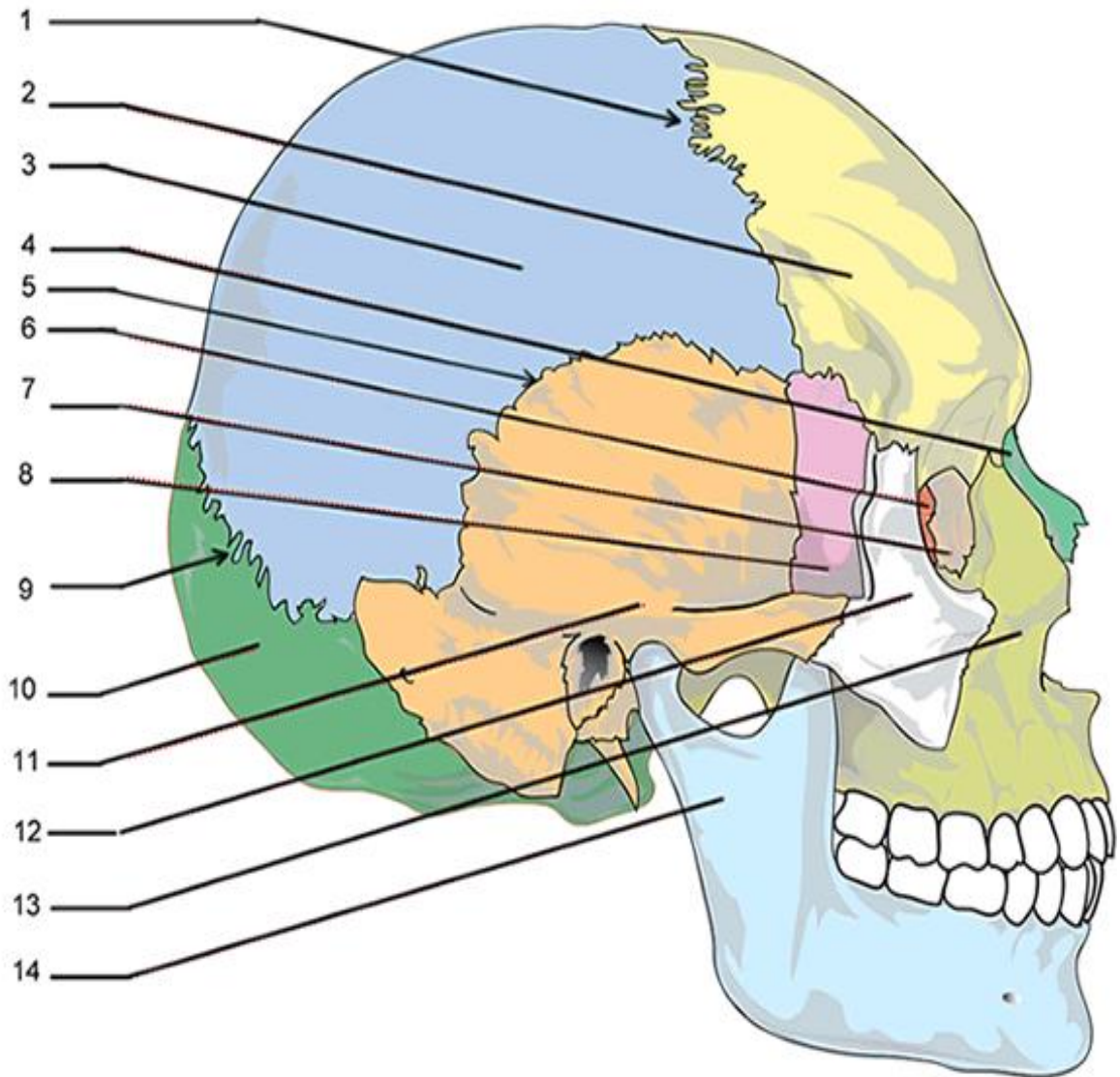
- a) ileum, ischium & pubis
- b) ileum, ischium & frontal
- c) clavicle, scapula & pubis
- d) malus, incus & stapes

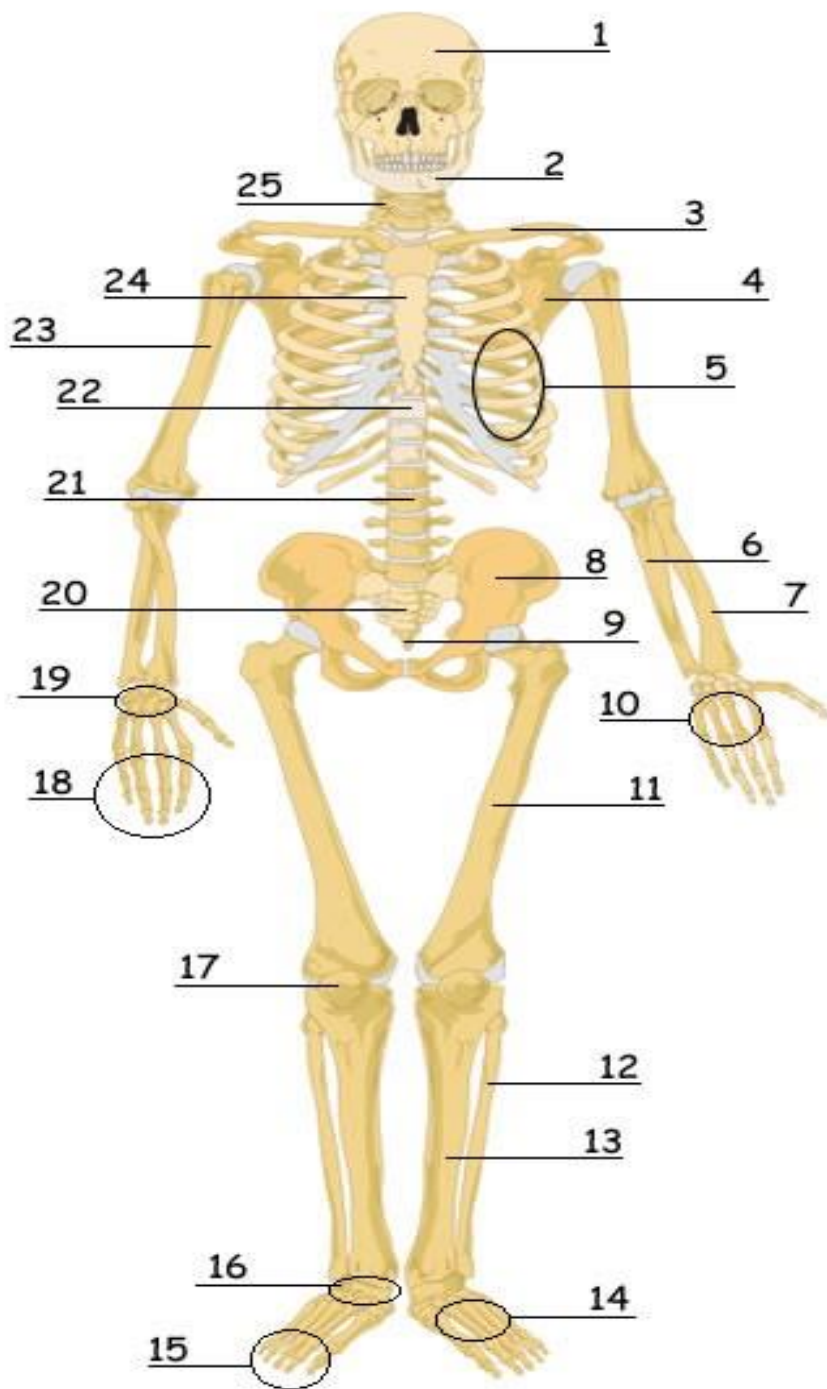
v. Thick myofilament in myofibril is made up of:

- a) myosin
- b) actin
- c) tropomyosin
- d) troponin

→ Label the diagram:

→





BIOLOGY WEEK-4

Day 1 – Overview:

Chapter No.	Topic	Activity / worksheet
17 Nervous coordination	<ul style="list-style-type: none">Nerve impulse 1) https://youtu.be/Y572LriqqYs	<ul style="list-style-type: none">https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/nervous-tissue/quiz-transmission-of-nerve-impulses

Day 1 – Homework:

→ Solve the quiz:

<https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/nervous-tissue/quiz-transmission-of-nerve-impulses>

Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
17 Nervous coordination	<ul style="list-style-type: none">Synapse 1) https://youtu.be/a7_trQuFvgU	<ul style="list-style-type: none">https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/nervous-tissue/quiz-the-synapse

Day 2 – Homework:

→ Solve the quiz:

<https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/nervous-tissue/quiz-the-synapse>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
17 Nervous coordination	<ul style="list-style-type: none">Brain & Spinal cord 1) https://youtu.be/a7_trQuFvgU 2) https://youtu.be/J9C0nF3AXUw 3) https://youtu.be/6jZQxxoRqcw 4) https://youtu.be/lGIXKoHFfp0	<ul style="list-style-type: none">https://biologycorner.com/quiz/quiz_brain_anatomy.html

Day 3 – Homework:

→ Solve the quiz:

https://biologycorner.com/quiz/quiz_brain_anatomy.html

Weekly Assessment

→ Select correct answer:

i. Resting membrane potential of a neuron is:

- | | |
|-----------|----------|
| a) -50 mV | b) -60mV |
| c) -70 mV | d) -80mV |

ii. In myelinated neurons, the impulse jumps from node to node and is called:

- | | |
|----------------------|------------------|
| a) saltatory impulse | b) nerve impulse |
| c) synapse | d) synapsis |

iii. The largest part of brain is:

- | | |
|---------------|-------------|
| a) cerebellum | b) medulla |
| c) thalamus | d) cerebrum |

iv. The number of spinal nerves in man is:

- | | |
|-------|-------|
| a) 24 | b) 62 |
| c) 12 | d) 3 |

v. Microscopic gap between two neurons is called as:

- | | |
|-------------|------------|
| a) synapsis | b) synapse |
| c) collapse | d) preapse |

→ **Short questions:**

- i.** Name the factors responsible for the resting membrane potential of neuron.
- ii.** Briefly explain synaptic transmission of nerve impulse.
- iii.** Describe cranial and spinal nerves in man.
- iv.** Define depolarization, repolarization and hyperpolarization.

v. Complete the table:

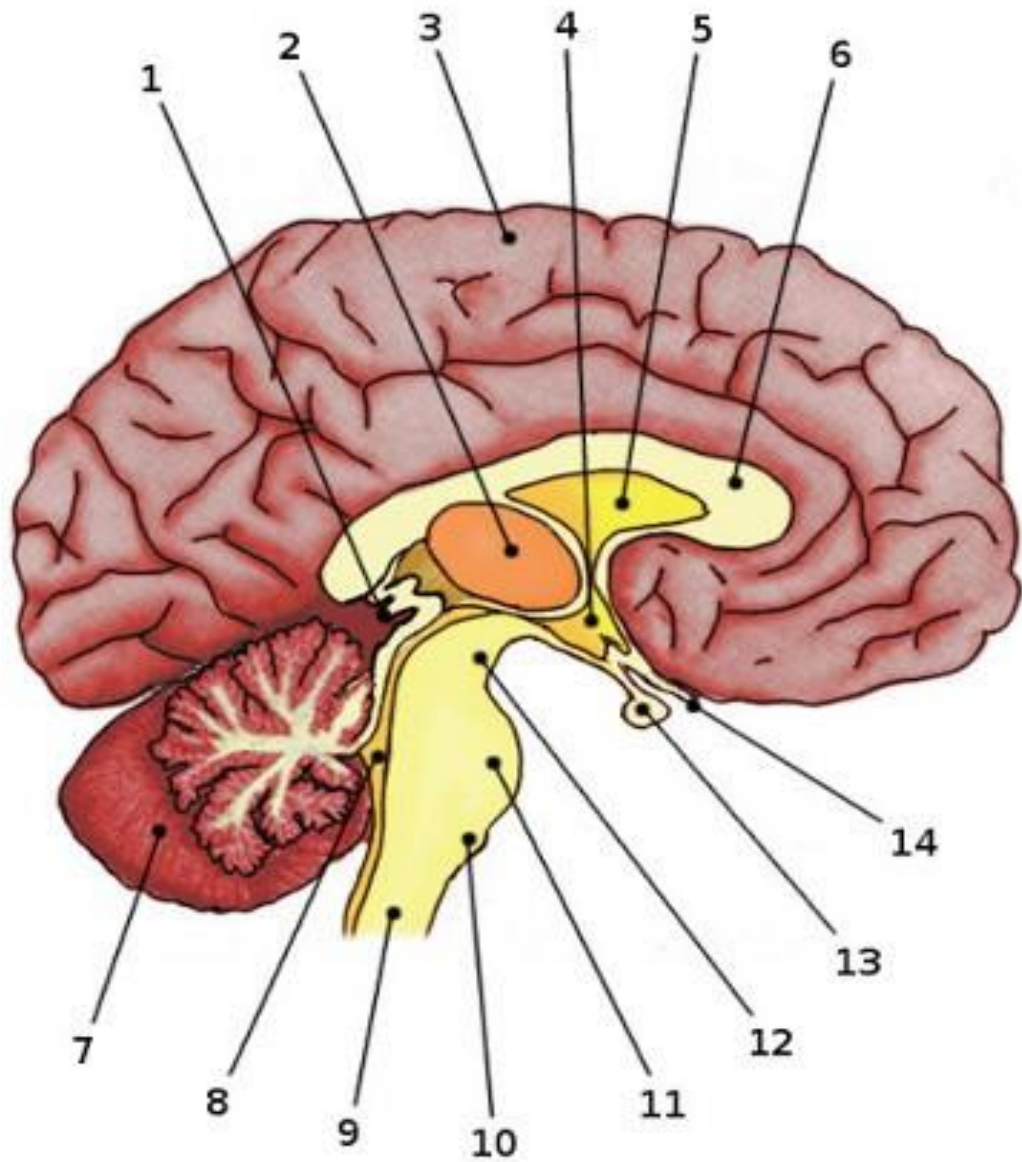
	It maintains homeostasis & contains centers of hunger, sleep, thirst, body temperature, water balance and blood pressure
Cerebellum	
Hippocampus	
	Controls the automatic functions of the body, such as heartbeat, respiration, swallowing etc.
Amygdalae	

→ **Extensive questions:**

i. Describe the generation and transmission of nerve impulse.

ii. Describe the structure of spinal cord with diagram.

→ Label the diagram:



BIOLOGY WEEK-5

Day 1 – Overview:

Chapter No.	Topic	Activity / worksheet
18 Chemical coordination	<ul style="list-style-type: none">Chemical nature of hormones & Mode of hormone action <ol style="list-style-type: none">1) https://youtu.be/0_nXFNwXcFQ2) https://youtu.be/lvi7k4MkNP4	Book page 95 & 96

Day 1 – Homework:

→ Define steroid hormones, proteinous hormones, catecholamine, amino acid derivatives and peptide hormones.

Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
18 Chemical coordination	<ul style="list-style-type: none">Pituitary gland <ol style="list-style-type: none">1) https://youtu.be/g-lIPzuTdW42) https://youtu.be/69OGmhUhlZA3) https://youtu.be/nSmc4tXJZtA	<ul style="list-style-type: none">https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-endocrine-system/quiz-the-hypothalamus-and-pituitary-glandshttps://www.abpischols.org.uk/topic/hormones/10

Day 2 – Homework:

→ Solve the quiz:

<https://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-endocrine-system/quiz-the-hypothalamus-and-pituitary-glands>

→ Solve the worksheet:

<https://www.abpischools.org.uk/topic/hormones/10>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
18 Chemical coordination	<ul style="list-style-type: none">Feedback mechanism <ol style="list-style-type: none">1) https://youtu.be/rjqO73b1bo4	<ul style="list-style-type: none">https://www.biologycorner.com/worksheets/feedback_loops.html

Day 3 – Homework:

→ Solve the worksheet:

https://www.biologycorner.com/worksheets/feedback_loops.html

Weekly Assessment

→ **Select the correct answer:**

i. Which secretions pass through the cell membrane of target cell

- | | |
|----------------------|---------------------|
| a) steroid hormones | b) peptide hormones |
| c) neurotransmitters | d) neuropeptide |

ii. Anterior pituitary doesn't secrete which one of the following hormone?

- | | |
|--------|-------------------|
| a) FSH | b) vasopressin |
| c) TSH | d) growth hormone |

iii. In case of low blood glucose concentration, the negative feedback is:

- | | |
|--------------------|--------------------------------------|
| a) to avoid sweets | b) conversion of glycogen to glucose |
| c) to workout | d) to rest |

iv. Vasopressin (anti-diuretic hormone) and oxytocin are:

- | | |
|-----------------|--------------------------------|
| a) proteins | b) amino acids and derivatives |
| c) polypeptides | d) steroids |

v. Glucagon causes an increase in level of blood:

- | | |
|------------|------------|
| a) glucose | b) sucrose |
| c) lactose | d) urea |

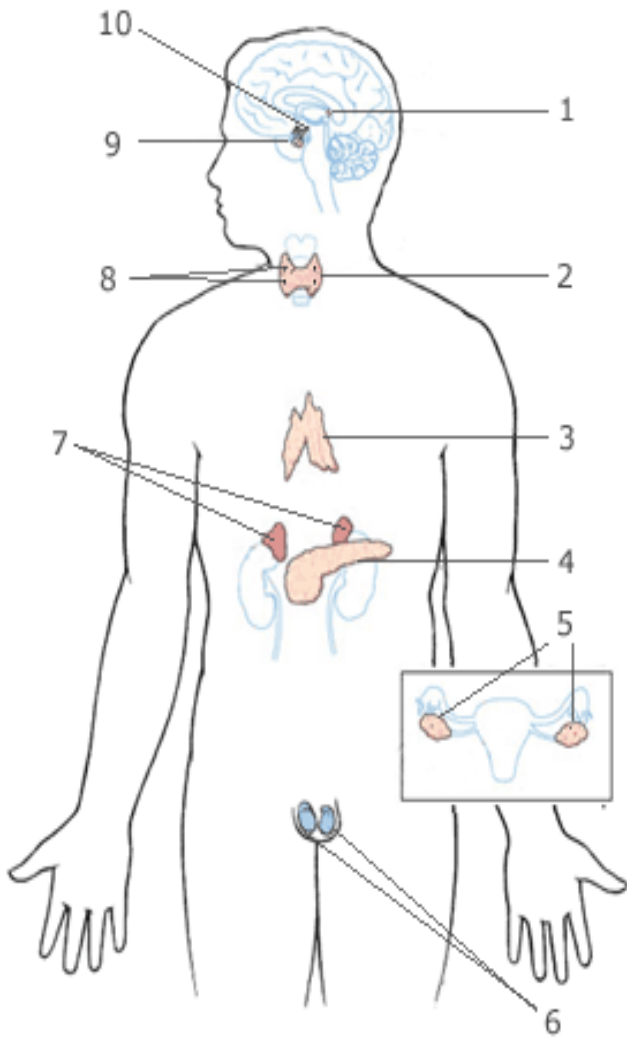
→ **Short questions:**

- i.** Describe the chemical nature of hormones and correlate it with important hormones.
- ii.** Explain the two modes of hormone action at the cells of target site.
- iii.** Explain the problems associated with the imbalance of Growth hormone (GH), Thyroid stimulating hormone (TSH) and Anti-diuretic hormone (ADH).

→ **Extensive questions:**

- i.** Describe positive feedback with reference to Oxytocin and negative feedback with reference to Insulin and Glucagon.
- ii.** Describe the hormones secreted by pituitary gland.

→ Label the major endocrine glands and their respective hormones:



→

BIOLOGY WEEK-6

Day 1 – Overview:

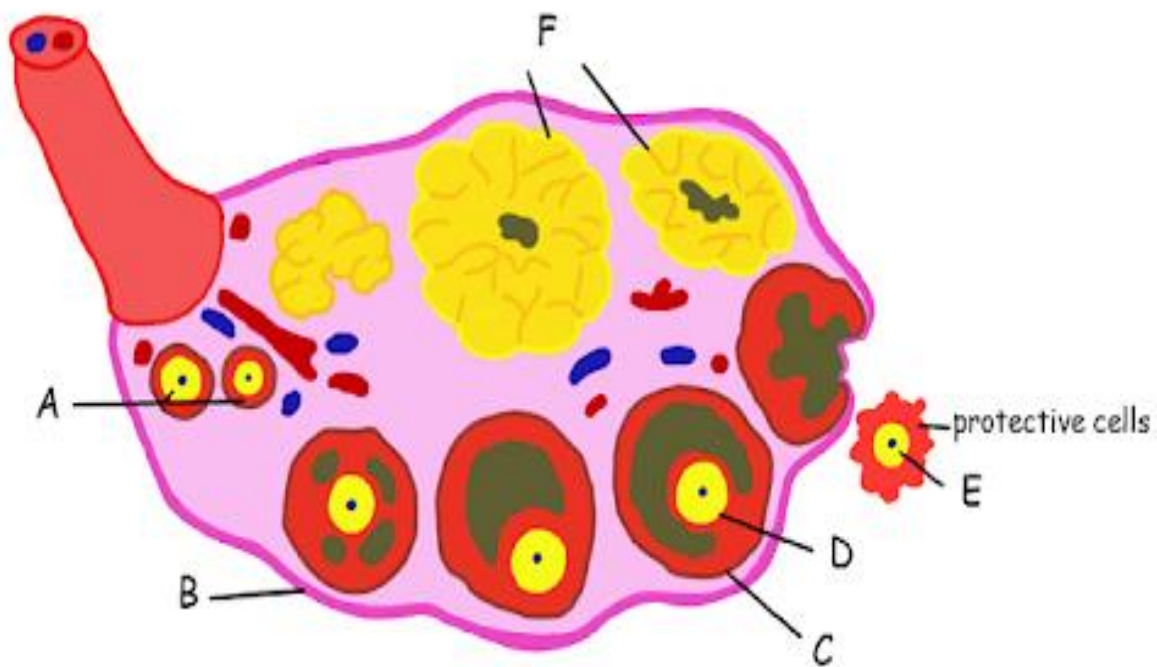
Chapter No.	Topic	Activity / worksheet
20 Reproduction	<ul style="list-style-type: none">Female reproductive cycle <ol style="list-style-type: none">https://youtu.be/joazhVgH_kkhttps://youtu.be/eaWvdzDQJ-whttps://youtu.be/cHh-wwOGUeM	Extensive question & label the diagram

Day 1 – Homework:

→ Extensive question:

i. Describe the events of female reproductive cycle and explain its hormonal regulation.

