



Modernage Public School & College, Pakistan
Homework for Summer Break
Grade XI (Abbottabad), Session 2026-27

Dear Parents and Students of Grade XI,

As we conclude a term marked by academic progress and focused effort, we commend our students for their dedication and resilience in facing the challenges of a board class. With the summer break ahead, we aim to make the most of this time by reinforcing key concepts, revising important topics, and building a strong foundation for the upcoming session.

This summer, our focus remains on structured revision. Students are expected to revisit previously covered content, follow a revision timetable, and work on concept lists prepared by subject teachers. These efforts will not only strengthen their understanding but also prepare them well for the board examinations.

Purpose of the Homework

- To systematically revise essential topics from the course.
- To consolidate learning through concept mapping and focused practice.
- To build self-discipline, time management, and exam readiness.

What to Expect

- A well-planned revision timetable shared for all core subjects.
- Concept-based question sets and practice papers.
- Tasks that encourage reflective learning and conceptual clarity.

Parental Involvement

We value and appreciate the role of parents in supporting students through this crucial academic year. We encourage you to:

- Ensure a balanced daily schedule for your child with dedicated study hours.
- Support the use of concept lists and past paper practice.
- Motivate them through appreciation and regular check-ins.

Summer Vacation Schedule

- **School will remain closed from Thursday, 25th June 2026.**
- **Classes will resume on Monday, 3rd Aug 2026, In Sha Allah.**

Homework Submission

All summer homework, revision assignments, and concept lists must be submitted on **Monday, 3rd Aug 2026**.

As we step into this summer break, we wish our students a restful yet productive time. May this break recharge their minds and prepare them for a successful academic journey ahead.

• For homework details, visit www.maps.edu.pk, log in to the **school portal**, or check the **Modernage app**.

Looking forward to welcoming you back—refreshed, prepared, and ready to excel.

Warm regards,

Academic Coordinator

1. Biology

1. In integrated disease management involves:
A) Combating of disease, B) Loss of microbes, C) Extinction of species, D) Division of zygote
2. A structure within a cell that performs a specific function is called:
A) Molecule, B) Atom, C) Element, D) Organelle
3. Who said “Omni cellula e cellula”?
A) Lorenz Oke, B) Jean Baptist de Lamarck, C) Rudolph, D) August Weisman
4. The resolution of electron microscope ranges between:
A) 2-4 angstrom, B) 2-4 nm, C) 2-4 um, D) None of above
5. Which one of the following can easily cross the plasma membrane?
A) Alcohol, B) Glucose, C) Sucrose, D) All of them
6. Glyoxisomes are found in:
A) Pea, B) Gram, C) Soya bean, D) All of them
7. The number of chromosomes in the cell of frog is:
A) 16, B) 18, C) 22, D) 26
8. All living organisms are formed of basic units called:
A) Tissues, B) Organs, C) Atoms and sub-atomic particles, D) Cells
9. Cloning is a technology for achieving:
A) Eugenic aims, B) Scientific aims, C) Biology aims, D) Integrated aims
10. All the living and non-living matter is formed of:
A) Cells and cell products, B) Organic molecules and tissues, C) Atoms and sub-atomic particles, D) Organs and organelle
11. Heptoses contain:
A) Glucose, B) Maltose, C) Starch, D) Fructose
12. The kind of amino acids which are involved in the synthesis of most proteins are:
A) 20, B) 30, C) 40, D) 60
13. Coiling of two strands of DNA is:
A) Parallel, B) Antiparallel, C) Lateral, D) Colateral
14. Rubber is an example of:
A) Carbohydrates, B) Waxes, C) Acylglycerol, D) Terpenoids