→ Label the diagram:



Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
20 Development and aging	<ul style="list-style-type: none">Embryonic development <ol style="list-style-type: none">1) https://youtu.be/5iFdvZXBcnk2) https://youtu.be/asEupnsNSgl3) https://youtu.be/TGryC3-7AqA	<ul style="list-style-type: none">https://www.mcqslearn.com/study/general-zoology/embryonic-development-cleavage-and-egg-types-multiple-choice-questions.php

Day 2 – Homework:

→ Solve the quiz:

<https://www.mcqslearn.com/study/general-zoology/embryonic-development-cleavage-and-egg-types-multiple-choice-questions.php>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
20 Development and aging	<ul style="list-style-type: none">Embryonic development <ol style="list-style-type: none">1) https://youtu.be/qZUjFpE32QU2) https://youtu.be/8AhwA5QrVSw	<ul style="list-style-type: none">https://study.com/academy/practice/quiz-worksheet-organogenesis.html

Day 3 – Homework:

→ Solve the quiz:

<https://study.com/academy/practice/quiz-worksheet-organogenesis.html>

Weekly Assessment

→ Select the correct answer:

i. Immediately after fertilization, the egg undergoes a series of mitotic divisions called:

- | | |
|-------------|-----------------|
| a) morula | b) gastrulation |
| c) cleavage | d) blastula |

ii. Cleavage results in the formation of a rounded closely packed mass of blastomeres called:

- | | |
|-------------|-----------------|
| a) morula | b) gastrulation |
| c) cleavage | d) neurula |

iii. Movement and rearrangement of the cells in the embryo is called:

- | | |
|------------------|------------------|
| a) organogenesis | b) gastrulation |
| c) cleavage | d) fertilization |

iv. Neural plate is formed from _____

- | | |
|-------------|--------------|
| a) ectoderm | b) mesoderm |
| c) endoderm | d) notochord |

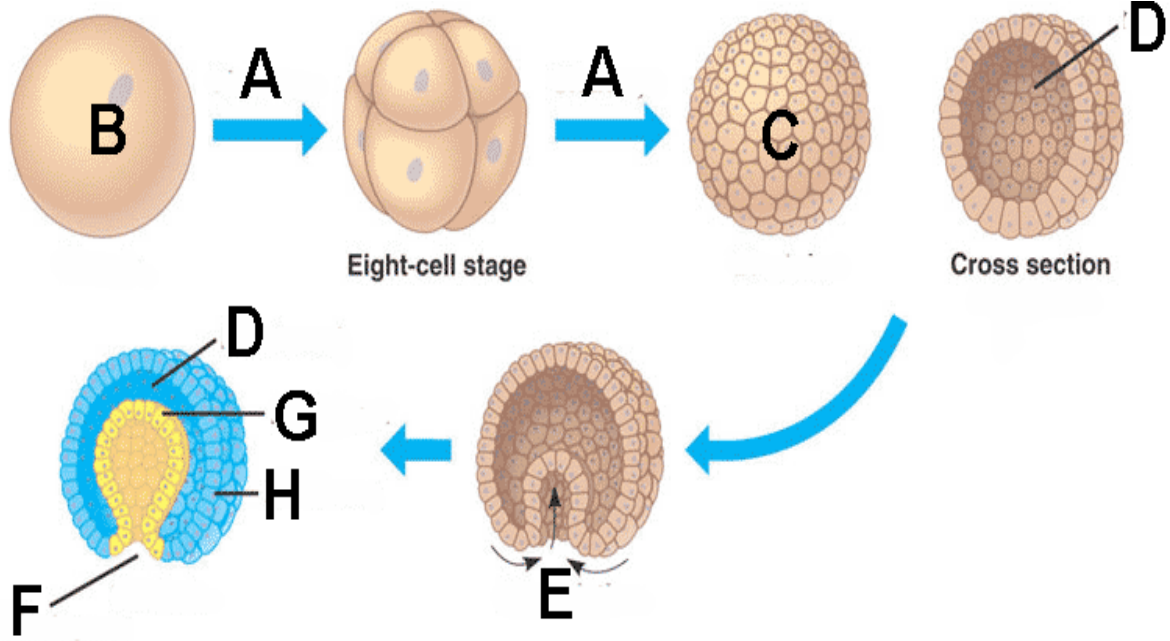
v. In which development stage, germ layers are formed:

- | | |
|----------------|-----------------|
| a) morula | b) gastrulation |
| c) neurulation | d) blastulation |

→ Short questions:

- i.** Define organogenesis.
- ii.** Describe the formation of neural crest and list the structures that are derived from neural crest cells.
- iii.** List the tissues and organs formed from the three germ layers.
- iv.** What is morula and blastula?
- v.** Define holoblastic cleavage and meroblastic cleavage.

→ Label the diagram:



BIOLOGY WEEK-7

Day 1 – Overview:

Chapter No.	Topic	Activity / worksheet
22 Inheritance	<ul style="list-style-type: none">Inheritance of single trait 1) https://youtu.be/SNiRz6H3eNI	https://www.biologycorner.com/worksheets/genetics_practice_pigs.html
	<ul style="list-style-type: none">Inheritance of two traits 1) https://youtu.be/4THglp7YAlk	https://www.biologycorner.com/worksheets/genetics_2traits_bio2.html
	2) https://youtu.be/kbnwqbAjPDY	
	3) https://youtu.be/eRDh-l7d8G0	https://www.biologycorner.com/worksheets/genetics-2traits-floppy-ears-bunny.html
	4) https://youtu.be/ovAZEZbT4m4	https://www.biologycorner.com/worksheets/genetics_heridity_sim_dihybrid.html
		https://www.biologycorner.com/quiz/qz_mendel_genetics.html

Day 1 – Homework:

→ Solve the genetic problems:

- https://www.biologycorner.com/worksheets/genetics_practice_pigs.html
- https://www.biologycorner.com/worksheets/genetics_2traits_bio2.html
- <https://www.biologycorner.com/worksheets/genetics-2traits-floppy-ears-bunny.html>
- https://www.biologycorner.com/worksheets/genetics_heridity_sim_dihybrid.html

→ Solve the quiz:

https://www.biologycorner.com/quiz/qz_mendel_genetics.html

Day 2 – Overview:

Chapter No.	Topic	Activity / worksheet
22 Inheritance	<ul style="list-style-type: none">Exceptions to Mendelian inheritance <ol style="list-style-type: none">1) https://youtu.be/dJk5gfZRyi82) https://youtu.be/w7f51ka3tnY3) https://youtu.be/7G0nB67lhvg4) https://youtu.be/HDchlzUOmX4	<ul style="list-style-type: none">• https://www.biologycorner.com/worksheets/genetics_codominance_cows.html• https://www.biologycorner.com/worksheets/genetics_multiplealleles.html• https://www.biologycorner.com/worksheets/genetics-blood-types.html

Day 2 – Homework:

→ Solve the genetic problems:

- https://www.biologycorner.com/worksheets/genetics_codominance_cows.html
- https://www.biologycorner.com/worksheets/genetics_multiplealleles.html
- <https://www.biologycorner.com/worksheets/genetics-blood-types.html>

Day 3 – Overview:

Chapter No.	Topic	Activity / worksheet
22 Inheritance	<ul style="list-style-type: none">Blood group system <ol style="list-style-type: none">1) https://youtu.be/506kQAMpFc4	<ul style="list-style-type: none">• https://www2.palomar.edu/anthro/practice/bldquiz2.htm

Day 3 – Homework:

→ Solve the quiz:

- <https://www2.palomar.edu/anthro/practice/bldquiz2.htm>

Weekly Assessment

→ Select the correct answer:

i. A grey coloured offspring of black and white parents is an example of:

- | | |
|-----------------------|-------------------------|
| a) complete dominance | b) incomplete dominance |
| c) co-dominance | d) epistasis |

ii. Agglutinins is also called:

- | | |
|-------------|------------|
| a) antibody | b) antigen |
| c) allele | d) gene |

iii. If half offspring are recessive, this means that individual was a:

- | | |
|--------------------------|---------------------------|
| a) heterozygous dominant | b) heterozygous recessive |
| c) homozygous dominant | d) homozygous recessive |

iv. Ratio of phenotype (round yellow seeds, round green seeds, wrinkled yellow seeds and wrinkled green seeds) in Mendel's law of independent assortment of pea plant is:

- | | |
|-------------|------------|
| a) 10:2:3:1 | b) 9:3:3:1 |
| c) 8:4:3:1 | d) 7:4:3:2 |

v. Filial is a Latin word. It means:

- | | |
|------------|---------------|
| a) progeny | b) descendent |
| c) spring | d) issue |

→ **Short questions:**

- i.** Explain the law of independent assortment, using a suitable example.
- ii.** State the law of segregation.
- iii.** Associate multiple alleles with ABO blood group system.
- iv.** Differentiate between incomplete dominance and complete dominance.
- v.** Investigate the reasons for O-ve individual as the Universal donor and AB+ve as the Universal recipient.
- vi.** What are the limitations of law of independent assortment?
- vii.** Solve these genetic problems, to illustrate the law of independent assortment:
 - PKU and albinism are two autosomal recessive disorders, unlinked in human beings. If couple, each of them heterozygous for both traits, produce a child, what is the chances of their having a child with:

a) PKU?	b) albinism?	c) both traits?
---------	--------------	-----------------
 - For any gene with a dominant allele **C** and recessive **c**, what proportions of the offspring from a **CC X Cc** cross expected to homozygous dominant, homozygous recessive and heterozygous?

→ **Solve the genetic problem:**

Dominant trait

Recessive trait

Curly hair **C**

Brown hair **B**

Straight hair **c**

Black hair **b**

➤ Cross a female with heterozygous curly hair with a male with straight hair. Figure out the cross.

Cross: **Cc X cc**

Probability of heterozygous offspring: _____

Probability of offspring with straight hair: _____

➤ Cross a female with homozygous curly, heterozygous brown hair, with a male with straight, black hair.

Cross **CCBc X ccbb**








Genotypic Ratio:

Phenotypic Ratio

Probability of straight brown hair in offspring: _____

Probability of curly black hair in offspring: _____

→ Complete the table:

Blood Group	A	B	AB	O
Surface antigens Please draw the surface antigens present on the red blood cells of each blood type				
Antibodies in the blood Please draw the shape of the antibodies present in the blood of each blood type				
Can accept blood from Please write down the blood types each blood type can accept blood from				
Can give blood to Please write down the blood types each blood type can give blood to				

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: PHYSICS

PHYSICS WEEK-1

Day 1 –Overview

S. No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Photocopier https://sabaq.pk/video-page.php?sid=kpk-physics-12th-1.4&v=p-11-12-electrostatics-6	➤ See book pg #13
2	➤ Inkjet Printer https://sabaq.pk/video-page.php?sid=federal-physics-12th-1.4&v=p-11-12-electrostatics-7	➤ See book pg #15

Day 1 - Home Work

1. Which of the following is used for image of the document to be copied and retained over the surface of the drum of the photocopier?

(Choose only one correct answer)

- Toner
- Aluminum
- Selenium
- Light

2. A specific region of paper is going to be printed. Which of the given components of the inkjet printer must remain off?

(Choose only one correct answer)

- Deflecting plates
- Inkjet nozzle
- Charging electrodes
- None of these

Short answer questions:

Q1: Write down the three applications of electrostatics

Day 2 –Overview

S.No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Application of gauss's law https://www.youtube.com/watch?v=9f-e7G7IJFs	➤ See book pg #21 and solve question #4 on pg #56

Day 2 - Home Work

1. 2 C charge is given to a spherical conductor of radius 10 cm. What is the amount of charge at the center of the sphere?

(Choose only one correct answer)

- 20 C
- 1 C
- 2 C
- Zero

2. Calculate the electric field intensity between two oppositely charged parallel plates. The surface charge density on one of the plates is $4 \times 10^{-7} \text{ Cm}^{-2}$

(Choose only one correct answer)

- $2.2 \times 10^5 \text{ NC}^{-1}$
- Zero
- $4.5 \times 10^7 \text{ NC}^{-1}$
- $4.5 \times 10^4 \text{ NC}^{-1}$

3. A hollow metal ball of radius 8 cm is given $6 \mu\text{C}$ charge. What will be the electric field intensity at the center of the ball?

(Choose only one correct answer)

- 4.8 NC^{-1}
- 48 NC^{-1}
- 2 NC^{-1}
- Zero

4. Ten identical charges of amount $7 \mu\text{C}$ each are closed in a rectangular box. What is the electric flux through the box?

(choose only one correct answer)

- $88.0 \times 10^{-6} \text{ Nm}^2\text{C}^{-1}$
- $8.0 \times 10^7 \text{ Nm}^2\text{C}^{-1}$
- $8.0 \times 10^6 \text{ Nm}^2\text{C}^{-1}$
- $8.0 \times 10^5 \text{ Nm}^2\text{C}^{-1}$

5. 3.7 C charge is given to a spherical conductor of radius 10 cm . What is the magnitude of electric intensity at the center of the sphere?

(choose only one correct answer)

- 370 NC^{-1}
- Zero
- 3.7 NC^{-1}
- 37 NC^{-1}

Short answer questions:

Q: State and explain Gauss's law?

Day 3 –Overview

S. No.	Topic	Activity
1	➤ Capacitance of parallel plate capacitor https://www.youtube.com/watch?v=Vm492hap0rw	➤ See book pg #40 and solve mcqs#5 on pg #53

Day 3 - Home Work

1. Calculate the capacitance of a parallel plate capacitor when area of one of the plates is 1 cm^2 and distance between the plates is 3 mm . The medium between the plates is air.

(Choose only one correct answer)

- 3 pF
- 0.3 pF
- 30 pF
- 300 Pf

2. Calculate the capacitance of a parallel plate capacitor when area of one of the plates is 3 cm^2 and distance between the plates is 4 mm . The medium between the plates is mica. The dielectric constant of mica is 6.

(Choose only one correct answer)

- 4 pF
- 4 nF
- 0.4 nF
- 1.4 nF

Long answer question

Q: What are capacitors? Find the capacitance of parallel plate capacitor

PHYSICS WEEK-2

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Wire wound variable resistance https://sabaq.pk/video-page.php?sid=kpk-physics-12th-2.6&v=p-11-12-elec-cur-15	➤ See book pg #76

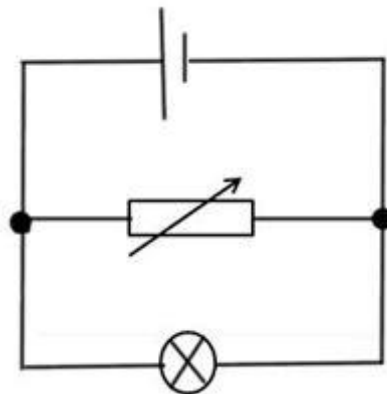
Day 1 - Home Work

1. Which of the following is an advantage of a rheostat over a potentiometer?

(Choose only one correct answer)

- A rheostat is more precise than potentiometer
- A rheostat can handle higher frequencies than potentiometer
- A rheostat can handle more current than potentiometer
- A rheostat works better with DC than potentiometer

2. Which of the following statements is correct about the circuit in image?



(Choose only one correct answer)

- The bulb becomes brighter when the rheostat is adjusted to a high resistance
- The bulb becomes dimmer when the rheostat is adjusted to a higher resistance
- The brightness of bulb cannot be adjusted because its resistance is constant
- The brightness of bulb cannot be adjusted because the potential difference across bulb is constant

Long answer question:

Q: Explain the construction of rheostat. How is it used as a control the current,?

Day 2 –Overview

S, No.	Topic	Activity
1	<p>➤ Potential divider</p> <p>https://sabaq.pk/video-page.php?sid=cambridge-physics-ol-24.5&v=p-9-10-bas-electro-4d</p>	<p>➤ See book pg #77</p>

Day 2 - Home Work

2. Rheostat can also be used in which of the following ways?

(Choose only one correct answer)

- As a potential divider
- As a variable resistor
- Both, as a variable resistor and a potential divider
- As a barometer

Long answer question:

Q: Explain the construction of rheostat. How is it used as a potential divider?

Day 3 –Overview

S, No.	Topic	Activity
1	<p>➤ Thermistor</p> <p>https://sabaq.pk/video-page.php?sid=kpk-physics-12th-2.7&v=p-11-12-elec-cur-28</p>	<p>➤ See book pg #78 and solve Q#8 on pg #108</p>

Day 3 - Home Work

1. The thermistors convert change of temperature into which of the following?

(Choose only one correct answer)

- Heat energy
- Electrical voltage
- Solar energy
- Light energy

2. Which of the following has negative temperature coefficient? (Choose only one correct answer)

- Silicon
- Germanium
- All of these
- Carbon

3. What is the temperature coefficient of substances whose resistance decreases with increase in temperature?

(Choose only one correct answer)

- Zero temperature coefficient
- Infinite temperature coefficient
- Positive temperature coefficient
- Negative temperature coefficient

PHYSICS WEEK-3

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Potentiometer https://sabaq.pk/video-page.php?sid=punjab-physics-12th-2.11&v=p-11-12-elec-cur-27	➤ See book pg #100

Day 1 - Home Work

1. Which of the following devices is used to determine the internal resistance of a cell?

(Choose only one correct answer)

- Ammeter
- Potentiometer
- Galvanometer
- Voltmeter

2. How can sensitivity of a potentiometer be increased?

(Choose only one correct answer)

- By decreasing length of wire
- By increasing emf of cell
- By increasing length of wire
- None of these

Long answer questions

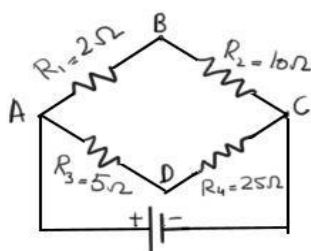
Q: What is potentiometer? Explain its principle, construction, and working.

Day 2 –Overview

S, No.	Topic	Activity
1	<p>➤ Wheatstone bridge</p> <p>https://sabaq.pk/video-page.php?sid=punjab-physics-12th-2.10&v=p-11-12-elec-cur-26</p>	<p>➤ See book pg #99 and solve MCQ#1 on pg #105</p> <p>➤</p>

Day 2 - Home Work

1. What is the potential difference between points B and D in the circuit?



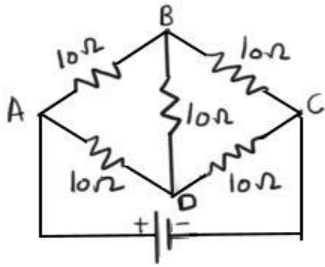
- 5 V
- 25 V
- 0 V
- 2 V

2. Which of the following conditions is satisfied when the wheatstone bridge is balanced?

(Choose only one correct answer)

- Potential difference across galvanometer is maximum
- Minimum current flows through the galvanometer
- Maximum current flows through the galvanometer
- Potential difference across galvanometer is zero

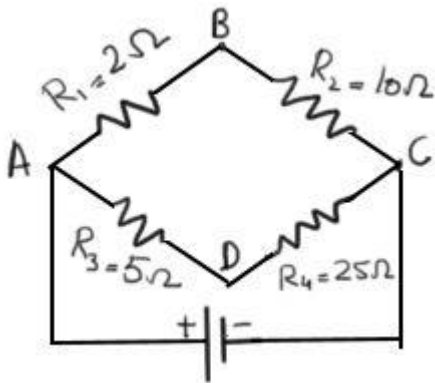
3. What is the equivalent resistance between points A and C, in the given circuit?



Choose only one correct answer)

- 10 Ω
- 100 Ω
- 2 Ω
- 5 Ω

4. What is equivalent resistance between A and C for the given circuit?



(Choose only one correct answer)

- 18.5 Ω
- 50.4 Ω
- 8.57 Ω
- 1.85 Ω

Long answer questions

Q: What is Wheatstone bridge? Explain with diagram the balancing, the principle and the working of this bridge?.

Day 3 – Overview

S, No.	Topic	Activity
1	<p>➤ Force on a current carrying conductor https://www.khanacademy.org/science/in-in-class10th-physics/in-in-magnetic-effects-of-electric-current/force-on-current-carrying-wire-in-magnetic-field/v/force-on-a-current-carrying-conductor-in-a-magnetic-field</p>	<p>➤ See book pg #113 and solve Q#1 on pg #144</p>

Day 3 - Home Work

1. Why a current carrying conductor experiences a force when placed in an external magnetic field which is at right angle to the direction of flow of electric current?

(Choose only one correct answer)

- It experiences no force
- Due to interaction of external field with the magnetic field of the current
- Due to interaction of external magnetic field with the electric field of flowing charges
- None of these

2. Which of the following quantities is not affected by the magnetic field? (Choose only one correct answer)

- Stationary charge
- Change in magnetic flux
- Moving charge
- Current flowing in conductor

3. Fleming's left hand rule is used to find direction or polarity of which quantity? (Choose only one correct answer)

- Direction of flux in a solenoid
- Polarity of a magnetic pole
- Direction of force on a current carrying conductor in a magnetic field
- Direction of magnetic field due to current carrying conductor

4. A conductor of length 1.6 m is at 70° to the magnetic field of strength 1 T. A current of 6 A is flowing through the conductor. Calculate the force of magnetic field on the conductor.

(Choose only one correct answer)

- Zero
- 8.0 N
- 10.0 N
- 9.0 N

5. Calculate the force on a positive charge of amount 2 C entering perpendicular into the magnetic field of strength 3 T with a velocity of 40 ms^{-1} . (Choose only one correct answer)

- 180 N
- 60 N
- 240 N
- 8.0 N

Short answer question

Q: What is the force that a conductor of length L carrying a current I experience when placed in a magnet force that a conductor of length L carrying a current I experience when placed in a magnetic field B? What is the direction of that force

PHYSICS WEEK-4

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Torque on a current carrying loop/coil. https://www.youtube.com/watch?v=c4eHlgfyu7I	➤ See book pg #78 and solve MCQ#5 on pg #141 and Q#2 on pg #144

Day 1 - Home Work

1. A force F acts on one side of a current carrying loop placed in a magnetic field into paper. What will be the force on the other side of the loop?
(Choose only one correct answer)

- 3F out of paper
- F out of paper
- 2F into paper
- F into paper

2. A current carrying square loop is placed in a magnetic field of 3 T such that the field is along the plane of the loop. The current through the loop is 14 A and the length of one side of the loop is 0.4 m. Calculate the torque in the loop.

(Choose only one correct answer)

- 8.4 Nm
- 16.8 Nm
- 3.36 Nm
- 6.72 Nm

3. A current carrying rectangular loop of 40cm^2 area is placed in a magnetic field such that the field is along the plane of the loop. The value of current is 10 A and magnetic field is 2 T. Calculate the magnitude of torque in the loop.

(Choose only one correct answer)

- 0.08 Nm
- 80 Nm
- 8 Nm
- 0.8 Nm

4. A current carrying loop is placed in a uniform magnetic field. What will the loop experience?

(Choose only one correct answer)

- Magnetic flux
- Force
- Electric flux
- Torque

5. Which of the following should be increased in order to increase the torque on a current carrying coil in a magnetic field?

(Choose only one correct answer)

- Area of coil
- Current and magnetic field
- All of these
- Number of turns of coil

Day 2 –Overview

S, No.	Topic	Activity
1	<p>➤ MRI</p> <p>https://sabaq.pk/video-page.php?sid=pakistan-physics-MCAT-11.2&v=gs-9-10-tech-6</p>	<p>➤ See book pg #128</p>

Day 2 - Home Work

Long answer question:

Q1: Describe MRI How it works explain,

Day 3 –Overview

S, No.	Topic	Activity
1	<p>➤ Galvanometer</p> <p>https://sabaq.pk/video-page.php?sid=sindh-physics-12th-5.1&v=p-11-12-elect-mag-15</p>	<p>➤ See book pg #130 and solve Q#7 on pg #144</p>

Day 3 - Home Work

1. What happens in a stable or dead beat galvanometer?

- Coil comes to rest quickly after current passes through it
- Coil remains in motion even after the current is stopped from flowing through it
- Coil moves very fast after current passes through it
- None of these

2. What should be the orientation of a current carrying coil in a magnetic field so that torque acting on the coil is maximum?

- $\alpha=90^\circ$
- $\alpha=37^\circ$
- $\alpha=45^\circ$
- $\alpha=0^\circ$

3. Why the coil of a moving coil galvanometer is wound on an Aluminum foil?

- None of these
- To create electromagnetic damping due to induced current, as damping causes the coil to move very fast
- To remove any electromagnetic damping due to induced current
- To create electromagnetic damping due to induced current, as damping causes the coil to come to rest very quickly

4. In galvanometer, the wire obeys which of the following laws when the restoring couple of the suspension wire is proportional to the angle of deflection?

- Lenz's law
- Hooke's law
- Faraday's law
- Ampere's law

5. What is the deflecting couple when the coil of the galvanometer is in equilibrium?

- Deflecting couple is equal to the restoring couple
- Deflecting couple is greater than the restoring couple
- Deflecting couple is smaller than the restoring couple
- Deflecting couple is zero

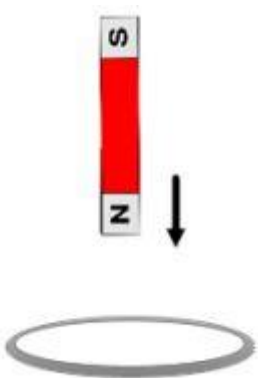
PHYSICS WEEK-5

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Electromagnetic induction https://www.youtube.com/watch?v=KGTZPTnZBFE	➤ See book pg #148 and solve MCQ#1 on pg #174

Day 1 - Home Work

1. A bar magnet with the North Pole faced downward is dropped above a horizontal circular coil. Which of the following statements about the induced current is true (viewed from above)?



- There is no induced current in the coil
- The induced current flows initially in a clockwise and then in an anticlockwise direction
- The induced current flows in a clockwise direction
- The induced current flows in an anticlockwise direction

2. Magnitude of induced EMF depends on which of the following factors?

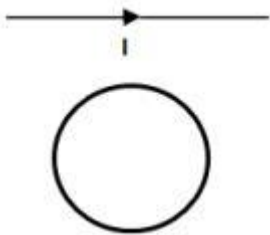
(Choose only one correct answer)

- All of these
- Speed of motion of magnet
- Speed of motion of coil
- Number of turns of coil

3. How can induced current be increased?

- By moving the loop faster
- By using the coil of greater loops
- By using stronger magnetic field
- All of these

4. A current carrying wire lies on a horizontal table. A circular coil is placed next to the loop. The current suddenly grows stronger. What is the direction of the induced current in the coil?



- There is no induced current in the coil
- Anticlockwise direction
- Clockwise direction
- The induced current changes its direction from anticlockwise to clockwise

4. An emf is induced in a conductor due to relative motion of magnet and conductor. Current I is produced when the magnetic field strength is B . What will be the current if the field is $2B$?

- I
- $4I$
- $2I$
- $I/2$.

5. A bar magnet moves towards a conducting coil. A galvanometer attached to the coil indicates a current. How can we increase the magnitude of induced current?

- By using sensitive galvanometer
- By increasing the speed of magnet
- By decreasing speed of the magnet near the coil
- None of these

Long answer question:

Q: Describe electromagnetic induction with simple experiments. Explain the factors effecting magnitude and direction of induced e.m.f.

Day 2 –Overview

S, No.	Topic	Activity
1	<p>➤ Back emf in motor</p> <p>https://sabaq.pk/video-page.php?sid=kpk-physics-12th-4.6&v=p-11-12-elmng-ind-16</p>	<p>➤ See book pg #166 and solve Q#3 on pg #175</p>

Day 2 - Home Work

1. Voltage of 200 V is supplied to a motor. The resistance of the coil is 70 Ω and the current through the coil is 2.86 A, while the motor is just going to start the rotation. Calculate the emf induced in the coil.

(Choose only one correct answer)

- 150 V
- 200 V
- 100 V
- Zero

2. Voltage of 200 V is supplied to a motor. The resistance of the coil is 70 Ω and the back emf induced in the coil is 100 V. Calculate the net current in the coil.

(Choose only one correct answer)

- 1.43 A
- Zero
- 2.86 A
- 4.3 A

Short answer question:

Q1: What factors limit the size of the back e.m.f ?

Q2: Explain what is meant by the term back e.m.f in any electric motor operation.

Day 3 –Overview

S, No.	Topic	Activity
1	<p>➤ Ammeter and Voltmeter</p> <p>https://sabaq.pk/video-page.php?sid=punjab-physics-12th-practical-4.1&v=p-pr-11-12-conversion-gal</p> <p>https://sabaq.pk/video-page.php?sid=punjab-physics-12th-practical-4.1&v=p-pr-11-12-gal-volt</p>	<p>➤ See book pg #134&135 and solve Q#7 on pg #144</p>

Day 3 - Home Work

1. How is a galvanometer converted into an ammeter?

- By connecting a suitable low resistance in parallel with galvanometer
- By connecting a suitable low resistance in series with galvanometer
- By connecting a suitable high resistance in parallel with galvanometer
- None of these

2. How can we increase the range of an ammeter?

- By decreasing the value of resistance connected in parallel in ammeter
- By decreasing the value of resistance connected in series in ammeter
- By increasing the value of resistance connected in parallel in ammeter
- None of these

3. How can an ammeter be used in a circuit?

- By connecting it in a series arrangement
- By connecting it in a parallel arrangement
- By connecting it in a combination of series and parallel arrangement
- None of these

4. How can the range of an ammeter be increased with the help of shunt resistance?

- By decreasing shunt resistance
- By increasing shunt resistance
- By sometimes increasing and sometimes decreasing the shunt resistance
- By keeping the shunt resistance constant

5. Why the resistance of an ammeter should be very low?

- If resistance is high, it would cause short circuit
- If resistance is high, it would increase the circuit current
- If resistance is high, it would decrease the circuit current
- None of these

6.If a high resistance is connected in series with the galvanometer, what will be the resulting instrument?

- AVO meter
- Potentiometer
- Voltmeter
- Ammeter

7.How can a galvanometer be converted into voltmeter?

- By connecting a low resistance in series with galvanometer
- By connecting a high resistance in series with galvanometer
- By connecting a high resistance in parallel with galvanometer
- None of these

8. The resistance of a galvanometer is 50Ω and reads full scale deflection with a current of 2.0 mA . How much high resistance is required to convert this galvanometer into voltmeter reading 200 V full scale?

- 1000Ω
- 902Ω
- 99950Ω
- 9950Ω

9. How can the range of voltmeter be increased with the help of series resistance?

- By increasing the series resistance
- By sometimes increasing and sometimes decreasing the series resistance
- By keeping series resistance constant
- By decreasing the series resistance

10.What is the resistance of ideal voltmeter?

(Choose only one correct answer)

- Very high
- Infinite
- Very low
- Zero

Long answers questions

Q: How galvanometer is converted into an ammeter and a voltmeter.

PHYSICS WEEK-6

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Alternating current generator https://sabaq.pk/video-page.php?sid=kpk-physics-12th-4.5&v=p-11-12-elmq-ind-10	See book pg #164

Day 1 - Home Work

1. A rectangular coil of length 50 cm in a magnetic field of 3 T is rotated with a speed of 30 ms^{-1} . Calculate the induced emf at the instant when the plane of coil is parallel to the field.

- 90 V
- 450 V
- 45 V
- 900 V

2. How will you represent the direction of a magnetic field that is directed away from you i.e. into the paper?

- None of these
- With crosses
- With dots
- With circles

Long answer question

Q: Define Alternating current generator write its construction and work

Day 2 –Overview

S, No.	Topic	Activity
1	➤ Transformer https://sabaq.pk/video-page.php?sid=kpk-physics-12th-4.7&v=p-11-12-elmq-ind-17	➤ See book pg #168 and solve MCQ#7 on pg #175

Day 2 - Home Work

1. The turn ratio of a step down transformer is 1:20. If 12 V is required at secondary as output, how much voltage must be applied on primary of transformer?

(Choose only one correct answer)

- 100 V
- 120 V
- 12 V
- 240 V

2. There are 200 turns in primary coil and 75 turns in secondary coil of a transformer. If 400 V alternating voltage is applied to the primary, what will be the voltage at secondary?

(Choose only one correct answer)

- 12 V
- 400 V
- 200 V
- 150 V

3. A power supply needs 500 W which will be given by a transformer. If 240 V is applied at the primary coil of transformer, how much current will be induced in secondary? The turn ratio is 1:3 and assumes that it is an ideal step down transformer.

(Choose only one correct answer)

- 6.25 A
- 3.0 A
- 1.0 A
- 10.14 A

4. What is the source of electrical connection between primary and secondary coils of a transformer?

- A wire
- No electrical connection
- Iron core
- A metal strip

5. What is the function of soft iron core in transformer?

- It causes eddy currents
- It causes an induced emf
- It lowers the output power
- It causes maximum magnetic flux through secondary

Long answer question

Q1: What is transformer? Give its principle, mathematical relationship. Also explain why laminated iron core is used instead of solid one.

Day 3 –Overview

S, No.	Topic	Activity
1	<p>➤ Stress and strain</p> <p>https://sabaq.pk/video-page.php?sid=kpk-physics-12th-6.3&v=p-11-12-prop-solids-7</p>	See book pg #247&248 and solve Q#2 on pg# 266

Day 3 - Home Work

1. What is the SI unit of stress?

- $\text{kg m}^{-1}\text{s}^{-2}$
- Nm^{-2}
- All of these
- Pascal.

2. What is the strain on a wire that is 2.5 m long and of cross sectional area 10^{-5} m^2 , if it is stretched 1.5 mm by a force of 100 N in the elastic region?

- 1.2×10^{-3}
- 12×10^{-5}
- 6.02×10^{-4}
- 9.02×10^{-8}

3. The modulus of elasticity of a material does not depend on which of the following factors?

- Temperature
- Nature of material
- Shape
- Impurity mixed

Short answer questions

Q1: What is the stress-strain curve and define the plastic deformation?

Q2: Explain modulus of elasticity

PHYSICS WEEK-7

Day 1 –Overview

S, No.	Topic	Activity
1	<u>First Attempt and Challenges</u> ➤ Mechanical properties of solid https://sabaq.pk/video-page.php?sid=kpk-physics-12th-6.4&v=p-11-12-prop-solids-5	see book pg #249 and solve Q#2 on pg #266

Day 1 - Home Work

1. Which of the following substances has highest elasticity?

- Copper
- Rubber
- Steel
- Brass

Short answer questions:

Q: What are the mechanical properties of solids?

Day 2 –Overview

S, No.	Topic	Activity
1	➤ Energy band theory http://sabaq.pk/video-page.php?sid=kpk-physics-12th-6.5&v=p-11-12-prop-solids-17 https://sabaq.pk/video-page.php?sid=kpk-physics-12th-6.5&v=p-11-12-prop-solids-18	➤ See book pg # 252 and solve Q#3 on pg #266

Day 2 - Home Work

1. Which of the following statements is true about electrons in conduction band?

- Electrons in conduction band are free to transport charge
- Electrons in conduction band are free to transport vibrations
- Electrons in conduction band are free to transport signals
- Electrons in conduction band are free to transport impulses

Long answer question:

Q: Write a note on Energy Band Theory

Day 3 –Overview

S, No.	Topic	Activity
1	<p>➤ Classification of magnetic materials</p> <p>https://www.youtube.com/watch?v=wDyKF4ioxyl</p>	See book pg #258 and solve Q#5 on pg #266

Day 3 - Home Work

1. A paramagnetic material is kept in a magnetic field. If the strength of magnetic field is increased and the temperature is decreased, then what will happen to the magnetization?

- Magnetization will remain constant
- Magnetization will decrease
- Magnetization will increase
- None of these

2. An atom containing unpaired electrons shows which of the following properties?

- Diamagnetism
- Ferromagnetism
- No magnetism
- Para magnetism

3. Why a paramagnetic sample displays greater magnetization when cooled?

- At high temperature, the random thermal motion is reduced
- At low temperature, the random thermal motion is reduced
- At low temperature, the random thermal motion is increased
- None of these

Short answer questions:

Q: Distinguish between diamagnetic materials and ferromagnetic materials

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: CHEMISTRY

CHEMISTRY WEEK-1

Day 1 – Overview

TOPIC	ACTIVITY
Introduction of Organic Chemistry	
1. https://www.youtube.com/watch?v=YAjpntbbQ2w	https://library.vcc.ca/learningcentre/pdf/vcclc/Chem0871-NamingOrganicCompoundsPractice.pdf
2. https://www.youtube.com/watch?v=nP0gDV0xDLY	https://www.sanfoundry.com/organic-chemistry-questions-answers-nucleophiles/

Work sheet # 1

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Day 2 – Overview

TOPIC	ACTIVITY
IUPAC Nomenclature of hydrocarbons and functional groups	
1. https://www.youtube.com/watch?v=CUnd0D6JVOU	https://library.vcc.ca/learningcentre/pdf/vcclc/Chem0871-NamingOrganicCompoundsPractice.pdf
2. https://www.youtube.com/watch?v=GYq9cQ3H4FU	https://www.saddleback.edu/faculty/jzoval/worksheets_tutorials/ch4worksheets/naming_hydrocarbons_worksheet1_key_12_26_08.pdf

Work sheet # 2

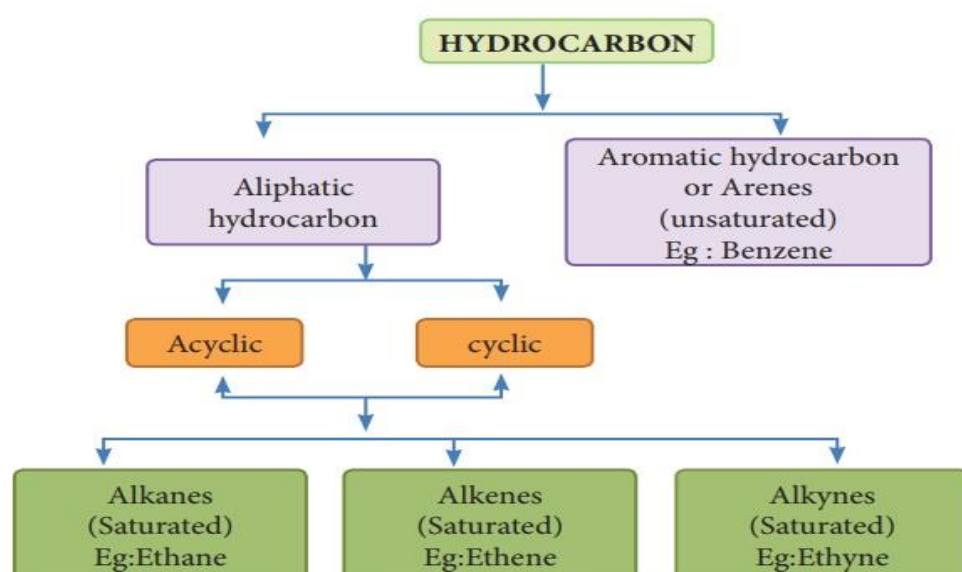


Fig.13.1. Classification of Hydrocarbons

Hydrocarbons (Choose the correct answer)

1. Hydrocarbons are organic compounds with element

- a) Hydrogen
- b) Oxygen
- c) Carbon
- d) Both hydrogen and carbon

2. Find the odd one out:

- a) Aromatic
- b) Alkanes
- c) Alkynes
- d) Alkenes

3. The simplest member of organic compounds is ?

- a) Methanol
- b) Methane
- c) Formaldehyde
- d) Formic acid

4. Ethane is obtained by electrolyzing

- a) Potassium formate
- b) Potassium succinate
- c) Potassium acetate
- d) Potassium fumarate

5. "Methane is a product of aerobic respiration". State true or false

- a) False
- b) True

6. Name the process associated with acylation of benzene

- a) Friedel craft reaction
- b) Wurtz reaction
- c) Wurtz fitting reaction
- d) Debey Huckel reaction

8. The hydrocarbon in which all the 4 valencies of carbon are fully occupied is called as

- a) Alkene
- b) Alkyne
- c) Alkane
- d) Cycloalkane

9. Liquid hydrocarbon is converted into gaseous hydrocarbon by:

- a) Oxidation
- b) Hydrolysis
- c) Cracking
- d) Distillation

10. Chlorination of alkanes is an example of

- a) Radical
- b) Elimination
- c) Free radical
- d) Addition

Day 3 – Overview

TOPIC	ACTIVITY
https://www.khanacademy.org/science/biology/properties-of-carbon/hydrocarbon-structures-and-functional-groups/v/isomers	https://www.sanfoundry.com/organic-chemistry-questions-answers-isomerism/

Work sheet # 3

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

CHEMISTRY WEEK-2

Day 1 – Overview

TOPIC	ACTIVITY
Electrophilic aromatic substitution reaction of benzene	https://global.oup.com/uk/orc/pharmacy/ifp_chemistry/01student/mcqs/ch07/
https://www.khanacademy.org/science/organic-chemistry/aromatic-compounds/reactions-benzene/v/electrophilic-aromatic-substitution	
https://www.khanacademy.org/science/organic-chemistry/aromatic-compounds/reactions-benzene/v/bromination-of-benzene	https://global.oup.com/uk/orc/chemistry/okuyama/student/mcqs/ch16/

Work sheet # 1

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online

Day 2 – Overview

TOPIC	ACTIVITY
Friedel Crafts Acylation/ Alkylation	https://www.youtube.com/watch?v=duTE34oTPh4
https://www.khanacademy.org/science/organic-chemistry/aromatic-compounds/reactions-benzene/v/friedel-crafts-acylation	

Work sheet # 2

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Do question on separate sheet:

Q1 Friedel-Crafts alkylation and acylation reactions are very similar both in terms of the conditions for the reactions and the mechanisms. Both are used to substitute carbon-containing groups onto a benzene ring. Alkylation substitutes an alkyl group, and acylation substitutes an acyl group.

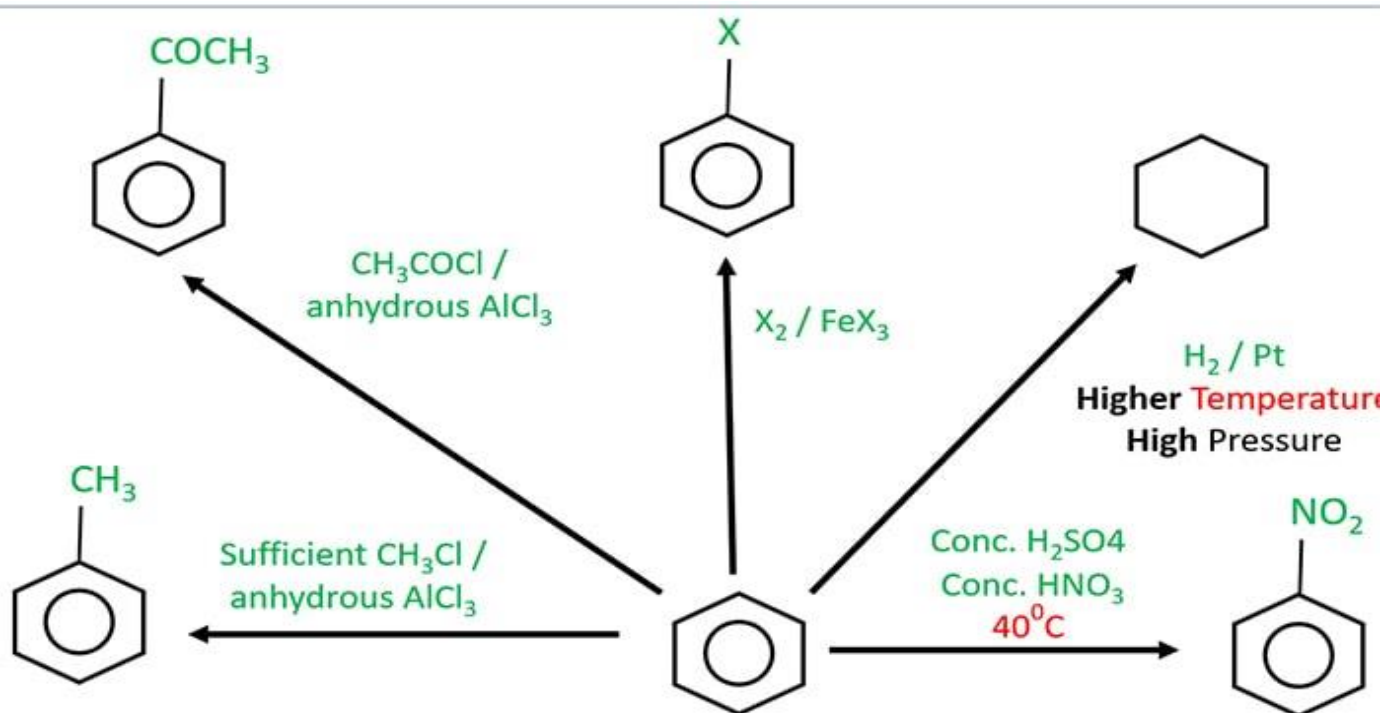
a) Draw the structures for the final products of reactions substituting a group containing two carbon atoms during (i) alkylation; (ii) acylation.

b) Name the catalyst used during both alkylation and acylation.

Day 3 – Overview

TOPIC	ACTIVITY
Substituent effect on benzene	https://chem.libretexts.org/Books/helves/Organic_Chemistry/Map%3A_Organic_Chemistry_(Smith)/Chapter_18%3A_Electrophilic_Aromatic_Substitution/18.9%3A_Orientation_Effects_in_Substituted_Benzenes
https://www.khanacademy.org/science/organic-chemistry/aromatic-compounds/directing-effects/v/ortho-para-directors-i	
https://www.khanacademy.org/science/organic-chemistry/aromatic-compounds/directing-effects/v/meta-directors-i	

Work sheet # 3



BENZENE REACTIONS

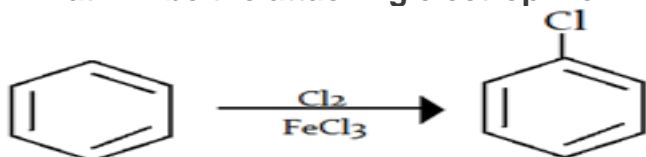
1. What will be the product formed when phenol reacts with Br₂ in CCl₄ medium?

- a) 3-Bromophenol
- b) 4-Bromophenol
- c) 3,5-Dibromophenol
- d) 2,4,6-Tribromophenol

2. What is the electrophile in the electrophilic substitution reaction of benzene using oleum and conc. H₂SO₄?

- a) SO₃
- b) NO₃
- c) NO₂⁺
- d) NO⁺

3. What will be the attacking electrophile in this reaction?

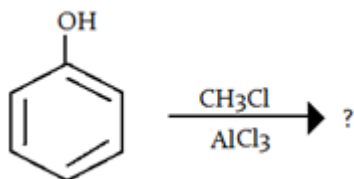


- a) Carbanion
- b) Halonium
- c) Radical
- d) Transition state

4. Which of the following aromatic compounds undergo Friedel–Crafts alkylation with methyl chloride and aluminum chloride?

- a) Benzoic acid
- b) Nitrobenzene
- c) Toluene
- d) Aniline

5. What will be the product in the given reaction?

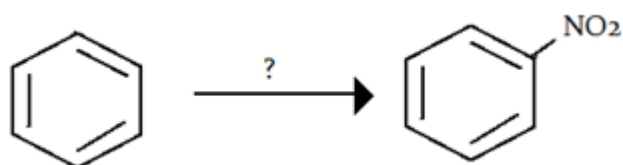


- a) m-chlorophenol
- b) o-chlorophenol and p-chlorophenol
- c) o-hydroxytoluene and p-hydroxytoluene
- d) m-hydroxytoluene

6. What is the electrophile in the acylation of benzene?

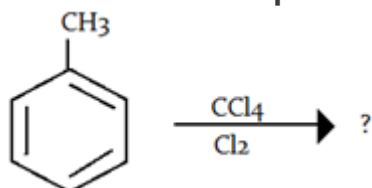
- a) AlCl₃
- b) CO⁺
- c) Cl⁺
- d) R-CO⁺

7. How would you synthesis the following reaction?



- a) conc. HNO₃ + conc. H₂SO₄
- b) conc. HNO₃
- c) anhydrous AlCl₃ + Ph-NO₂
- d) conc. H₂SO₄ + Oleum

8. What will be the product in the given reaction?



- a) m-chlorotoluene
- b) o-chlorotoluene and p-chlorotoluene
- c) 1-chloro-3-methylbenzene
- d) no reaction

9. Which of the following is the most activating in electrophilic aromatic substitution?

- a) -NO₂
- b) -NHCOCH₃
- c) -CN
- d) -NH₂

10. How many number of pie e- is present in benzene?

- a) 6
- b) 7
- c) 8
- d) 9

Q. This question is about substitution in methylbenzene and nitrobenzene.

- a) The methyl group in methylbenzene is 2,4-directing. Explain what this means with the help of simple diagrams using nitration as an example.
- b) Write the equation for the formation of the electrophile from the nitrating mixture of concentrated nitric and sulphuric acids.
- c) Give the first stage of the mechanisms (showing the reaction of the nitronium ion with the ring to produce the intermediate positive ions) for the nitration of methylbenzene leading to (i) 2-nitrobenzene; (ii) 4-nitrobenzene

CHEMISTRY WEEK-3

Day 1 – Overview

TOPIC	ACTIVITY
Nucleophilic substitution reactions	https://www.mcgsglearn.com/a-level/chemistry/nucleophilic-substitution-reactions-mcq-multiple-choice-questions.php
https://www.youtube.com/watch?v=BRBLa1xX9K8	

Work sheet # 1

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Day 2 – Overview

TOPIC	ACTIVITY
SN1 Reaction	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/sn1-sn2-tutorial/v/sn1-reaction-mechanism?modal=1	http://chemistry.bd.psu.edu/justik/CHEM%20210/CHEM%20210%20CH%2006%20Substitution.pdf
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/sn1-sn2-tutorial/v/sn1-reaction-stereochemistry?modal=1	

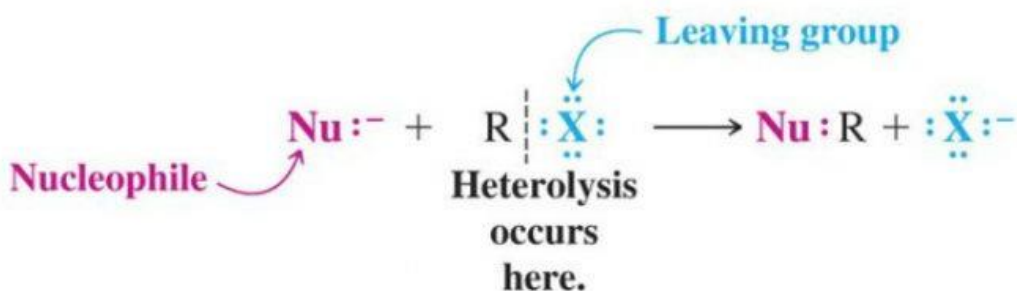
Work sheet # 2

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Day 3 – Overview

TOPIC	ACTIVITY
SN2 Reaction	http://chemistry.bd.psu.edu/jstik/CHEM%20210/CHEM%20210%20CH%2006%20Substitution.pdf
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/sn1-sn2-tutorial/v/sn2-mechanism-and-stereochemistry	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/sn1-sn2-tutorial/v/sn2-mechanism-and-stereochemistry	

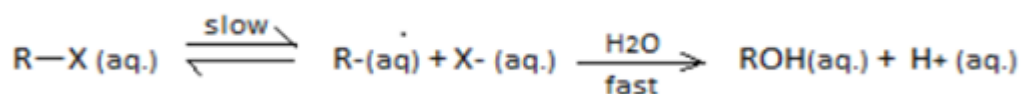
Work Sheet # 3



Substitution Reactions

1

SN1 reaction undergoes through a carbocation intermediate as follows:



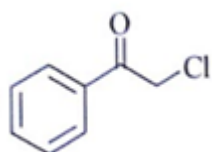
[R = t-Bu, iso-Pr, Et, Me] (X = Cl, Br, I)

The correct statements are:

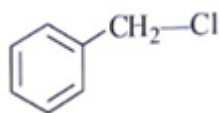
- I. The decreasing order of rate of SN1 reaction is t-BuX > iso-PrX > EtX > MeX
- II. The decreasing order of ionization energy is MeX > EtX > iso-PrX > t-BuX
- III. The decreasing order of energy of activation is t-BuX > iso-PrX > EtX > MeX

- a) I & II are correct
- b) I & III are correct
- c) II and III are correct
- d) I, II & III are correct

2. Which one is an excellent substrate for S_N2 reaction?

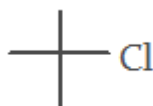


a)



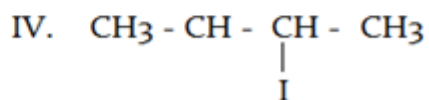
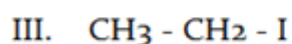
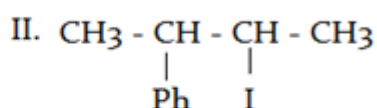
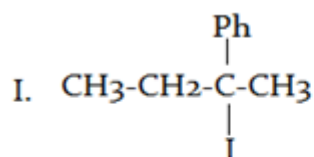
b)

c) $\text{CH}_3 - \text{CH}_2 - \text{Cl}$



d)

3. What will be the correct order of S_N2 / $E2$ ratio for the %yield of the product of the following halide?



a) III > IV > II > I

b) III > II > IV > I

c) I > III > IV > II

d) II > I > III > IV

4. Which of the following is not true for S_N1 reactions?

a) They occur through a single step concerted reaction

b) They are favored by polar solvents

c) Tertiary alkyl halides generally react through this mechanism

d) Concentration of nucleophile does not affect the rate of such reactions

5. Double bond is formed as a result of:

a). Addition reaction

b). Substitution reaction

c). Elimination reaction

d). Polymerization reaction

Q1. Write in detail the differences between S_N1 and S_N2 mechanism of nucleophilic substitution reactions with reference to alkyl halides.

Q2. Discuss the following factors affecting Substitution versus Elimination reactions of alkyl halides

CHEMISTRY WEEK-4

Day 1 – Overview

TOPIC	ACTIVITY
Elimination Reactions	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e1-elimination-mechanism	https://www.sanfoundry.com/tricky-organic-chemistry-questions-answers/

Work sheet # 1

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Day 2 – Overview

TOPIC	ACTIVITY
E1 Reaction	
2. https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e1-elimination-regioselectivity	
3. https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e1-mechanism-stereoselectivity	https://quizizz.com/admin/quiz/5addec b6842049001b864f2d/sn1-sn2-e1-and-e2
4. https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/carbocations-and-rearrangements	

Work sheet # 2

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Day 3 – Overview

TOPIC	ACTIVITY
E2 Reaction	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e2-elimination-mechanism	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e2-elimination-regioselectivity	https://quizizz.com/admin/quiz/5addec6842049001b864f2d/sn1-sn2-e1-and-e2
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/e1-e2-tutorial/v/e2-elimination-stereoselectivity	

Work sheet # 3

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online.

Q. How can you prepare alkene from alcohol? Write also mechanism of reaction

CHEMISTRY WEEK-5

Day 1 – Overview

TOPIC	ACTIVITY
Electrophillic Addition	https://collard.chemistry.gatech.edu/quiz/quiz8-1.htm
https://www.youtube.com/watch?v=sWMKmVMbf7A	

Work sheet # 1

Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online

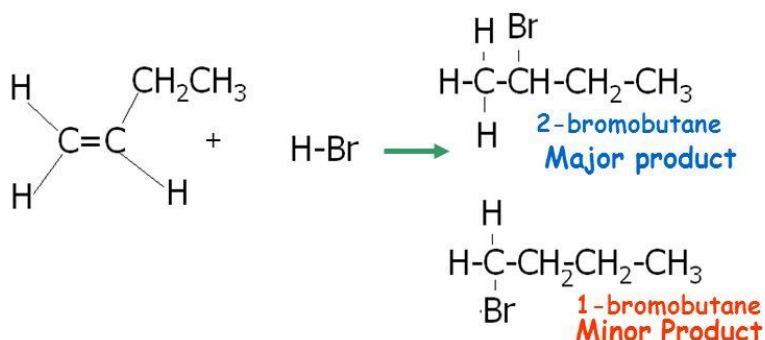
Day 2 – Overview

TOPIC	ACTIVITY
Reaction Mechanism	
Markovnikov's Rule	
https://www.khanacademy.org/science/organic-chemistry/alkenes-alkynes/alkene-reactions/v/introduction-to-reaction-mechanisms	
https://www.khanacademy.org/science/organic-chemistry/alkenes-alkynes/alkene-reactions/v/markovnikov-s-rule-and-carbocations	

Work Sheet # 2

"MARKOVNIKOV'S" Rule

- "the **rich** get **richer**"
- The carbon atom with the largest number of carbon atoms gets the X (halogen) or OH bind to it
- Therefore 2- bromobutane is favoured



Q1. What is Markownikov's rule? Explain with example.

Q2. Hydroboration of 2-methyl-1-butene gives major and minor products. Draw the structures and name the rule which governs the formation of major product

Day 3 – Overview

TOPIC	ACTIVITY
Reaction Mechanism	https://books.google.com.pk/books?id= aUQAqAAQBAJ&pg=PA327&lpg=PA327&dq=saytzeff+rule++mcqs+with+answers&source=bl&ots=RksvYzV7os&sig=ACfU3U0sVPZ8pWjYUYKDAI_zAQmMQcEh-g&hl=en&sa=X&ved=2ahUKEwie7Yj5j77pAhWp6uAKHcZOC3oQ6AEwEHoECAkQAQ#v=onepage&q=saytzeff%20rule%20%20mcqs%20with%20answers&f=false
Zaitsev's rule/ saytzeff rule	
https://www.khanacademy.org/science/organic-chemistry/substitution-elimination-reactions/elimination-reactions-tutorial/v/zaitsev-s-rule	

Work Sheet # 3

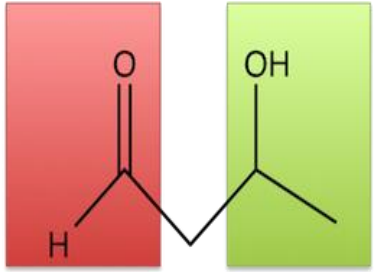
Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online

Q1. What is Zaitsev's rule

Q2. Why is Zaitsev's product favored in elimination reactions?

CHEMISTRY WEEK-6

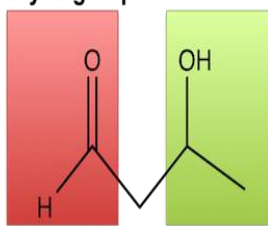
Day 1 – Overview

TOPIC	ACTIVITY
Aldol Reaction	Aldehyde group  Alcohol group
https://www.khanacademy.org/science/organic-chemistry/ochem-alpha-carbon-chemistry/aldol-condensation-jay/v/aldol-reaction	
https://www.khanacademy.org/science/organic-chemistry/ochem-alpha-carbon-chemistry/aldol-condensation-jay/v/aldol-condensation	

Work Sheet # 1

Aldol Condensation

Aldehyde group



Alcohol group

Q1. Choose the correct answer

1. Which compound is *not* a carbonyl compound?

- a) Ethanoylchloride
- b) Hexanoic acid
- c) Pentanal
- d) Butanol

2. Which of the following is a dibasic, weak acid?

- a) Pentanoic acid
- b) Butanoic acid
- c) Pentane-2,4-dione (acetylacetone)
- d) Oxalic acid

3. Which statement about an aldol reaction is *incorrect*?

- a) An aldol reaction may occur between two aldehydes, and one reactant (at least) must contain an α -H atom.
- b) An aldol reaction is a C–C bond-forming reaction.
- c) The product of an aldol reaction between two aldehydes is a β -diketone
- d) The first step in an aldol reaction is deprotonation at the α -H position.

4. What occurs during an aldol condensation reaction?

- a) A small molecule is removed
- b) An aldehyde undergoes ionization
- c) Molecules are added together
- d) A molecule of water is deprotonated

Q2. . Which of the following Aldehyde can give Aldol condensation reaction? Justify your choice with scientific reason. Also draw the structure of the product through Aldol condensation reaction.

- i) formaldehyde
- ii) benzaldehyde
- iii) acetaldehyde

Q3. Write down condensation reactions:

- a) Between two identical ketones.
- b) Between aldehyde and ketone

Day 2 – Overview

TOPIC	ACTIVITY
Cannizzaro Reaction	http://makoxmcqs.com/chemistry-mcqs-for-jee-main-aldehydes-and-ketones-mcq-practice-sheet-1/
https://www.youtube.com/watch?v=JNkEm-8CN3U	

Work Sheet # 2

1. Aldehydes and ketones are commonly referred to as:

- (a) Ethers (b) Carbonyl compounds
(c) Phenols (d) Saturated H.C.

2. Which one is the structural formula of carbonyl group?

- (a) $\begin{array}{c} \text{O} \\ || \\ -\text{C}-\text{OH} \end{array}$ (b) $\begin{array}{c} \text{O} \\ || \\ -\text{C}-\text{X} \end{array}$
(c) $\begin{array}{c} \text{O} \\ || \\ -\text{O}- \end{array}$ (d) $\begin{array}{c} \text{O} \\ || \\ -\text{C}-\text{O}-\text{R} \end{array}$

3. Which one is not the general formula of aldehydes?

- (a) $\text{C}_n\text{H}_{2n+1}\dots\text{CHO}$ (b) $\text{C}_n\text{H}_{2n+2}\text{CO}$
(c) $\text{C}_n\text{H}_{2n}\text{O}$ (d) $\text{C}_n\text{H}_{2n}\text{O}_2$

4. In aldehydes, one of the two available valencies of the carbonyl group is always attached to:

- (a) Carbon atom (b) Hydrogen atom
(c) Nitrogen atom (d) None of the above

5. The type formula of aldehyde is:

- (a) R_2CO (b) R_2CO_2
(c) RHCO (d) RHCO_2

6. The formula of butyraldehyde is:

- (a) $\text{C}_4\text{H}_8\text{O}$ (b) $\text{C}_3\text{H}_8\text{CO}$
(c) $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CHO}$ (d) $\text{C}_3\text{H}_7-\text{CHO}$

7. Formalin is an aqueous solution of:

- (a) Formic acid (b) Formaldehyde
(c) Acetaldehyde (d) Acetic acid

8. On evaporating aqueous formaldehyde (formalin) solution, a crystalline solid known as hydrated para-formaldehyde is formed having formula:

- (a) $(\text{CH}_2\text{O})_n \cdot \text{H}_2\text{O}$ (b) $(\text{HCHO})_n \cdot \text{H}_2\text{O}$
(c) $(\text{CHO})_n \cdot \text{H}_2\text{O}$ (d) Both (a) and (b)

9. Oxidation of aldehydic group by acidified $\text{K}_2\text{Cr}_2\text{O}_7$ gives:

- (a) Ketone (b) Ester
(c) Carboxylic acid (d) Alcohol

10. Aldehydes on reduction (hydrogenation) give:

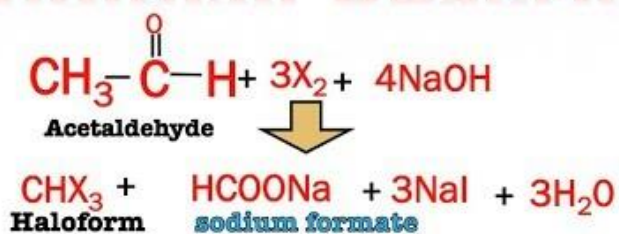
- (a) Ketone (b) Primary alcohol
(c) Carboxylic acid (d) Ester

Day 3 – Overview

TOPIC
https://www.youtube.com/watch?v=VmcZau3mQuA

Work Sheet # 3

Haloform Reaction



Q1. What is Iodoform test? How will you distinguish between 2-Pentanone and 3-Pentanone

CHEMISTRY WEEK-7

Day 1 – Overview

TOPIC	ACTIVITY
Environmental Chemistry	
Atmosphere	
https://www.youtube.com/watch?v=Y0AOq_fPkog	https://www.sanfoundry.com/environmental-science-questions-answers-atmosphere/

Work Sheet # 1

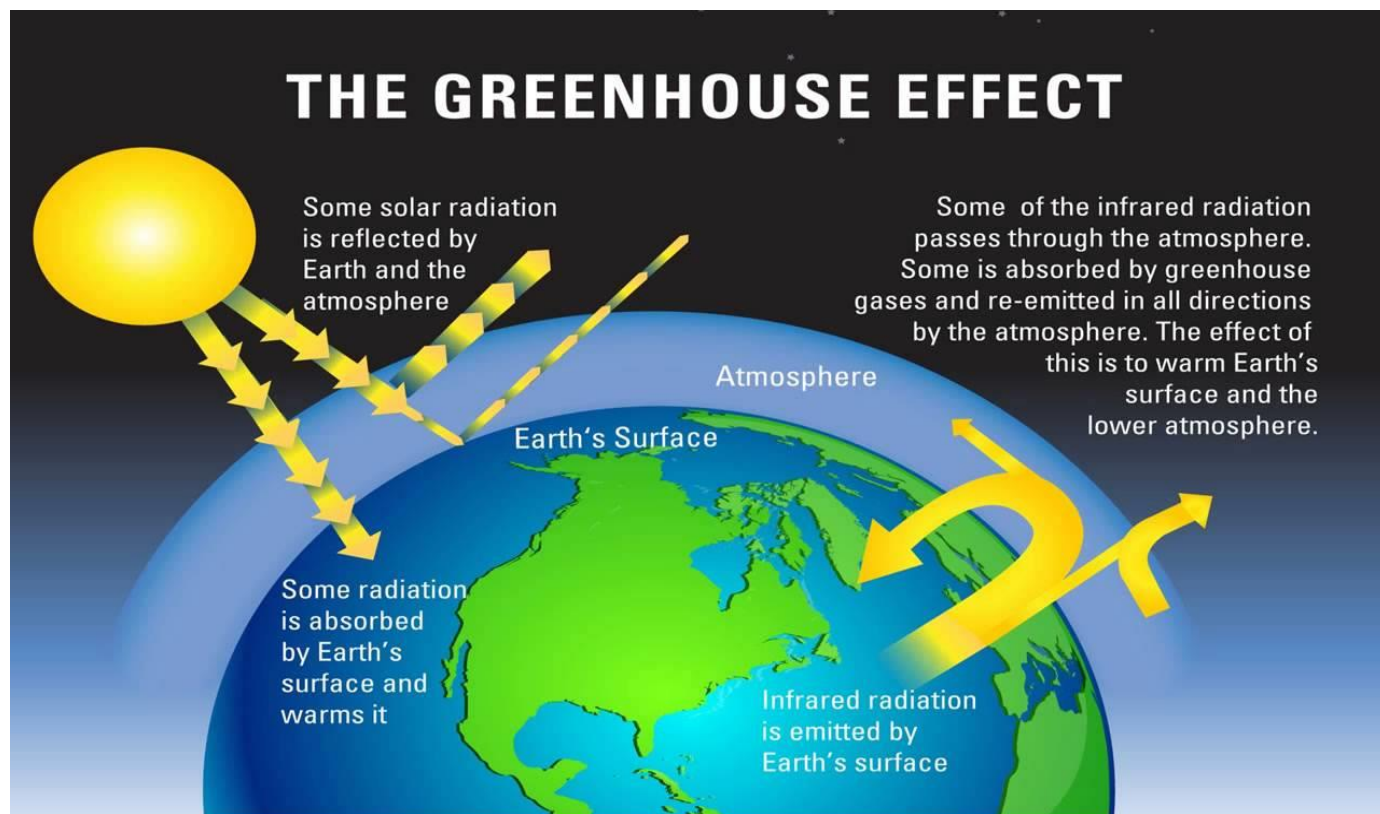
Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online

Day 2 – Overview

TOPIC	ACTIVITY
Environmental Chemistry	https://www.sanfoundry.com/environmental-science-questions-answers-greenhouse-gases-1/
https://www.youtube.com/watch?v=d7Ci_EooW-k	

Work Sheet # 2

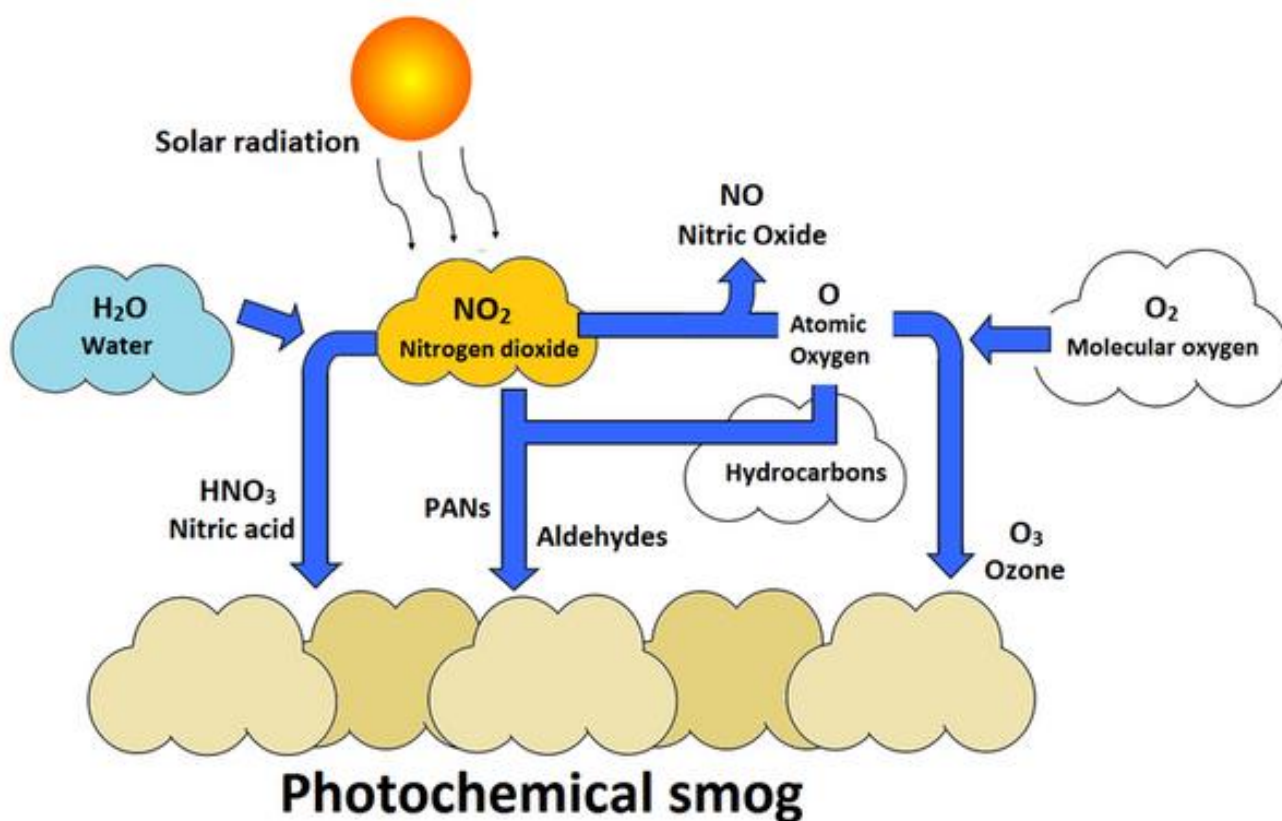
Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online



Day 3 – Overview

TOPIC	ACTIVITY
Environmental Chemistry	https://www.neetprep.com/question/7165-Green-chemistry-means-reactions-which-produce-colour-during-reactions-b-reduce-use-production-hazardous-chemicals-C-related-depletion-ozone-layer-d-study-reactions-plants
Acid rain	
1. https://www.nationalgeographic.com/environment/global-warming/acid-rain/	
2. https://study.com/academy/lesson/acid-rain-effects-causes-quiz.html	

Work Sheet # 3



Click the link given in activity column. It is online MCQs based work sheet. Solve it and check your answer online

Q1. Define the following terms (i) Reducing smog (ii) Oxidizing Smog (ii) Green Chemistry

Q2. What is greenhouse effect and describe the role of greenhouse gasses,

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: COMPUTER SCIENCE

COMPUTER WEEK-1

Unit 1 - OPERATING SYSTEM

a. Day 1- Introduction to Operating System

Unit 1	OPERATING SYSTEM 1.1 Introduction to Operating System Define an operating system ii) Describe commonly-used operating systems(DOS, Windows, Unix, Macintosh) https://www.slideshare.net/tanmaykataria7/operating-system-36256324 1https://sabaq.pk/chapter-page.php?vg=federal-computer%20science-12th&vsg=federal-computer%20science-12th-1	Installation Process of Windows 10 https://www.youtube.com/watch?v=2svqleNdNR4 Week Wise Assessment
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b. Day 1. Home Work

Do You Have Basic Knowledge About Operating Systems?

Click on the link below to answer.

<https://www.proprofs.com/quiz-school/story.php?title=operating-systems-set-1>

c. Day 2- Introduction to Operating System

Unit 1	OPERATING SYSTEM Batch processing Operating System • Multi-programming Operating System • Multi-tasking Operating System • Time -Sharing Operating System • Real-Time Operating System • Multi-processor Operating System • Parallel Processing Operating Systems • Distributed Operating Systems • Embedded Operating System https://www.slideshare.net/JahanqirAlam46/types-of-operating-system-45501674	http://examradar.com/batch-time-sharing-real-time-operating-system-questions-answers/ Week Wise Assessment
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d. Day 2. Home Work

Answer these questions on Batch processing / Time Sharing

Click on the link below to answer.

<https://www.mcqslearn.com/intro/computers/batch-processing-multiple-choice-questions.php3>

<https://www.mcqslearn.com/cs/ict/quiz/quiz-questions-and-answers.php?page=35>

e. Day 3- Introduction to Operating System

Unit 1	OPERATING SYSTEM • Single-user Operating Systems • Multi-user Operating System https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.1&v=cs-os-24b	http://examradar.com/batch-time-sharing-real-time-operating-system-questions-answers/ Week Wise Assessment
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f. Day 2. Home Work

Answer these questions on Single User / Multi User OS

Click on the link below to answer.

<https://www.proprofs.com/quiz-school/story.php?title=operating-system-quiz-1coe-5th-year>

Week wise Assessment

Write Short Answers

- Write down objective of Operating System.
- Give Examples of Operating System Interfaces.
- What are the advantages of GUI over CLI?
- Define Thread.
- Write down use of Multiprocessing System

Solve MCQ's

- 1. In _____ operating system related jobs are combined in a group and executed in a sequence**
 - a. Multi Programming
 - b. Real-Time
 - c. Time Sharing
 - d. Batch Processing.
- 2. Which of the following operating system is used in Air traffic controlling system.**
 - a. Multi Programming
 - b. Real-Time
 - c. Time Sharing
 - d. Batch-Processing.
- 3. Which of the following reads and execute commands entered through keyboard.**
 - a. Memory management
 - b. I/O management
 - c. Command -Interpreter
 - d. Network management
- 4. Which operating system runs applications that require High Reliability?**
 - a) Parallel processing operating system
 - b) Multi-tasking operating system
 - c) Time Sharing System
 - d) Real Time Operating System
- 5. Which command is used to create directory in disk operating system?**
 - a. CD
 - b. MD
 - c. Change directory
 - d. Create directory

COMPUTER WEEK-2

Unit 1 - OPERATING SYSTEM

a. Day 1- Operating System Function

Unit 1	OPERATING SYSTEM 1.2 Operating System Function Process Management • Memory Management • File Management • I/O System Management • Secondary Storage Management • Network Management • Protection System • Command-Interpreter https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.2&v=cs-os-3	Work Sheets https://www.proprofs.com/quiz-school/story.php?title=ict-quiz-36 End Unit Assignment
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b. Day 1 Home Work

Answer these questions on Functions OF Computer
Click on the link below to answer.

https://www.proprofs.com/quiz-school/story.php?title=ict-quiz_36

c. Day 2- Process Management

Unit 1	Define a process ii) Describe the new, running, waiting/blocked, ready and terminated states of a process https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.3&v=cs-os-33	Work Sheets End Unit Assignment
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d. Day 2 Home Work

Answer these questions on States of Process
Click on the link below to answer.

<http://www.cs.fsu.edu/~baker/opsys/quizzes/quiz5.html>

e. Day 3- Process Management

Unit 1	Differentiate between: • Thread and process • Multi-threading & multi-tasking • Multi-tasking and multi-programming https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.3&v=cs-os-36 https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.3&v=cs-os-37	Work Sheets https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-1.3&v=cs-os-38 End Unit Assignment
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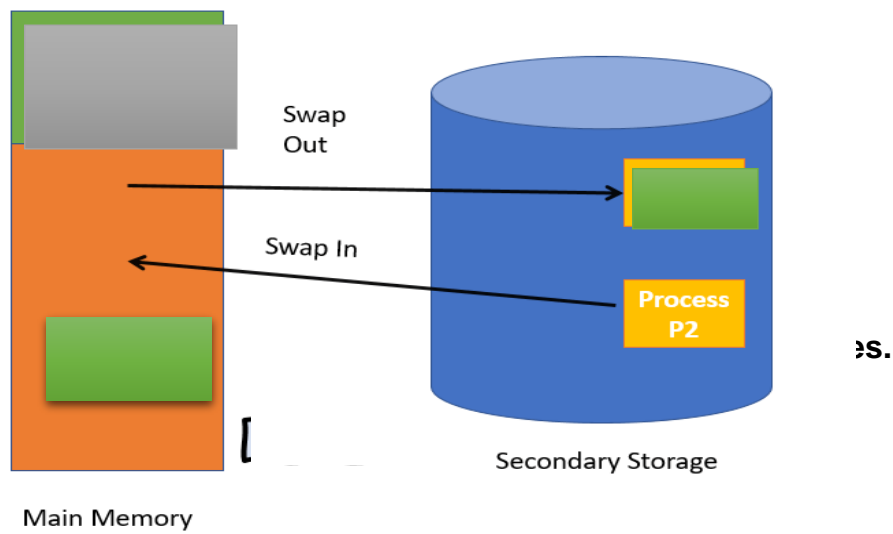
f. Day 3 Home Work

Answer these questions to review.
Click on the link below to answer.

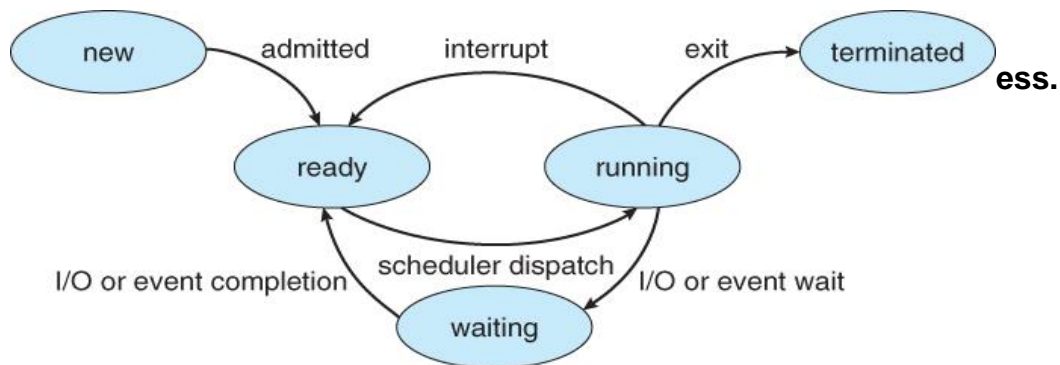
<https://www.proprofs.com/quiz-school/story.php?title=mju3nzcyoq0fsj>

End Unit Assignment No 1:

i. Label the Diagram in the example given below



ii. Differentiate between Real Time & Time Sharing Operating System.



iii. Differentiate between Functional & Non-Functional Requirements

COMPUTER WEEK-3

Unit 2 - SYSTEM DEVELOPMENT LIFE CYCLE

a. Day1- 2.1 System Development Life Cycle

Unit 2	SYSTEM DEVELOPMENT LIFE CYCLE 2.1 System Development Life Cycle https://drive.google.com/open?id=15on-OMWwgPqpc1t0x2V-e9Gk0Z1nJay2	Work Sheets /Activities Prepare Chart to Show SDLC Week Wise Assessment End Unit Assignment
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b. Day 1 Home Work

Answer these questions to review.
Click on the link below to answer.

<https://www.proprofs.com/quiz-school/story.php?title=test-2-multiple-choice>

c. Day2- 2.1 System Development Life Cycle

Unit 2	SYSTEM DEVELOPMENT LIFE CYCLE 2.1 System Development Life Cycle role of following in the SDLC • Management • Project Manager • System Analyst • Programmer • Software Tester • Customer https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-2.1&v=cs-soft-19	Work Sheets /Activities https://study.com/academy/practice/quiz-worksheet-software-development-life-cycle.html Week Wise Assessment End Unit Assignment
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d. Day 2 Home Work

Answer these questions to review.
Click on the link below to answer.

<https://quizizz.com/admin/quiz/5c9a9072fff573001a92db48/software-development-job-roles>

e. Day 3- 2.1 System Development Life Cycle

Unit 2	SYSTEM DEVELOPMENT LIFE CYCLE Review Flow Charts , Algorithms, Programming https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-2.1&v=cs-soft-22	Work Sheets /Activities https://www.proprofs.com/quiz-school/story.php?title=algorithms_1 Week Wise Assessment End Unit Assignment
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f. Day 3 Home Work

Answer these questions to review.
Click on the link below to answer.

<https://quizizz.com/admin/quiz/5af04ad6f0549b001a490129/algorithms-flow-charts-and-pseudocode>

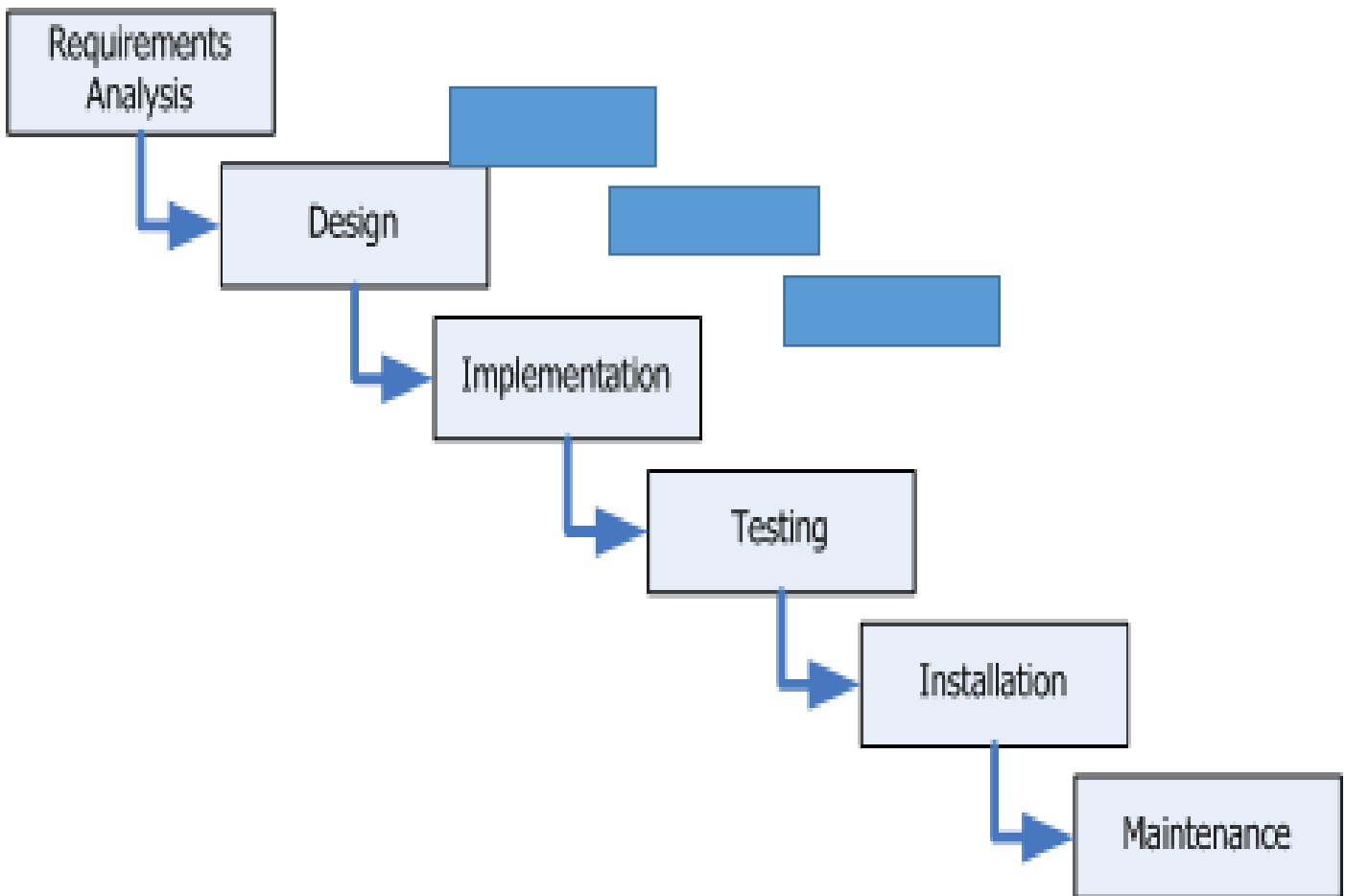
Week wise Assessment

Write Short Answers

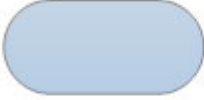

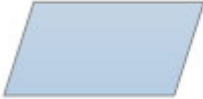
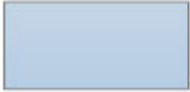

- Define System.
- Which Phase is the key phase in SDLC give reason?
- Explain Analysis Phase with example.
- What are different types of Feasibility study.

Assignment 2

- Prepare Chart to Show SDLC
- Complete this diagram by writing names of different phases of SDLC



- Identify each symbol and write their purpose.

Symbol	Name	Function
		
		
		
		
		

Solve MCQ'S

1. _____ Concerned with examining the requirements to certify to meet the requirement of stake holder.

- Requirements Management
- Requirements Management
- Functional Requirements
- Non- Functional Requirements

2. System maintenance is performed in response to _____

- Business Changes
- Hardware & Software Changes
- All of the above
- User Request's for additional changes.

3. The First step in SDLC is _____

- Analysis
- Design
- Problem Identification
- Development & Documentation.

4. The Last step in SDLC is _____

- Analysis
- Design
- Problem Identification
- Maintenance.

COMPUTER WEEK-4

Unit 3: OBJECT ORIENTED PROGRAMMING USING C++

a. Day 1- 3.1 Introduction

4th	Unit 3	OBJECT ORIENTED PROGRAMMING USING C++ 3.1 Introduction Define Program ii) Define header files and reserved words https://sabaq.pk/chapter-page.php?vq=federal-computer%20science-12th&vsg=federal-computer%20science-12th-3 https://www.slideshare.net/waqasazamkml/object-oriented-programming-using-c-32608968	Work Sheets Installation of C Compiler Program to print Average ,product https://www.youtube.com/watch?v=GBjuDwOdHq4 https://www.youtube.com/watch?v=1tEwC3IURvk Weekly assessment End Unit Assignment
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b. Day 1 Home Work

Answer these questions to review.

Click on the link below to answer

<https://www.w3schools.com/quiztest/quiztest.asp?qtest=CPP>

c. Day 2- 3.2 C++ Constants and Variables

4th	Unit 3	OBJECT ORIENTED PROGRAMMING USING C++ 3.2 C++ Constants and Variables https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-3.2&v=cs-fund-3 https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-3.2&v=cs-fund-55	Work Sheets http://www.allindiaexams.in/engineering/cse/c-p-p-multiple-choice-questions-answers/cpp-constants Weekly assessment End Unit Assignment
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d. Day 1 Home Work

Answer these questions to review.

Click on the link below to answer

<https://quizizz.com/admin/quiz/56703b33581e48805bc45a86/c-variables-and-data-types>

COMPUTER WEEK-2

Unit 3 - OBJECT ORIENTED PROGRAMMING USING C++

a. Day 1- Input/ Output Handling

Week 5 th	Unit 3	3.3 Input/ Output Handling getch(), gets() and puts() functions iv) Define escape sequence https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-3.3&v=cs-fund-78 https://www.slideshare.net/AshimLamichhane/unit-3-input-and-output https://www.youtube.com/watch?v=5zNCNPI5pzi	Practice Programs given in book Week wise Assessment End Unit Assignment
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b. Day 1 Home Work

Develop these Programs to Practice.

Click on the link below to solve

<https://www.codesdope.com/practice/cpp-lets-start/>

c. Day 2- Input/ Output Handling

Week 5 th	Unit 3	3.4 Operators in C++ https://www.slideshare.net/Sachin_Kpl/operators-in-c	Practice Programs given in book Week wise Assessment https://www.w3schools.com/cpp/cpp_operators.asp End Unit Assignment
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d. Day 2 Home Work

Develop these Programs to Practice.

Click on the link below to solve

<https://study.com/academy/lesson/basic-input-output-in-c-plus-plus-programming.html>

e. Day 3 - 3.4 Operators in C++

Week 5 th	Unit 3	3.3 Input/ Output Handling COUT() CIN () Statement https://sabaq.pk/chapter-page.php?vq=federal-computer%20science-12th&vsg=federal-computer%20science-12th-3 https://www.slideshare.net/nileshdalvi01/input-and-output-in-c-39132148	Practice Programs given in book Week wise Assessment https://www.youtube.com/watch?v=q_7dH6WbuNc
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f. Day 3 Home Work

Solve these questions to Practice.

Click on the link below to solve

<https://www.proprofs.com/quiz-school/story.php?title=c-chap-9-and-10>

End Unit Assignment 3

- Evaluate the expressions
a. $4/6*3.0+6$ b. $29\%7$ c. $(30-2)/(9/3)$
- Identify Reserve words from non-Reserved words.

S.No	Command	Valid / Invalid
1	And	
2	Char	
3	Change	
4	Of	
5	For	
6	Friend	

- Differentiate between Arithmetic & Arithmetic Assignment Operator.
- Write down purpose of these escape sequence

ESCAPE SEQUENCE

ESCAPE SEQUENCE	MEANING
\a	
\b	
\f	
\n	
\r	
\t	
\v	
\\	
\'	
\"	

COMPUTER WEEK-6

Unit 4 - CONTROL STRUCTURES

a. Day 1- CONTROL STRUCTURES

Unit 4	CONTROL STRUCTURES 4.1 Decisions Explain the use of the following decision statements: • If • If-else • Else-if https://sabaq.pk/chapter-page.php?vg=federal-computer%20science-12th&vsg=federal-computer%20science-12th-4 https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-13	Work Sheets/ Activities Week Wise Assessment https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-13 End Unit Assignment
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b. Day 1 Home Work

Perform this activity to learn.

Click on the link below to solve

<http://web.cs.iastate.edu/~honavar/JavaNotes/Notes/chap12/chap12quiz.html>

c. Day 2- Switch Statement

Unit 4	CONTROL STRUCTURES 4.1 Decisions Explain the use of the following decision statements: Else-if, Switch https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-13	Work Sheets/ Activities Week Wise Assessment https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-25 End Unit Assignment
---------------	---	---

d. Day 2 Home Work

Perform this activity to learn.

Click on the link below to solve

<https://www.cprogramming.com/tutorial/quiz/quiz5.html>

<http://web.cs.iastate.edu/~honavar/JavaNotes/Notes/chap43/chap43quiz.html>

e. Day 3- Nested If break statement

Unit 4	CONTROL STRUCTURES 4.1 Decisions Know the concept of nested if iii) Use break statement and exit function https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-30 https://www.slideshare.net/VishveshJasani/nesting-of-if-else-statement-else-if-ladder	Work Sheets/ Activities https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.1&v=cs-clst-25 weekly assessment End Unit Assignment
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f. Day 3 Home Work

Perform this activity to learn.

Click on the link below to solve

<http://www.bowdoin.edu/~ltoma/teaching/cs107/spring05/Lectures/allif.pdf>

<https://www.mcqslern.com/cs/c++/quiz/quiz-questions-and-answers.php?page=3>

Week wise Assessment

Write Short Answers

- Define Control Statements.
- Differentiate b/w if else and else-if statement?
- What is the purpose of exit statement?
- Differentiate b/w Post conditional & Pre conditional loop.
- What are counter Loops?

Solve MCQ's

- 1. While Loop is called _____**
 - a. Post Conditional Loop
 - b. Exit Controlled Loop
 - c. Counter Loop
 - d. Entry Control Loop
- 2. Which of the following statement can be used to replace ternary Statement.**
 - a. else-if statement
 - b. if-else statement.
 - c. Switch statement.
 - d. While statement.
- 3. Which of the following transfers control to the beginning of the loop, skipping the remaining statements.**
 - a. exit Function
 - b. Continue statement.
 - c. break statement.
 - d. nested loop.
- 4. _____ statement is used when programmer knows in advance number of required cycles in a loop.**
 - a. If- else
 - b. While
 - c. Do- While.
 - d. For.

COMPUTER WEEK-7

Unit 4 - CONTROL STRUCTURES

a. Day 1- Loops

Unit 4	4.2 Loops For • While https://www.slideshare.net/ahmadidrees1000/control-structures-selection-33030837	Lab Activities Page 94 End Chapter Assignment https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.2&v=cs-loop-21
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b. Day 1 Home Work

Perform this activity to learn.

Click on the link below to solve

http://cforbeginners.com/loops_c++_quiz.html

<https://study.com/academy/practice/quiz-worksheet-for-loops-in-c.html>

c. Day2- Loops

Unit 4	4.2 Loops Do-while ii) Use continue statement https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.2&v=cs-loop-14 https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.2&v=cs-loop-11	Lab Activities Page 94 End Chapter Assignment https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.2&v=cs-loop-21
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d. Day 2 Home Work

Perform this activity to learn.

Click on the link below to solve

<https://developerinsider.co/the-loop-control-structure-c-programming/>

e. Day3- Loops

Unit 4	4.2 Loops Know the concept of nested loop https://sabaq.pk/video-page.php?sid=federal-computer%20science-12th-4.2&v=cs-loop-24a	Lab Activities Page 95 End Chapter Assignment https://www.tutorialspoint.com/cplusplus/cpp_nested_loops.htm
---------------	--	---

f. Day 3 Home Work

Perform this activity to learn.

Click on the link below to solve

http://www.cppforschool.com/assignment/flow_3.html

https://www.tutorialspoint.com/cplusplus/cpp_nested_loops.html

End Unit Assignment 4

- Correct the Following Program and find errors :

```
int j i;  
for (j=1; j>=5 j+)  
{  
for (i=1 i<=j; i++)  
cout<<i<<'/'t";  
cou<<endl
```

- Write down nested loop which print following output.

```
1  
22  
333  
4444  
555
```

- Write down purpose of switch statement with syntax & one example.
- Write down a program print even numbers 50 to 1 in reverse order.
- Write the output of the following program:

```
int a, b ;  
for (a= 1; a<=5 ;a++)  
{  
cout<<endl;  
for (b= 1; b<=a ;b++)  
cout<< a;
```

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: PAKISTAN STUDIES

PAKISTAN STUDIES

PAKISTAN STUDIES WEEK-1

1st June 2020-Monday

Chapter 01: Genesis of Pakistan

- Trace out the history of beginning of Islam in Sub-continent
- Briefly explain social, religious condition of subcontinent before the advent of Islam
- Explain how Islam had its effects on the inhabitants of South Asia

2nd June 2020-Tuesday

Chapter: 01 War of Independence

- Discuss causes of War of Independence
- Narrate the reason for the failure of War of Independence and its effects in the subcontinent

Pakistan Affair 01: Privatization

- Differentiate Privatization vs. Nationalization
- Explain advantages of Privatization in current Era
- Identify which organizations are privatized during last two decades

5th June 2020-Friday

Chapter: 01 Sir Syed Ahmed Khan

- Explain the services of Sir Syed Ahmed Khan in the field of Education
- Narrate political efforts of Sir Syed Ahmed Khan done for Muslims
- Describe religious services done by Sir Syed Ahmed Khan

Pakistan Value 01: "Optimism"

- Explain how optimistic approach helps you in your hard time? Give example
- Explain with example, how can anyone raise the level of positivity in current situation?

Video Links

Monday

• https://www.youtube.com/watch?v=4NT_btkLlho

• <https://www.youtube.com/watch?v=y4MYoHVJQIc>

Tuesday

• <https://www.youtube.com/watch?v=waQimVsWdH8>

• <https://www.youtube.com/watch?v=l7BflcH-g38>

PAKISTAN AFFAIR

• <https://www.youtube.com/watch?v=ZWYNPIPEAsU>

• <https://www.youtube.com/watch?v=Vr1buQqwQeM>

Friday

• <https://www.youtube.com/watch?v=LrLq3u6nkyc>

• <https://www.youtube.com/watch?v=Oyl1rigF20w>

• <https://www.youtube.com/watch?v=WvziiWReEUU>

PAKISTAN VALUE

• <https://www.youtube.com/watch?v=FU83xB5Fm-c>

• https://www.youtube.com/watch?v=y_hi8gX9WuA

- ❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwj2oec37vpAhUDJBoKHxvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usq=AOvVaw06xteUzzTXxxVdiTfagRYp>

PAKISTAN STUDIES WEEK-2

8th June 2020-Monday

Chapter: 01 Key aspects of Constitution of 1973

- Why do we called Constitution of 1973 as Federal Constitution
- What do you mean by Bicameral Legislature in Constitution of 1973
- Why this is called a Parliamentary Constitution

9th June 2020-Tuesday

Chapter: 01 Ideology of Pakistan

- Explain the factors that are the main source of idea of separate homeland
- Explain the concept of Two-Nation Theory
- Discuss role of Quaid e Azam in ideology of Pakistan

Pakistan Affair 02: COVID-19 and Pakistan Economy

- List down major industries affecting due to Covid-19
- Identify the businesses that are booming due to Coronavirus

Activity: Develop a plan through which daily wagers can earn enough money during lockdown

12th June 2020-Friday

Chapter: 01 Partition of Bengal

- What are the major issues caused Partition of Bengal
- Discuss the reaction of Muslims and Hindus on Partition of Bengal

Pakistan Values 02: "Honesty"

- Explain the importance for the growth of society?
- How honesty builds character?
- Can honesty lead you towards success?

- ❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwjp2oec37vpAhUDJBoKHXvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usq=AOvVaw06xteUzzTXxxVdiTfagRYp>

Video Links

Monday

- <https://www.youtube.com/watch?v=bLEwFpxt58o>
- <https://www.youtube.com/watch?v=WfYWh1VK64>

Tuesday

- <https://www.youtube.com/watch?v=3EL-IJwLCXE>
- <https://www.youtube.com/watch?v=JjzVDC7qUs4>
- https://www.youtube.com/watch?v=-pnLq1IL-_E

PAKISTAN AFFAIR

- <https://www.youtube.com/watch?v=xCt9gP2WAol>

Friday

- <https://www.youtube.com/watch?v=MYDmFLI3yvY>
- <https://www.youtube.com/watch?v=sajmYS3cRI>

PAKISTAN VALUE

- <https://www.youtube.com/watch?v=IE39JS71RLo>
- <https://www.youtube.com/watch?v=FV4Kd2KXWkc>

PAKISTAN STUDIES WEEK-3

15th June 2020-Monday

Chapter: 01 Formation of Muslim League

- Explain the attitude of Congress after the Partition of Bengal
- Explain Simla Deputation 1906
- When and who formed Muslim League?
 - Discuss the objective of Muslim League
<https://www.youtube.com/watch?v=pV-oMzHwDxc>
<https://www.youtube.com/watch?v=R99h6IFRr5c>

16th June 2020-Tuesday

Chapter: 01 Khilafat Movement

- Why Lucknow Pact 1916 is important for the Muslims of India
- Explain the role of Muslims of India in Khilafat Movement
- Why Khilafat Committee was found?
- which non-cooperation movement was started by Gandhi during World War-I
- Explain the results of Khilafat Movement

Pakistan Affair 03: Federal Administrative Structure of Pakistan

- Identify major organs of Government of Pakistan and their functions
Activity: Explain the division of members of Pakistan Cabinet in 2020
<https://www.youtube.com/watch?v=bRcPk21zGeY>
<https://www.youtube.com/watch?v=yIbyu3xdqkk>
<https://www.youtube.com/watch?v=RZGfrlbOmpU>

PAKISTAN AFFAIR

- <https://www.youtube.com/watch?v=87zHmky-GYk>
- <https://www.youtube.com/watch?v=4oMzgfMEQjw>

19th June 2020-Friday

Chapter: 01 Fourteen Points of Quaid e Azam

- Explain the purpose of Simon Commission
- Why Nehru report was presented.
- Explain the aspects of "Quaid e Azam's 14 points" are in interest of both Muslims and Hindus

Pakistan Value 03: Forgiveness

- Explain why self-forgiveness is important to move on after any failure
- Discuss how forgiveness is an important source of peace of mind
<https://www.youtube.com/watch?v=APiK9zSHkWo>
<https://www.youtube.com/watch?v=BMm0IbUpNE4>

PAKISTAN VALUE

- <https://www.youtube.com/watch?v=-kfUE41-JFw>
- <https://www.youtube.com/watch?v=-aEUjlxOK-Y>

PAKISTAN STUDIES WEEK-4

22nd June 2020-Monday

Chapter: 01 Allama Iqbal Allahbad Address 1930

- Explain main points of Allahbad address 1930
- Discuss why Allahbad address 1930 is important for Muslims of India
- British government introduced India Act 1935, narrate its main points

23rd June 2020-Tuesday

Chapter: 01 Pakistan Movement 1940-1947

- Explain the importance of Lahore Resolution
- Why Muslim League and Congress rejected Cripps mission
- What was the demand of Congress in "Quit India Movement"
- Which points of Simla Conference 1945 are in Favor of Muslims of India

Pakistan Affair 04: Climate Change

- Explain main reasons of Climate change
- Discuss the effects of climate change on Environment

Activity: Briefly explain about the industries which are rising/declining due to climate change

26th June 2020-Friday

Chapter: 01 Cabinet Mission Plan 1946

- Narrate main points of Cabinet Mission Plan
- Point out major flaws of Cripps mission identified by Muslim league?
- Explain why Muslim league accepted Cabinet mission plan instead of Cripps mission?

Pakistan Values 04: Gratitude

- Explain how gratitude can be linked with inner satisfaction
- Gratitude is an important factor for the Positive gesture

❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwj2oec37vpAhUDJBoKHXvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usg=AOvVaw06xteUzzTXxxVdiTfagRYp>

Video Links

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Monday

- <https://www.youtube.com/watch?v=KyPZyQfnjTo>
- <https://www.youtube.com/watch?v=fBtUoddvHJw>

Tuesday

- <https://www.youtube.com/watch?v=tTPDMMPC01s>
- <https://www.youtube.com/watch?v=bEEo13nlyDo>
- <https://www.youtube.com/watch?v=0kJDgr8AN1M>

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- <https://www.youtube.com/watch?v=VdVguVkb8>
- <https://www.youtube.com/watch?v=s-a3OPLZC7M>

Friday

- <https://www.youtube.com/watch?v=gH0XmIFyA>
- https://www.youtube.com/watch?v=F2EU_3VQlqo

PAKISTAN VALUE

- https://www.youtube.com/watch?v=U51ZBjWDR_c

PAKISTAN STUDIES WEEK-5

29th June 2020-Monday

Chapter: 01 Elections 1945-46 and Interim Government

- Define manifesto of Congress and Muslim League for elections 1945-46
- Explain the election campaign run by Muslim League
- What was the result of elections 1945-46
- Why Quaid e Azam was disappoint during the formation of Interim Government

30th June 2020-Tuesday

Chapter: 01 3rd June 1947 plan

- Explain why Lord Mountbatten was chosen to divide the areas for partition
- Explain the relations of Lord Mountbatten with Congress
- Explain Lord Mountbatten division of Subcontinent
- What is Indian Independence Act

Pakistan Affair 05: Water Crisis of Pakistan

- Elaborate causes of water crisis in Pakistan
 - What is Indus Water Treaty
- Activity:** Develop a plan through which Pakistan can raise its water reserves

3rd July 2020-Friday

Chapter: 09 Local Government

- Name the head institute of Union Govt
- Name the head and other members of Union Government
- Identify major duties of Union Government
- Explain Tehsil Govt. and its divisions.
- Explain the role of District Govt in Local Government System

Pakistan Values 05: "Faith"

- Discuss how faith is an important factor for achievement of any goal. Support your answer with examples

- ❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEWjp2oec37vpAhUDJBoKHXvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usg=AOvVaw06xteUzzTXxxVdiTfagRYp>

Video Links

Monday

- <https://www.youtube.com/watch?v=pftILDZRsGY>
- https://www.youtube.com/watch?v=XidfGORqq_o
- <https://www.youtube.com/watch?v=eA7i8auv4wM>

Tuesday

- <https://www.youtube.com/watch?v=EN-UIzOMGsk>
- <https://www.youtube.com/watch?v=GuhR-M7QjaE&t=7s>

PAKISTAN AFFAIR

- https://www.youtube.com/watch?v=U76Mc_wiWT4

Friday

- <https://www.youtube.com/watch?v=ocuJXY-CNRq>
- <https://www.youtube.com/watch?v=L5JC-XTVKzE>
- <https://www.youtube.com/watch?v=dVWJeEANKhA>

PAKISTAN VALUE

- https://www.youtube.com/watch?v=9_4u_qqua6s

PAKISTAN STUDIES WEEK-6

6th July 2020-Monday

**Chapter: 08 Pakistan in the community of nations
Pakistan's Foreign Policy**

- Name the First current Foreign Minister of Pakistan
 - Explain why a country need Foreign Policy
 - Explain objectives of Pakistan's Foreign Policy
- Review: Q.no.01 (long) from textbook

7th July 2020-Tuesday

**Chapter: 01 Neighboring Countries
Pak-China Relations**

- When were Pak-China Relations started?
- Discuss the projects in Pakistan started with the Collaboration of China
- Discuss the support of China towards Pakistan in UNO

Pakistan Affair 06: Urbanization

- Explain reasons of urbanization
- Discuss major drawbacks of urbanization

10th July 2020-Friday

Chapter: 02 Indo-Pak Relations

- Which area of India and Pakistan are associated with the Indo-Pak Border?
Use map to answer
- Explain Indus Water Treaty
- Explain Kashmir issue
- When Kashmir issue was presented in United Nations

Pakistan Values 06: Determination

- Explain how strong determination and passion helps to get success

Activity: Write a success story of a determinant leader participated in Pakistan Movement

- ❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwj2oec37vpAhUDJBoKHxvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usq=AOvVaw06xteUzzTXxxVdiTfagRYp>

Video Links

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Monday

- <https://www.youtube.com/watch?v=K-3Ovk4eKQ0>
- <https://www.youtube.com/watch?v=4YPY6DmfrwU>
- <https://www.youtube.com/watch?v=elvv8WoZC6Q>

Tuesday

- <https://www.youtube.com/watch?v=SQMI9582dR0>
- <https://www.youtube.com/watch?v=WFqgbXPC110>

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- <https://www.youtube.com/watch?v=DwcW12J1FFA>
- <https://www.youtube.com/watch?v=WpJTR-IAG6k>

Friday

- <https://www.youtube.com/watch?v=tAVPW5PT8U>
- https://www.youtube.com/watch?v=a_MJyNG1wAs

PAKISTAN VALUE

- <https://www.youtube.com/watch?v=AausKIYbpho>

PAKISTAN STUDIES WEEK-7

13th July 2020-Monday

Chapter: 02 O.I.C Countries

- Define the purpose of O.I.C and when it was established
- List down initial/current member countries of OIC
- Where is the headquarter of OIC
- Which summit of OIC held in Pakistan

14th July 2020-Tuesday

Chapter: 03 Pakistan Relations with Saudi Arabia and Turkey

- What is Pak-Saudi Economic Commission
- How Saudi Arabia support Pakistan in Middle-east crisis
- Explain the support of Turkey in Indo-Pak War
- Pakistan and Turkey organized RCD in 1964, explain the purpose

Pakistan Affair 07: Global Warming

- Identify main factors causing Global Warming
- Explain the effects of Global Warming on environment
- Identify important measures taken to control Global Warming

17th July 2020-Friday

Chapter: 02 United Nation

- Name the organs of United Nation
- Explain the members of General Assembly
- Define the functions of Security Council
- Explain the structure of ICJ
- When and why Trusteeship Council was formed

Pakistan Values 07: Respect

- "Do respect have respect" explain
- Explain how respect in mind can control your behaviors

- ❖ For the solution of exercises on the basis of Board Pattern, students can take help from following notes:
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwj2oec37vpAhUDJBoKHxvwA0AQFjACegQIBBAB&url=https%3A%2F%2Fwww.office.com.pk%2Fclass-2nd-year-pak-studies-notes-english-version-new-course-fbise-2016-17-and-onwards%2F&usq=AOvVaw06xteUzzTXxxVdiTfagRYp>

Video Links

...

Monday

- <https://www.youtube.com/watch?v=b2hux6Y9WGg>
- <https://www.youtube.com/watch?v=3onV66njKB4>

Tuesday

- <https://www.youtube.com/watch?v=4t3JAKZeYHQ>
- <https://www.youtube.com/watch?v=Dy3f6MyF-RI>
- https://www.youtube.com/watch?v=OWekO96E4_w

PAKISTAN AFFAIR

- <https://www.youtube.com/watch?v=ilBBRT9F3Wc>
- https://www.youtube.com/watch?v=d7Ci_ooW-k

Friday

- https://www.youtube.com/watch?v=VOX-a9n_SdA
- <https://www.youtube.com/watch?v=tImYtJiUK00>
- https://www.youtube.com/watch?v=jxr_8hVP8Jw

PAKISTAN VALUE

- <https://www.youtube.com/watch?v=fp9dTtIQLPY>
- <https://www.youtube.com/watch?v=GkipANIbSpE>

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: URDU

اُردو ہوم ورک برائے سال دوم

برائے نصابی سال ۲۰۲۰
بارہویں جماعت
کینٹ پبلک ایجوکیشن سسٹم

معزز والدین موسم گرم کی تعطیلات نہ صرف بچوں کے لیے تفریح اور خوشی کا سبب ہیں بلکہ یہ وہ وقت ہے جس میں طلبا و طالبات اپنی تدریسی سرگرمیوں کی تجدید نو کے ساتھ اپنے دھیان و گیان میں ایکنٹی روح بھی پہنکتے ہیں۔ تاہم اس آرام دہ اور پرسکون ماحول میں تخلیقی کام کے ساتھ تعلیمی توازن رکھنا ایک ضروری امر ہے۔ جیسا کہ تعلیمی ادارے موسم گرما کی چھٹیوں کی وجہ سے بند ہیں۔ وباء (COVID-19) کے باعث موسم گرما کی چھٹیاں بڑھائی گئیں ہیں۔

سی پی ائی نے طلبا کی تخلیقی صلاحیتوں کو نکھارنے اور ابھارنے کے لیے کچھ مشقی پارچے تیار کیے ہیں۔ تاکہ وہ اپنے وقت اور علم کو بہترین انداز میں استعمال کر سکیں تحریری مشق لکھنے کی رفتار بڑھانے میں مددگار ہوگی۔ قرآن کی تلاوت اور نماز کی پابندی کریں صحت و صفائی کا خیال رکھیں۔ بلا وجہ باہر اور دھوپ میں جانے سے گریز کریں۔ گھر میں رہیے محفوظ اور سلامت رہیے۔

اولین مقصد

طلبا کی کردار سازی ایسے پُر اعتماد، باصلاحیت اور ذمہ دار افراد کے طور پر کرنا کہ وہ اپنی بے مثال اور قابل تقلید خوبیوں سے نا صرف واقف ہوں بلکہ ملک و قوم کی ترقی میں معاون و رہنما ثابت ہوں۔
خاص ہدف

گرمیوں کی چھٹیوں میں دئیے جانے والے کام کا خصوصی مقصد طلبا کے وقت کو موثر اور تخلیقی بنانا ہے تاکہ وہ اپنی صلاحیتوں کو نکھارنے کے ساتھ جدید دنیا کے مقابل کھڑے ہو سکیں۔
منزل مقصود

- طلبا میں انفرادی مطالعہ کا شوق پیدا کرنا۔
- خود اعتمادی میں اضافہ اور مثبت رویہ پیدا کرنا۔
- تدریسی مشکلات کی نشاندہی اور جائزہ سے سیکھنے کے عمل میں مثبت تبدیلی لانا۔

ظن و تخمین

عزیز طلبا و طالبات! امید ہے آپ اپنی چھٹیاں عمدہ طریقے سے گزار رہے ہوں گے۔ چھٹیوں کا کام شروع کرنے سے پہلے درج ذیل ہدایات غور سے پڑھیں:-
تدریسی اور مشقی کام سات ہفتوں میں مکمل کرنا ہے۔
سیکھنے کے کامیاب عمل کے لیے تفویض کار مرتب کئے گئے ہیں۔
مشقی کام کے تحریری جواب کے لئے علیحدہ کاپی استعمال کی جائے۔
والدین کی سرپرستی اور رہنمائی میں خوشخط اور صاف کام کریں۔
تحریری کام اور مشقی پارچوں پر دن اور تاریخ لازمی لکھیے۔
مشقی پارچے مکمل کرنے کے لئے link Web اور internet کا استعمال کریں۔

عمومی مقاصد

سی پی ائی نے مشقی کام اس طرح سے ترتیب دیا ہے کہ تحریری مشق کے ساتھ ذہنی آمادگی اور تروتازگی کے ساتھ طلبا تعلیمی اداروں میں واپسی پر ہر میدان میں چاک و چوبند ہوں۔ تعلیمی سرگرمیوں سے رابطے میں رہیے گھر میں رہیے محفوظ و سلامت رہیے۔

تدریس اردو

نصاب برائے میعاد اول تعلیمی سال ۲۰۲۰
بارہویں جماعت
فہرست

نمبر شمار	تدریسی مہینہ	تدریسی ہفتہ	سبق	عنوان
۱	جون ۲۰۲۰	پہلا ہفتہ	جواب شکوہ	منظوم ادب
۲	جون ۲۰۲۰	دوسرا ہفتہ	جواب شکوہ مسلمانوں کا قدیم طرز تعلیم	منظوم ادب اصناف ادب
۳	جون ۲۰۲۰	تیسرا ہفتہ	سقراط منظور	اصناف ادب اصناف ادب
۴	جون ۲۰۲۰	چوتھا ہفتہ	کتبہ	اصناف ادب
۵	جون و جولائی ۲۰۲۰	پانچواں ہفتہ	مائیں سیاہ فارم	اصناف ادب اصناف ادب
۶	جولائی ۲۰۲۰	چھٹا ہفتہ	فاکہ میں روزہ	اصناف ادب
۷	جولائی ۲۰۲۰	ساتواں ہفتہ	غزل علامہ محمد اقبال تمام کرواتے گئے کام کا جائزہ	منظوم ادب

ہفتہ وار سرگرمیاں

نمبر شمار	تدریسی ہفتہ	سبق	سرگرمی
۱	پہلا ہفتہ	جواب شکوہ	نظم سے دس ہم قافیہ الفاظ چن کر لکھیے
۲	دوسرا ہفتہ	جواب شکوہ	ڈاکٹر علامہ محمد اقبال کا مختصر تعارف بتائیے۔
۳	تیسرا ہفتہ	مسلمانوں کا قدیم طرز تعلیم	اعراب لگائیے اور معنی لکھیے معمور، دفعتا، عجمی، غارت گری، مجتہدین
۴	چوتھا ہفتہ	سقراط	سبق سقراط کی خاموش خوانی کیجیے سقراط کا شخصی خاکہ لکھیے
۵	پانچواں ہفتہ	منظور	سرکاری ہسپتال میں داخل کسی مریض کی آب بینی لکھیے
۶	چوتھا ہفتہ	کتبہ	اس افسانے کے بارے میں اپنی رائے کا اظہار کیجیے
۷	پانچواں ہفتہ	مائیں	مناسب الفاظ سے خالی جگہ پُر کیجیے بیگم خواجہ کو وہ ---- سنائیں کہ وہ بے چاری زلزلے کو بھول گئی اکھٹے رکھے ہوئے برتن بھی ---- کر بجاتے ہیں ان کی باتوں میں ---- کم اور بددعائیں زیادہ ہوتی تھیں جیسے مریض ---- کا کھانا کھانے پر مجبور ہوتا ہے بیگم خواجہ اپنے ---- کی بددعا سن کر مسکرا رہی تھی
۸	چوتھا ہفتہ	سیاہ فارم	اعراب لگائیں نوعیت، غنیم، برفروختہ، سناتا، مڈبھیڑ، بدرد
۹	چھٹا ہفتہ	فاقہ میں روزہ	مناسب الفاظ سے خالی جگہ پُر کیجیے مرزا سلیم ---- میں گانے بجانے کی محفلیں سجاتے مصاحب کے کہنے پر مرزا سلیم ---- جانے لگے مرزا شہزور کی والدہ مرزا سلیم کی ---- تھی انگریز ۱۸۵۷ کی جنگ آزادی کو ---- کہتے ہیں مغل خاندان ---- کی نسل سے تھا
۱۰	ساتواں ہفتہ	غزل علامہ محمد اقبال کروائے گئے کام کا جائزہ	غزل اور نظم کا فرق واضح کیجیے سیاق و سباق، خلاصہ اور رموز و اوقاف کا اعادہ

ہفتہ وار تفویض کار

نمبر شمار	تدریسی ہفتہ	سبق	تفویض کار
۱	پہلا ہفتہ	جواب شکوہ	نظم کا مرکزی خیال شاعر کے مختصر تعارف کے ساتھ لکھا جائے۔
۲	دوسرا ہفتہ	جواب شکوہ	کلام میں موجود ادبی محاسن علم بیان و علم بدیع کی پہچان اور فرق تحریر کرنا
		مسلمانوں کا قدیم طرز تعلیم	زمانہ قدیم میں درس و تدریس کے طریقے لکھیے
۳	تیسرا ہفتہ	سقراط	مختصر سوالات کے جواب لکھیے 1 سقراط کے مخالفین نے ان پر کیا الزامات لگائے؟ 2 سقراط کے لیے کیا سزا تجویز کی گئی؟ 3 سقراط نے کتنے برس عمر پائی؟
		منظور	عراب لگائیے۔۔ مفلوج، معجزہ، معین، مسیحا، مریض، مرض، مانند
۴	چوتھا ہفتہ	کتبہ	سبق کے حوالے سے مندرجہ ذیل جملوں کی وضاحت کیجیے 1 دن کے وقت اس علاقے کی چہل پہل اور گہما گہمی کمروں کی چار دیواری میں ہی محدود تھی۔ 2 دنیا بھر کی چیزیں اور ہر وضع اور ہر قماش کے لوگ یہاں ملتے تھے۔ 3 وہ بڑا غفور رحیم ہے کیا عجب کہ اس کے دن پھر جائیں۔ 4 دفتر میں جب کبھی اس کا کوئی ساتھی کسی معاملے میں اسکی رہنمائی کو جو یا ہوتا تو اپنی برتری کے احساس سے اسکی آنکھیں چمک اٹھتی۔ 5 ترقی لطیفہ غیبی سے نصیب ہوتی ہے کڑی محنت جھیلنے اور جان کھپانے سے کچھ حاصل نا ہوگا۔
۵	پانچواں ہفتہ	مائیں	مختصر سوالات کے جوابات دیجیے 1 دونوں بیگمات کے برعکس ان کے شوہروں کے تعلقات کیسے تھے۔ 2 زلزلہ آنے پر بیگم راجہ کا کیا رد عمل تھا۔ 3 محلے کے بزرگ کے سمجھانے پر راجہ صاحب کا کیا جواب تھا۔
		سیاہ فارم	اعراب لگائیے نو عیت، غنیم، برافر وختہ، سناتا، مڈبھیڑ، بدرد
۶	چھٹھ ہفتہ	فاقہ میں روزہ	سوالوں کے جواب دیجیے 1 مرزا شہروز کون تھا؟ 2 مرزا سلیم والدہ کے باتوں سے کیوں آزرده تھا؟ 3 مغلیہ دور میں رمضان میں جامع مسجد میں کیا سماں ہوتا تھا؟ 1857 کے بعد رمضان میں مسجد کی کیا حالت تھی؟
۷	ساتواں ہفتہ	غزل علامہ محمد اقبال	کوئی سے دو اشعار کی تشریح کیجیے

مشقی پارچے

مشقی پارچہ نمبر ۱

- نظم جواب شکوہ
- ۱۔ اقبال کی شاعری کا پاکستان بننے اور مسلمانوں کی بیداری میں کردار لکھیے
 - ۲۔ نظم جواب شکوہ کو لہن کے ساتھ پڑھیں اور تشریحات لکھیے
 - ۳۔ علامہ اقبال کی علمی اور ادبی خدمات کے متعلق تفصیلی بحث کی جائے

مدد گار ویب لنک:

<https://youtu.be/1p-UWzVGNXY>

<https://youtu.be/fOJ4RadR3PY>

<https://youtu.be/D6l4D2aNueQ>

<https://youtu.be/G5X65VQheBQ>

مشقی پارچہ نمبر ۲

- خطوط نگاری کے اصول لکھیے۔
خطوط نگاری کا طریقہ لکھیے۔
اپنے دوست کو خط لکھیں اور کورنا وائرس سے متعلق حفظانِ صحت کے اصولوں سے آگاہی دیں۔

مدد گار ویب لنک

<https://youtu.be/xHp7Ur0OGSk>

<https://www.youtube.com/watch?v=Lkipjem1pl0>

مشقی پارچہ نمبر ۳

- نظم جواب شکوہ سے صنعتِ تفریق تلاش کر کے لکھیں۔
نظم جواب شکوہ سے ایسے اشعار تلاش کر کے لکھیں جن میں صنعتِ تفریق اور صنعتِ جمع موجود ہو۔
قافیہ اور ردیف میں کیا فرق ہے؟

نظم جواب شکوہ سے قافیہ اور ردیف الگ الگ لکھیے

مدد گار ویب لنک

<https://youtu.be/1p-UWzVGNXY>

<https://www.youtube.com/watch?v=KS9128NNdFg>

<https://www.youtube.com/watch?v=jgOFtSQIyf0>

مشقی پارچہ نمبر ۴

سبق سقراط

مناسب الفاظ سے خالی جگہ پُر کیجیے

۱. سقراط کا باب ایک ---- تھا۔
۲. سقراط کے نزدیک کسی چیز کا ---- کرنا ایک فضول کام ہے
۳. داروغہ جیل نے سقراط کو ---- جانے کی ترغیب دی
۴. سقراط کی طبیعت نے تیزی کے ساتھ ---- کا اثر قبول کیا
۵. سقراط ایک ---- شخص کو واجب الرحم سمجھتا تھا

سقراط کی شخصیت اور زندگی کا احاطہ کریں۔
خلاصہ نگاری کے اصول لکھیے اور سبق سقراط کا خلاصہ تحریر کریں۔

مدد گار ویب لنک

https://youtu.be/rC_js-c5UbE

<https://youtu.be/zWJEMUoT1to>

<https://www.youtube.com/watch?v=19FSpK6Qz4s>

<https://www.youtube.com/watch?v=KhmqbCxvIrM>

<https://www.youtube.com/watch?v=NUdjXDoliaA>

مشقی پارچہ نمبر ۵

سبق مسلمانوں کا قدیم طرز تعلیم

خالی جگہ پر کیجیے۔

1. علوم وہ تھے جن کو — سے زیادہ تر تعلق تھا۔
2. مذہبی ---- کی وجہ سے فلسفہ اور منطق سے ہمدردی نہ تھی۔
3. دریاے سندھ کے کنارے تک ---- حکومت کر رہا تھا۔
4. مناظرہ کی مجلسوں میں شرکت ---- کے لیے ضروری تھی۔
5. تیسرے دور نے ---- تعلیم کی بنیاد ڈالی۔

تعلیم سے کیا مراد ہے؟

زمانہ قدیم میں کیا طریقہ کار رائج تھا؟

عناصر خمسہ کون ہیں؟

تعلیم کس حد تک ضروری ہے؟

مدد گار ویب لنک

<https://youtu.be/xvBmhwSe3-k>

<https://youtu.be/xvBmhwSe3-k>

<https://www.youtube.com/watch?v=FwF84wEzOWM>

<https://www.youtube.com/watch?v=Y4uxJb-V5vo>

مشقی یارچہ نمبر ۶

درج ذیل الفاظ کے معانی لکھیے۔

- ۱۔ اسماء الرجال
- ۲۔ حجازی فتوحات
- ۳۔ ایوان
- ۴۔ مستعد
- ۵۔ اجمالی کیفیت

سبق مسلمانوں کا قدیم طرز تعلیم کا خلاصہ لکھیں۔
سبق مسلمانوں کا قدیم طرز تعلیم کے مصنف کا تعارف لکھیں۔

مدد گار ویب لنک

<https://www.youtube.com/watch?v=FwF84wEzOWM>

<https://www.youtube.com/watch?v=Y4uxJb-V5vo>

<https://youtu.be/xvBmhwSe3-k>

مشقی یارچہ نمبر ۷

سبق کتبہ

سوالوں کے جواب دیجیے

- ۱۔ اردو کس زبان کا لفظ ہے؟
- ۲۔ اردو کتنی پرانی زبان ہے؟
- ۳۔ کون سی زبان اپنے اندر بہت وسعت رکھتی ہے؟
- ۴۔ اردو زبان کتنی زبانوں کا امتزاج ہے؟
- ۵۔ ناول، افسانہ، کہانی، ڈرامہ اور داستان کا فرق واضح کریں
- ۶۔ افسانوں کی خصوصیات واضح کریں
- ۷۔ سبق کتبہ کے مصنف کا تعارف لکھیں۔

مدد گار ویب لنک

<https://youtu.be/utxZP2fQLP8>

<https://youtu.be/DS4QYabG1Lw>

<https://youtu.be/xvBmhwSe3-k>

<https://youtu.be/xvBmhwSe3-k>

SUMMER VACATIONS HOMEWORK 2020

CLASS: XII (FEDERAL BOARD)

SUBJECT: GENERAL KNOWLEDGE

General Knowledge

History + Geography

WEEK-1

Geography

Important links: <https://www.atnyla.com/general-knowledge/7/100>

1. The canal joining Baltic Sea to North Sea is

- a) Neil Canal
- b) Kiel Canal
- c) Panama Canal
- d) Suez Canal

2. Which of the following is the smallest ocean of the world?

- a) Pacific
- b) Indian
- c) Atlantic
- d) Arctic

3. Through which one of the following Straits, does a tunnel connect the United Kingdom and France?

- a) Davis Strait
- b) Denmark Strait
- c) Strait of Dover
- d) Strait of Gibraltar

4. Sargasso Sea is a part of :

- a) North Atlantic ocean
- b) South Atlantic Ocean
- c) North Pacific Ocean
- d) North Sea

5. The Suez Canal connects -

- a) Mediterranean and Red Seas
- b) Baltic and Caspian Seas
- c) Mediterranean and North Seas
- d) Red Sea and Caspian Sea

History

Important link : <https://exam2win.com/indian-history-mcq/great-mughals/part1/questions-answers-1.jsp>

1. Guru Arjun Dev was the _____ sikh guru

- a) Fifth
- b) Ninth
- c) Tenth
- d) None

2. The last sultan of Delhi was _____

- a) Ibrahim Lodhi
- b) Sikandar Lodhi
- c) Allaudin
- d) None

3. _____ setup a “chain of Justice”

- a) Aurangzaib
- b) Jahangir
- c) Babur
- d) None

4. Akbar land revenue system was known as

- a) Todar nal's
- b) Zabt system`
- c) Bandobast system
- d) All of above

5. Sher Shah has been called as the “Fore-runner of _____

- a) Akbar
- b) Hamayun
- c) Shahjhan
- d) None

Geography

Important links: <https://yourclasses.in/geography-notes-oceans-of-the-world>

1. **Which pass connects Chitral with Gilgit and is just 381 meters long?**
 - a) Lawari Pass
 - b) Shangla Pass
 - c) Malakand Pass
 - d) Shandur Pass
2. **Which of the following pass connects Abbotabad and Gilgit?**
 - a) Babusar Pass
 - b) Tochi
 - c) Bolan
 - d) Dargai Pass
3. **Which of the following pass connects Peshawar with Chitral?**
 - a) Malakand Pass
 - b) Dargai Pass
 - c) Bolan Pass
 - d) Baroghil Pass
4. **Manchhar Lake is found in**
 - a) Thatta District
 - b) Khushab District
 - c) Dadu district
 - d) None
5. **Famous lake saif-ul-maluk is situated in**
 - a) Ziarat
 - b) Swat
 - c) Baltistan
 - d) Kaghan

History

Important link: <https://fgstudy.com/mcqs/islamic-history-mcqs-set-6/>

1. **Ibn-e-Kahldun was a famous historian of century**
 - a) 15th
 - b) 14th
 - c) 13th
 - d) None
2. **The Holy Quran was first compiles during caliphate Hazrat _____**
 - a) Muhammad (P.B.U.H.)
 - b) Abu Bakar Siddique (R.A.)
 - c) Uthman
 - d) None of these

3. The Holy Prophet (P.B.U.H.) migrated to Madina in _____

- a) 615 AD
- b) 622 AD
- c) 625 AD
- d) None of these

4. When did the Ottoman cross into Europe

- a) 1357 AD
- b) 1520 AD
- c) 1550 AD
- d) None of these

5. Kamal Attaturk ended the Ottoman Caliphate and deposed Abdul Majid in _____

- a) 1920
- b) 1922
- c) 1924
- d) None of these

Geography

Important links: <https://www.csstimes.pk/geography-of-pakistan-solved-mcqs/>

- 1. The land near which of the following is considered the lowest point on land on earth?**
 - a) Caspian Sea
 - b) Dead Sea
 - c) Black Sea
 - d) Salton Sea
- 2. Which of the following is referred to as Pirates' Alley because of increased number of pirate activities in it?**
 - a) Gulf of Aden
 - b) Gulf of Oman
 - c) Red Sea
 - d) Gulf of Khambat
- 3. A shallow body of water protected from a larger body of water (usually the ocean) by sandbars, barrier islands, or coral reefs is called -**
 - a) Strait
 - b) Gulf
 - c) Lagoon
 - d) Bay
- 4. The much-in-news Guantanamo Bay is located in which of the following countries?**
 - a) Mexico
 - b) Cuba
 - c) Guatemala
 - d) Nicaragua
- 5. Which country has the longest coastline in the world?**
 - a) Canada
 - b) Russia
 - c) U.S.A.
 - d) Indonesia

History

Important link : <https://www.csstimes.pk/world-history-mcqs-solved-world-general-knowledge-mcqs-series/>

- 1. In United States, the congress declared independence from great britian on**

- a) July 4, 1774
- b) July 4, 1775
- c) July 4, 1776
- d) July 4, 1777

2. North Atlantic Treaty of NATO was signed on _____ in Washington DC.

- a) April 4, 1947
- b) April 4, 1948
- c) April 4, 1949
- d) April 4, 1950

3. In the war of 1812 between 13 states of US and Great Britain ; Britain set fire to White House in

- a) April 1813
- b) August 1813
- c) April 1814
- d) August 1814

4. World war I was lasted from

- a) 1914 to 1918
- b) 1913 to 1917
- c) 1914 to 1917
- d) 1913 to 1918

5. World war II was lasted from

- a) 1939 to 1945
- b) 1939 to 1944
- c) 1937 to 1941
- d) 1937 to 1939

Geography

Important link: <https://www.scribd.com/document/239259618/Geography-of-Pakistan-Mcqs>

1. The length of River Indus is:

- a) 2880 km
- b) 2700 km
- c) 2650 km
- d) 3200 km

2. The total length of Railways in Pakistan is:

- a) 5000 km
- b) 8875 km
- c) 7500 km
- d) 9235 km

3. Pakistan Forest institution is located in:

- a) Karachi
- b) Rawalpindi
- c) Lahore
- d) Peshawar

4. Which part of Punjab is famous for shisham Timber Forests?

- a) Changa Manga
- b) Ala Chitta Range
- c) Murree Kohuta Range
- d) Mianwali and Kalabagh range

5. The area lying between river Beas and the Ravi is called:-

- a) Chaj Doab
- b) Rachna Doab
- c) Bari Doab
- d) Saharwal Doab

History

Important link: <https://www.csstimes.pk/world-history-mcqs-solved-world-general-knowledge-mcqs-series/>

1. Napoleon Bonaparte was a _____ military and political leader.

- a) American
- b) British
- c) German
- d) French

2. Adolf Hitler was a _____ military and political leader.

- a) British
- b) American
- c) German
- d) French

3. Napoleon Bonaparte was finally defeated at the _____ in June 1815.

- a) Peninsula War
- b) Invasion of Russia
- c) Battle of Waterloo
- d) Battle of Leipzig

4. World War II in Europe was outbreak by German invasion of

- a) Russia
- b) Poland
- c) Croatia
- d) France

5. United States was discovered by Christopher Columbus during his voyage in

- a) 1486
- b) 1488
- c) 1490
- d) 1492

Geography

Important link: <https://www.careerride.com/view/world-geography-general-knowledge-questions-and-answers-9469.aspx>

<https://www.youtube.com/watch?v=Dj7mE5k8X6c>

- 1. What is the height of Tirich Mir Peak?**
 - a) 7690 m
 - b) 7650 m
 - c) 7670 m
 - d) 7640m
- 2. What is the height of Nanga Parbat peak?**
 - a) 8116m
 - b) 8126 m
 - c) 8186 m
 - d) 8101 m
- 3. Which of the following mountain peak is called Killer Mountain?**
 - a) Nanga Parbat
 - b) Pamir
 - c) K-2
 - d) Rakaposhi
- 4. What is the total length of Siachen glacier?**
 - a) 63 km
 - b) 67 km
 - c) 71.5 km
 - d) 72.5 km
- 5. Baltoro glacie is situated in mountain range of**
 - a) Karakoram
 - b) Sulaiman
 - c) Hindu kash
 - d) Himalayas

History

Important link : <https://mcqsforum.com/general-knowledge/pakistan-history-mcqs/>

<https://sheir.org/edu/pakistan-history-mcqs/>

- 1. Sir Sultan Muhammas Shah, The Agha Khan headed the historic Simla deputation which successfully presented Muslims demand on 1 Oct. 1906 before**
 - a) Lord Curzon
 - b) Lord Irwin
 - c) Lord Minto
 - d) None of these

2. The first Urdu News paper in Indian subcontinent was

- a) Jam-e-jahan Numa
- b) Nawai-e-Waqt
- c) Imrox
- d) Indian Gazette

3. When All India Muslim League celebrated victory day?

- a) January 1945
- b) January 1946
- c) January 1937
- d) None of above

4. The credit of establishing All India Muslim League goes to

- a) Quaid e Azam
- b) Allama Iqbal
- c) Mohsin ul Malik
- d) Nawab Waqar ul Malik

5. The All India Muslim League was founded in

- a) March 1906
- b) December 1906
- c) March 1913
- d) December 1913

WEEK-6

Geography

Important link: <https://www.csstimes.pk/geography-of-pakistan-solved-mcqs/>

<https://mcqsforum.com/general-knowledge/pakistan-geography-mcqs/>

<https://www.youtube.com/watch?v=t-wk2Mx1dwU>

1. The Earth is comprised of how many continental and oceanic plates?

- a) 10
- b) 13
- c) 20
- d) 14

2. Mantle layer is situated between

- a) Crust and Lithosphere
- b) Crust and Core
- c) Core and Lithosphere
- d) Inner core and Outer core

3. Mantle is composed of

- a) Silicon and Magnesium
- b) Silicon
- c) Magnesium
- d) None of above

4. After oxygen which is the most abundant element in the earth's crust?

- a) Sodium
- b) Silicon
- c) Magnesium
- d) Aluminum

5. Which one of the following is the cause for change in the season?

- a) Earth's rotation and revolution
- b) Earth's rotation
- c) Earth's revolution
- d) None of above

History

Important link: <https://exam2win.com/indian-history-mcq/great-mughals/part1/questions-answers-1.jsp>

<https://testbook.com/blog/mughal-empire-gk-notes/>

1. Buland Darwaza (gate of victory) was built by Akbar the great commemorate his conquest of Gujrat at

- a) Gujrat
- b) Delhi
- c) Fatehpur Sikri
- d) Agra

- 2. Under which scheme did Muslim league surrender the demand of separate electorate for Muslims?**
- a) Delhi proposal 1927
 - b) Patna scheme 1938
 - c) Poona pact
 - d) Never surrender
- 3. Which political party was in power in North West Fronties Province (Now KPK) at the time of independence?**
- a) Muslim League
 - b) Congress
 - c) Justice party
 - d) Tehreek e Khaksaae
- 4. When did Simla conference held?**
- a) 1944
 - b) 1946
 - c) 1945
 - d) 1956
- 5. Who presented Lahore Resolution (Pakistan Resolution) on 23rd March 1940?**
- a) Allama Iqbal
 - b) Liaqat Ali Khan
 - c) Quaid e Azam
 - d) A.K. Fazal-ul-Haq

General Knowledge

ENGLISH

WEEK-1

- ❖ Here we have given some common sentences with common mistakes. A careful study of these sentences is sure to help you to cultivate correct expression:

Common Errors in use of adjectives:

1. He is serious then me .
2. It is much fine today .
3. The fort is a worth seeing building.
4. Rich should not hate poors.
5. He has many wealth.
6. The climate of Lahore is hotter then Islamabad.
7. He is sick of fever.
8. Little money is better then no money.
9. From the two he is strong.
10. Much efforts bring their reward

WEEK-2

- ❖ Write any three essays from the following of your choice in your own words. (Words limit 200-250).

Argumentative Essay

1. Education should be free:
2. Students should not be allowed to play PUBG

Essay based on proverbs

3. Health is wealth
4. Time and tide wait for none
5. Where there is a will, there is a way

WEEK-3

- ❖ Read the following passage carefully and answer the questions given at the end:
In 1807 Noah Webster began his greatest work an American dictionary of the English language. In preparing the manuscript he devoted 10 years to the study of English and its relationship to other languages and seven more years to the witting itself. Published in two volumes in 1828. An American dictionary of the English language has become the recognized authority for usage in the United States. Webster's purpose in writing it was to demonstrate that the American language was developing distinct meanings, pronunciations, and spellings from those of British English. He is responsible for advising simplified spelling forms: develop instead of the British for develop: theater and center instead of theater and center, color and honor instead of color and honor.

Questions:

1. **When was an American dictionary of the English language published:**
a. 1817 b. 1828 c. 1807 d. 1824
2. **According to this passage, which one of the following spellings would Webster have approved in his dictionaries:**
a. Develop b. theater c. Color d. honor
3. **According to the author, Webster purpose in writing an American of the English language was to:**
a. Respond to the need for new school books
b. Demonstrate the distinct development of English language in America
c. Promote spelling fonts based upon British model
d. influence the pronunciation of the English language
4. **In how many volumes was an American dictionary of the English language published:**
a. 1 volume b. 2 volumes c. 3 volumes d. 4 volumes

WEEK-4

❖ Certain words and phrases in English must be followed by particular prepositions. Given below are some sentences with blank spaces followed by a word with four different prepositions, choose the appropriate one.

1. **It is awful to be _____ a sense of inferiority.**
a. Afflicted for
b. Afflicted to
c. Afflicted with
d. Afflicted in
2. **I felt, I must _____ my host's judgment.**
a. Defer in
b. Defer to
c. Defer for
d. Defer from
3. **She is not very quick at _____ the language.**
a. Picking with
b. Picking up
c. Picking on
d. Picking in
4. **Naeem neatly _____ a thrust at his chest.**
a. Fended in
b. Fended of
c. Fended from
d. Fended off
5. **There has been a complete _____ of law and order.**
a. Breakup
b. Break down
c. Break off
d. Break of

6. Do not _____ the facts.
- Flinch with
 - Flinch from
 - Flinch off
 - Flinch in
7. The estate was so _____ debts that it was not worth buying.
- Encumbered with
 - Encumbered into
 - Encumbered from
 - Encumbered in
8. It is a bleak _____ for anyone hoping for quick profit.
- Look on
 - Look in
 - Look out
 - Look into
9. He _____ every debate organized by the society.
- Plunged in
 - Plunged into
 - Plunged upon
 - Plunged to
10. He was _____ salted food by the doctor.
- Abstained from
 - Abstained for
 - Abstained in
 - Abstained to

WEEK-5

❖ Each of the following questions consists of a word printed in bold letters along with four options. Choose the word that is most nearly same in meaning to word printed in bold letters.

- Acquaintance:**
 - Familiarity
 - Connection
 - Intelligent
 - Ignorance
- Weird:**
 - Genteel
 - Usual
 - Vulgar
 - Haunting
- Manipulate:**
 - Manage
 - Deceive
 - Exhibit
 - Misguide
- Prejudice:**
 - Pressure
 - Prelude
 - Bias
 - Affectionate

- 5) **Bolster:**
(a) Strengthen
(b) Rest on
(c) Support
(d) Straddle
- 6) **Conspicuous:**
(a) Hard
(b) Peculiar
(c) Conspirator
(d) Significant
- 7) **Schedule:**
(a) List
(b) Obligate
(c) Load
(d) Request
- 8) **Uprising:**
(a) Debilitate
(b) Overturn
(c) Outbreak
(d) Heartening
- 9) **Inversion:**
(a) Reversal
(b) Introvert
(c) Diversification
(d) Vortex
- 10) **Reclamation:**
(a) Passing of new law
(b) Declaration
(c) Proposal
(d) Recovering possession

WEEK-6

❖ Each of the following questions consists of a word printed in bold letters along with four options. Choose the word that is most opposite in meaning to word printed in bold letters.

1. **Adequate:**
(b) profuse
(c) abounding
(d) abundant
(e) scanty
2. **Discount:**
(a) interest
(b) premium
(c) concession
(d) profit
3. **Extension:**
(a) condensation
(b) diminution
(c) subtraction
(d) weakening

4. **Humble:**
(a) dominant
(b) proud
(c) despotic
(d) pompous
5. **Confess:**
(a) lengthen
(b) expand
(c) distribute
(d) interpret
6. **Transparent:**
(a) colored
(b) childlike
(c) opaque
(d) imminent
7. **Lenient:**
(a) obstinate
(b) rude
(c) harsh
(d) annoyed
8. **Moist:**
(a) dry
(b) parched
(c) hard
(d) crisp
9. **Flexible:**
(a) brittle
(b) hard
(c) rigid
(d) solid
10. **Official:**
(a) domestic
(b) public
(c) general
(d) private

General Knowledge

ISLAMIAT

WEEK-1

- وحی کے اصطلاحی معنی لکھیے۔
- رسالت کے لغوی معنی کیا ہیں۔
- اللہ تعالیٰ اپنے انبیاء کی طرف کن کن طریقوں سے وحی نازل فرماتا ہے۔
- بعض روایات میں انبیاء کی کتنی تعداد بیان ہوئی ہے۔
- انبیاء کی خصوصیات کون کون سی ہیں۔
- ختم نبوت کے دلائل کون کون سے ہیں تحریر کیجیے۔
- حضور صلی اللہ علیہ وآلہ وسلم کی رسالت کے عالمگیر ہونے کے بارے میں قرآن مجید کی آیت کا ترجمہ لکھیے۔
- ختم نبوت کے لغوی معنی کیا ہیں۔
- انبیاء کی بعثت کا مقصد کیا ہے فرشتوں کا اہم ترین فریضہ کیا ہے۔
- پہلے آسمانی کتابوں اور قرآن مجید میں کیا فرق ہے۔
- ہمیں کیسے پتہ چلا کہ پہلی کتابیں تحریر کا شکار ہو گئی تمام الہامی کتابوں کی مشترکہ تعلیمات کون سی ہیں۔

WEEK-2

- عہد نبوی میں قرآن کریم کی حفاظت کس طرح کی گئی۔
- قرآن مجید کا علم کے بارے میں کیا رویہ ہے۔
- قرآن مجید کی خصوصیات لکھیے۔
- قرآن کریم میں پہلی کتابوں کے بارے میں کیا بیان کیا گیا ہے۔
- عقیدہ آخرت کا اصطلاحی مفہوم کیا ہے۔
- منکرین آخرت کا سب سے بڑا شبہ کیا ہے۔
- قرآن کریم نے منکرین آخرت کو کیسے جواب دیا۔
- انسان کو برائی سے بچانے والے دو اہم ترین عقیدے کون سے ہیں۔
- عقیدہ آخرت کے بارے میں سب سے اہم عقلی دلیل کیا ہے۔
- عقیدہ آخرت کے انسانی زندگی پر اثرات لکھیے۔

WEEK-3

- حضور صلی اللہ علیہ وآلہ وسلم سے محبت کا اظہار کس طرح کیا جائے۔
- نبی اکرم صلی اللہ علیہ وسلم کی اطاعت کیوں لازم ہے۔
- اطاعت رسول صلی اللہ علیہ وسلم کے بارے میں ایک آیت کا ترجمہ لکھیں۔
- حدیث کی رو سے کون سا شخص جنت کی خوشبو سے بھی محروم رہے گا۔
- کیا کافر والدین سے بھی اس نے سلوک کیا جائے گا۔
- والدین کے اہم ترین حقوق کون سے ہیں۔
- قرآن مجید میں قتل اولاد کی ایک بڑی وجہ کونسی بیان کی گئی ہے۔
- حدیث کی رو سے تین بڑے گناہ کون کون سے ہیں۔
- والدین کی طرف محبت بھری نگاہ سے دیکھنے کا کیا اجر ہے۔
- صلح رحمی سے کیا مراد ہے۔

WEEK-4

حضور صلی اللہ علیہ وآلہ وسلم نے قطع رحمی کرنے کی مذمت کس طرح بیان فرمائی .
رشتہ داروں کے باہمی حقوق کون کون سے ہیں .
جزیہ سے کیا مراد ہے .
امانت کے بارے میں کوئی ایک حدیث اور اس کا ترجمہ لکھیں .
دیانت داری کے فوائد لکھیے .
امانت کا خیال نہ رکھنے والوں کی مذمت اس طرح کی گئی ہے .
صلح حدیبیہ کے موقع پر کونسے صحابی زنجیروں میں جکڑے ہوئے حاضر ہوئے .
کیا نبی کے اہل بیت کو زکوٰۃ دی جاسکتی ہے .
روزے کے لیے عربی میں کونسا لفظ استعمال ہوتا ہے اور اس کے کیا معنی ہیں .
روزے کی فضیلت کے بارے میں کوئی ایک حدیث اور اس کا ترجمہ لکھیں .

WEEK-5

حصول خیر کے اعتبار سے رمضان کے ایام کی تقسیم کیا ہے .
حدیث کی رو سے رمضان میں انسان کے ہر عمل کا ثواب کتنے گنا بڑھ جاتا ہے .
قرآن مجید کی تین صفات لکھیں .
شب قدر کی فضیلت قرآن مجید نے کیا بیان کی ہے .
روزے کے اجتماعی فوائد کون کون سے ہیں .
روزہ ایک ڈھال ہے کیا مطلب ہے .
بے اثر روزے سے کیا مراد ہے حج کے لغوی معنی کیا ہیں .
حج نہ کرنے پر جو وعید حدیث میں بیان ہوئی ہے تحریر کریں .
مناسک حج میں سعی سے کیا مراد ہے .
حج کے فوائد کون کون سے ہیں .

WEEK-6

حج مبرور سے کیا مراد ہے .
جہاد کی مشہور اقسام کون کون سی ہیں .
جہاد کے لغوی اور اصطلاحی معنی کیا ہیں .
جہاد بالسیف سے کیا مراد ہے .
جہاد اور جنگ میں بنیادی فرق کیا ہے .
قرآن میں جہاد کی تیاری کے بارے میں کیا حکم ہے .
شہید کی کیا فضیلت ہے .
اسلامی سرحدوں کی حفاظت کرنے والوں کی کیا فضیلت ہے .
جہاد کے فرض ہونے سے پہلے سب سے بڑا عمل کیا تھا؟ .
اسلام میں جہاد کا کیا مفہوم ہے؟ یا جہاد سے کیا مراد ہے؟ .

General Knowledge

SCIENCE

WEEK-1

General Knowledge questions:

Link: <http://placement.freshersworld.com/general-science/33121920>

1. What is the chemical name of Vitamin E?

2. Which Vitamin is also known as retinol?

3. What is Calciferol?

4. What is the other name of thiamine?

5. Which Vitamin is called niacin?

6. Which element is excreted through human sweat?

7. Pollution of water bodies by which element causes Minamata disease?

8. Accumulation of which chemical leads to kidney stones?

9. Which heavy metal causes Itai Itai disease?

10. Which chemical was used earlier for giving anesthesia to patients?

WEEK-2

Link: <https://www.toppr.com/guides/general-awareness/basic-science-awareness/basic-science-practice-questions/>

1. Which wave is used for communication by artificial satellites?

2. When the speed of a car is doubled then what should be the braking force of the car to stop it at the same distance?

3. The mass of a star is two times the mass of the Sun. How will it come to an end?

4. Rain drops fall from great height. Explain about its velocity.

5. What happens when we see a rainbow?

6. Cement is made hard by which process?

7. What happens when a chemical bond is formed?

8. Which metal pollutes the air of a city having a large number of automobiles?

9. Table salt gets moist during the rainy season because?

10. Which indicator is suitable when the solution of sodium carbonate is mixed with sulphuric acid?

WEEK-3

Link: <https://www.toppr.com/guides/general-awareness/basic-science-awareness/basic-science-practice-questions/>

1. Milk of Magnesia is a suspension of which compound?

2. The presence of ozone in the stratosphere is responsible for?

3. The fundamental particles present in the nucleus of an atom are?

4. In which of the following substances all carbon atoms are quaternary in nature?
Graphite, Diamond, Teflon, Naphthalene.

5. The ratio of pure gold in 18-carat gold is?

6. The color of the eye depends upon the pigment present inside?

7. The ability of the eye to see in the dark is due to the production of a purple pigment known as?

8. The vitamin most readily destroyed by heat is?

9. Which one of the following is not a vaccine?

10. The disease that is caused by the virus is?

WEEK-4

Link: <https://www.sciencekids.co.nz/quizzes/biology.html>

1. Which famous scientist introduced the idea of natural selection?

2. A person who studies biology is known as a?

3. Botany is the study of?

4. Can frogs live in salt water?

5. True or false? The common cold is caused by a virus.

6. Animals which eat both plants and other animals are known as what?

7. Bacterial infections in humans can be treated with what?

8. A single piece of coiled DNA is known as a?

9. A group of dog offspring is known as a?

10. The area of biology devoted to the study of fungi is known as?

WEEK-5

Link: <https://www.sciencekids.co.nz/quizzes/nature.html>

1. What is the name of the world's largest reef system?

2. Do male or female mosquitoes bite people?

3. True or false? Earth Day is held on June 18.

4. What state of the USA is the Grand Canyon located in?

5. True or false? The Dead Sea is 8.6 times more salty than the ocean.

6. What are the 3 R's of recycling?

7. True or false? The horn of a rhinoceros is made from bone.

8. What famous islands west of Ecuador were extensively studied by Charles Darwin?

9. Ayers Rock in Australia is also known as what?

10. True or false? Burning or logging naturally occurring forests is known as deforestation.

WEEK-6

Link: <https://www.sciencekids.co.nz/quizzes/heat.html>

1. True or false? The boiling point of water is 100 degrees Celsius (212 degrees Fahrenheit).

2. When water is cooled, does it expand or contract?

3. True or false? The highest temperature ever recorded on Earth is 42.4 °C (108.3 °F).

4. Heat from the sun gets to the Earth by radiation, conduction or convection?

5. What is the freezing temperature of water?

6. True or false? Kelvin, Celsius and Fahrenheit are all measures of temperature.

7. True or false? 100 Kelvin is the temperature of absolute zero.

8. Substances that don't conduct heat are known as what?

9. Substances that don't conduct heat are known as what?

10. At what temperature is Fahrenheit equal to Centigrade?

General Knowledge
INFORMATION TECHNOLOGY

WEEK-1

<https://www.examsbook.com/computer-knowledge-questions-and-answers-for-bank-po-exams/5>

1. Which one of the following is not an internal DOS command?

- A. COPY
- B. CLS
- C. BREAK
- D. BACKUP

2. IT stands for

- A. Intelligent Technology
- B. Information Technology
- C. Integrated Technology
- D. Interesting Technology

3. Central Processing Unit (CPU) consists of

- A. control unit
- B. arithmetic and logic unit
- C. registers
- D. all of these

4. The following is an non volatile memory

- A. RAM
- B. ROM
- C. VLSI
- D. LSI

5. Personal computer can be connected together to form a

- A. supercomputer
- B. server
- C. enterprise
- D. network

6. CD ROM is a kind of

- A. optical disk
- B. magneto optical disk
- C. magnetic disk
- D. none of these

7. — is not an example of centralized controlling topology.

- A. star
- B. loop
- C. tree
- D. bus

8. VLSI was first used with the computers of

- A. first generation
- B. second generation
- C. third generation
- D. fourth generation

9. Laser printer is an example of

- A. input
- B. scanner
- C. output
- D. none of these

10. Which of the following stores more data?

- A. Floppy
- B. DVD
- C. CD
- D. None of these

WEEK-2

<https://sheir.org/edu/mcqs/computer/>

1. A language that is closed to human language is called

- (A) Low-Level language
- (B) High-Level language
- (C) Programming language
- (D) Machine language

2. CBT stands for?

- (A) Computer Based Training
- (B) Computer Based Trading
- (C) Computer Based Technology
- (D) None Of These

3. A virus that replicates itself is called?

- (A) Bug**
- (B) Worm
- (C) Bomb
- (D) Hoax

4. The tool used to find a similar word in a document is called?

- (A) Finder
- (B) Thesaurus
- (C) Dictionary
- (D) Find and Replace

5. Which of the following components of physical database design refer to the correctness and consistency of data?

- (A) Indexes
- (B) Integrity constraints
- (C) File organization
- (D) Data Distribution strategy

6. conio.h stands for?

- (A) character input output
- (B) console input output
- (C) common input output
- (D) complex input output

7. Duplication of data in multiple files is called?

- (A) Data Redundancy
- (B) Data Dependence
- (C) Data Inconsistency
- (D) None Of These

8. A relation that contains minimal redundancy and allows easy use is called?

- (A) Clean
- (B) Simple
- (C) Complex
- (D) Well-Structured

9. SQL stands for?

- (A) Structured Query Language
- (B) Sequential Query Language
- (C) Simple Query Language
- (D) None Of These

10. Which register stores the result of ALU operations?

- (A) Data Register
- (B) Instruction Register
- (C) Data Address Register
- (D) Accumulator Register

WEEK-3

<https://sheir.org/edu/mcqs/computer/>

1. A collection of rules for writing programs in a programming language is known as

- (A) Syntax
- (B) Program logic
- (C) Program Standards
- (D) None Of These

2. Which one connects two similar network segments?

- (A) Router
- (B) Bridge
- (C) Gateway
- (D) Node

3. Which of the following device uses the parallel transmission?

- (A) Mouse
- (B) Keyboard
- (C) Printer
- (D) Light Pen

4. What is a diagrammatic way of representing the relationship between the entities in a database?

- (A) Flowchart
- (B) ERD
- (C) DFD
- (D) Algorithm

5. Which transmission allows data to travel in both directions but only one direction at a time?

- (A) Simplex
- (B) Full duplex
- (C) Half duplex
- (D) Reverse

6. Another name for free software is?

- (A) Encrypted Software
- (B) Copy Protected Software
- (C) Shareware
- (D) Public Domain Software

7. DPI stands for?

- (A) Dot Per Inch
- (B) Decimal Per Inch
- (C) Digit Per Inch
- (D) Data Per Inch

8. _____ are used to evaluate compound conditions.

- (A) Arithmetic Operators
- (B) Logical Operators
- (C) Relational Operators
- (D) Assignment Operators

9. A small high speed memory inside CPU is?

- (A) RAM
- (B) ROM
- (C) Cache
- (D) Register

10. MICR stands for?

- (A) Magic In Character Redo
- (B) Magnetic Ink Character Recorder
- (C) Magnetic Ink Character Reader
- (D) None Of These

WEEK-4

<https://sheir.org/edu/mcqs/computer/>

1. _____ is used to control all the parts of a manufacturing process.

- (A) ATM
- (B) CAM
- (C) CAD
- (D) MICR

2. CPU consists of the following parts:

- (A) Control unit and ALU
- (B) CU and Main memory
- (C) Main memory and ALU
- (D) Operating system and Main memory

3. MHz stands for?

- (A) Millihertz
- (B) Microhertz
- (C) Megahertz
- (D) None Of These

4. DRAM stands for?

- (A) Digital Random Access Memory
- (B) Dynamic Random Access Memory
- (C) Digital Read Access Memory
- (D) Dynamic Read Access Memory

5. The dots that compose the image of a digital photograph are called _____.

- (A) Points
- (B) Resolution Points
- (C) Digital Points
- (D) Pixels

6. A type of reader commonly used to read UPC code is _____.

- (A) Bar-code reader
- (B) Optical-mark reader
- (C) Magnetic-ink reader
- (D) Both A and C

7. Caps Lock is a:

- (A) Window key
- (B) Modifier key
- (C) Toggle key
- (D) Cursor control key

8. GPS stands for?

- (A) Global Pointing System
- (B) Global Positioning System
- (C) Google Positioning System
- (D) None Of These

9. Internet surfing is an example of:

- (A) Half duplex
- (B) Simplex
- (C) Full duplex
- (D) None Of These

10. Analog signal is measured in:

- (A) Volt
- (B) Hertz
- (C) Digits
- (D) WATTS

WEEK-5

<https://www.examsbook.com/computer-knowledge-questions-and-answers-for-bank-po-exams/2>

1. KIS stands for

- A. Knowbot Information Services
- B. Knowbot Information Solutions
- C. Knowbot Information Security
- D. None of the above

2. Double precision variable can occupy

- A. 2 bytes
- B. 4 bytes
- C. 8 bytes
- D. 16 bytes

3. UNIVAC is an example of

- A. first generation computer
- B. second generation computer
- C. third generation computer
- D. fourth generation computer

4. Following performs modulation/demodulation

- A. fiber optic
- B. modem
- C. satellite
- D. coaxial cable

5. The alternative name for application software is

- A. utility software
- B. practical software
- C. end user software
- D. specific software

6. A computer programmer is a person who

- A. sells program
- B. use programs
- C. writes programs
- D. None of these

7. Which of the following is the input device?

- A. scanner
- B. pointing Mouse
- C. keyboard
- D. all the above

8. The set of instructions that tells the computer what to do is

- A. Softcopy
- B. Hardware
- C. Software
- D. Hardcopy

9. In formatting, floppy is divided into

- A. tracks
- B. sectors
- C. both and b
- D. None of these

10. Multi programming operation provides

- A. Handling of more jobs
- B. Better scheduling of work
- C. reduced computer idle time
- D. All of the above

WEEK-6

<https://sheir.org/edu/mcqs/computer/>

1. Operating system, editors and debuggers come under?

- (A) System software
- (B) Application software
- (C) Utilities
- (D) None Of These

2. Which one is the Low-Level language?

- (A) Visual Basics
- (B) Java
- (C) Assembly
- (D) C++

3. A modulator is used to convert:

- (A) Digital signals into analog signals
- (B) Analog signals into digital signals
- (C) Both A and B
- (D) None Of These

4. Which one is a Dot Matrix printer?

- (A) Laser Printer
- (B) Inkjet Printer
- (C) Impact Printer
- (D) Drum Printer

5. CRT stands for?

- (A) Cathode Rays Tube
- (B) Clarity Rays Tube
- (C) Crystal Rays Tube
- (D) None Of These

6. A computer program that translates one statement of program instructions at a time into machine language is called?

- (A) CPU
- (B) Interpreter
- (C) Compiler
- (D) Simulator

7. NTFS stands for?

- (A) New Trend File Saving
- (B) Network File Saving
- (C) New Technology File System
- (D) None Of These

8. In MS Windows key F1 is mostly used for?

- (A) Help
- (B) Exit
- (C) Save
- (D) Refresh

9. 1 Gigabyte is equal to

- (A) 1024 bits
- (B) 1024 bytes
- (C) 1024 kilobytes
- (D) 1024 megabytes

10. Which of the following devices stores instructions that help the computer startup?

- (A) Keyboard
- (B) RAM
- (C) ROM
- (D) Hard disk

General Knowledge

MATHEMATICS

WEEK-1

- 1) In which civilization dot patterns were first employed to represent numbers?
- 2) The ancient Babylonians had their number system based on?
- 3) Which number system was commonly employed in various ancient civilizations and is even today in some regions?
- 4) In which ancient civilization, numbers were for the first time represented by words?
- 5) In which numerals X, M, V, L, etc. belong to?.
- 6) In which ancient civilization, odd and even numbers were divided into two sets, the odd ones denoted as males and the even females?
- 7) Among the numbers – Fibonacci, Kaprekar, Mersenne and Figurate numbers which one is ancient in origin?
- 8) Apart from the number system, ancient Indians are held in high esteem for their contributions to the field. What is it?
- 9) Who wrote an elaborate history of Greek geometry from its earliest origins?
- 10) Which natural phenomenon was employed in ancient times to estimate the heights of objects?

WEEK-2

- 1) The Babylonian geometry mainly boils down to solving?
- 2) Which mathematician contemplated the creation of universal language 'Characteristica universalis' and a precise science of reasoning 'Calculus ratiocinator'?
- 3) It is claimed that the priest architects of Egypt could lay out a right angle with the aid of a rope divided in to a ratio by three knots. What is this ratio?
- 4) Zephirum, Iziphra, Cenero and Sifr are different names of _?
- 5) The pyramids of Egypt are monuments to truths about?
- 6) Which ancient book contains 64 Hexagrams?
- 7) Which mathematician prepared the trigonometric tables seen in a modern textbook?

- 8) Who wrote one of the oldest documents on mathematics, Rhind Papyrus'?
- 9) Which ancient school of thought believed that the universe is primarily made of numbers?
- 10) The most popular method of long multiplication 'Gelasia' in the 15th and 16th century world had its origin in _?

WEEK-3

- 1) A figure and a platform, not a figure and six pence' was the motto amongst _?.
- 2) Which is the most remarkable Babylonian mathematical table?
- 3) In the Stonehenge, the primitive astronomical observatory, stones arranged almost in the form of a _?
- 4) Where were red and black colored rods employed to denote positive and negative numbers respectively?
- 5) Where has been found an ivory scale of linear measurement of the time of the Indus Valley Civilization?
- 6) The Antikythera device found in an ancient shipwreck of a Greek island was?.
- 7) Which device was popular in Europe for counting purpose during 1200 to 1800?
- 8) When did the monumental "Principia Mathematica' of A.N Whitehead and Bertrand Russell appear?
- 9) When was 'Rhind Papyrus' oldest document on Mathematics discovered?

WEEK-4

- 1) Russell Maloney's story book gives an idea about statistics. Name this book.
- 2) This classic of Plato contains reference to numbers whose significance is still being dug out by mathematicians. Name it.
- 3) Who is the author of geometry oriented science fiction Flatland?
- 4) "The world can be made intelligent in terms of right angles" This statement was made in a world famous classic of Plato. Which is that classic?
- 5) Who explains his experience in a one dimensional world as depicted in the classic science fiction Flatland?

- 6) Which story shows how the law of average fails?
- 7) Who is the author of this book "The Law"?
- 8) "The senses delight in things duly proportional" who made this statement relating beauty to mathematics?
- 9) Who said "music is the pleasure of the human soul experiences from counting without being aware that it is counting"?
- 10) Who forwarded in his books this motto "The purpose of computing is insight, not numbers"?

WEEK-5

- 1) An artist as well as mathematician, he wrote a book on geometrical and perspective meant for artists. Who was he?
- 2) Who said "the power is not in the hands of the few but information in the hands of the many"?
- 3) Which books on mathematics has been described as a "scientific poem"?
- 4) Who is the author of "Mecanique Analytique"?
- 5) Himself an esteemed philosopher of mathematics, he wrote solely and extensively on the philosophy of mathematics. Who is he?
- 6) Who is the author of classic "Principia Mathematica"?
- 7) Who wrote one of the greatest mathematical treatises of ancient times the "Arithmetica"?
- 8) Who wrote "A Mathematician's Apology"?
- 9) Who wrote the first textbook on differential calculus?
- 10) Who is the author of "The Fractal Geometry of Nature" an important contribution to understanding form and complexity in the physical universe?

WEEK-6

- 1) Who wrote the classic "Paradoxes of the Infinite"?
- 2) Who wrote "Liber Abaci" which introduced the Indian number system and zero to the Europe?
- 3) Which mathematician wrote "Discourse of Method" in bed when he was hardly 16 years old and had studied mathematics for a few months only?
- 4) Who wrote the classic "On Growth and Form" a mathematical treatment of natural history.

- 5) Who wrote the popular “One, Two, Thre... Infinity” a book on numbers and their relationship with the cosmos?
- 6) Who is the author of “Mathematical Ideas, Their Nature and Use”?
- 7) Who wrote the recent mathematical masterpiece “Godel, Escher, Bach: An Eternal Golden Braid”?
- 8) Who discovered the oldest document on mathematics?
- 9) Who wrote the witty and amusing book “A Budget of Paradoxes”?
- 10) Who is the author of the classic “Men of Mathematics”?