15. Which of the following kinds of atoms does not occur in carbohydrates?
A) Oxygen, B) Nitrogen, C) Carbon, D) Hydrogen
16. Globular proteins differ from fibrous proteins in:
A) Being non-crystalline, B) Having more amino acids, C) Their repeating units joined by peptide bond, D) Being soluble in aqueous medium
17. Peptide bonds are found in:
A) Lipid, B) Carbohydrate, C) Proteins
18. Amino acids are arranged in proper sequence during protein synthesis according to the instruction transcribed on:
A) DNA, B) Ribosomal RNA, C) Messenger RNA, D) Transfer RNA
19. Which of the following is a protein:
A) Cellulose, B) Insulin, C) ATP, D) Cholesterol
20. Which one of the following is an organic molecule?
A) $C_6H_{12}O_6$, B) H_2SO_4 , C) NO_2 , D) H_2O
21. Tetroses occurs in:
A) Fungi, B) Algae, C) Bacteria, D) Viruses
22. Peptide bond is a:
A) C-H link, B) C-O link, C) C-N link, D) N-H link
23. A triglyceride is a:
A) Protein, B) Lipid, C) Simple sugar, D) Nucleic acid
24. Enzymes are:
A) Steroids, B) Polysaccharides, C) Proteins, D) Triglyceride
25. To produce Lactose:
A) Two amino acids must form a peptide bond, B) Pairing of nitrogenous bases must occur between nucleotides, C) Glucose and fructose must undergo a hydrolysis reaction, D) Glucose and galactose must undergo a dehydration reaction
26. Which class of molecule is the major component of the cell membrane?
A) Wax, B) Phospholipid, C) Triglyceride, D) Cellulose
27. Glycogen is an example of a:
A) Both a polysaccharide and a carbohydrate, B) Phospholipid, C) Polysaccharide only, D) Carbohydrate only

28. Animals obtain carbohydrates mainly from:

A) Glycogen, B) Glucose, C) Sucrose, D) Starch

29. The biological function of a protein is determined by its:

A) Tertiary structure, B) Quaternary structure, C) Secondary structure, D) Primary structure

30. Glycerol is the backbone molecule for:

A) DNA, B) ATP, C) Triglycerides, D) Disaccharides

Answer the following questions.

1. Differentiate between staining techniques.
2. Why cell fractionation is important?
3. What is microdissection?
4. Why lysosome is known as a suicidal bag?
5. Elaborate the role of Mitochondria and Chloroplast.
6. Why cytoskeleton is important for cells?
7. Write a note on the types of Proteins.
8. Compare the types of Carbohydrates.
9. Explain the open-chain and closed-chain structures of Monosaccharides.
10. What is the importance of biomolecules in the life of an organism?

2. مضمون: اردو

سوال نمبر 1: سبق "کچھ ادب کے بارے میں" کا فنی و فکری جائزہ لکھیں۔

سوال نمبر 2: (الف) نظم "شہر آشوب اور نعت کا مرکزی خیال لکھیں۔

سوال نمبر 3: رسید برائے مکان فروخت لکھ کر لائیں۔

سوال نمبر 4: اپنے کسی سفر کی روداد دلچسپ انداز میں تحریر کریں۔

سوال نمبر 5: دو دوستوں کے درمیان گرمی کی بڑھتی ہوئی شدت اور اس کے سدباب کے حوالے سے مکالمہ تحریر کریں۔

3. Computer Science

1. Writing Data to a storage device such as hard disk or USB is called.
 - A. Storage operation
 - B. Output operation
 - C. Input operation
 - D. Processing operation
2. Microcomputer is found in form of:
 - A. Desktop casing
 - B. Tower casing
 - C. Notepad/Laptop
 - D. All of these
3. Inter connection between computer and physical devices to collect and exchange of data is called.
 - A. Internet of Things (IOT)
 - B. Data communication
 - C. Internet Surfing
 - D. Cloud computing
4. A technical method in which we hire hardware/software services by other computing service providing organization instead of buying them is called:
 - A. Mobile computing
 - B. Cloud computing
 - C. Virtual network
 - D. Out sourcing
5. A software that is used to control and coordinate the activities of computer system is called.
 - A. System Software
 - B. Application Software
 - C. Assemblers
 - D. Device driver
6. Which software provide additional feature to carry out system task which are beyond the O.S?
 - A. Language translator
 - B. System Software
 - C. Application Software
 - D. Device driver
7. Which types of software is used to improve the way people to do their work?
 - A. Productivity Software
 - B. System Software
 - C. Application Software
 - D. Education Software
8. Software that are used to entertain people are called.
 - A. Entertainment Software
 - B. 3D-animation software
 - C. Education Software
 - D. Gaming Software
9. Educational software is not useful for which of given option.
 - A. Foreign language

- B. Physics & chemistry
 - C. Mathematics
 - D. None of these
10. Program that supports cloud computing are called.
- A. Cloud Computing application
 - B. Web-based application
 - C. Mobile computing applications
 - D. Internet applications

Questions

(40)

1. How much RAM is recommended for gaming, and why is this amount beneficial
 2. Discuss the importance of drivers during the installation process.
 3. Provide a troubleshooting guide for a computer that does not start.
 4. Describe steps to resolve common software issues such as a frozen application.
 5. Provide examples of how computers have improved efficiency and quality of life in these areas.
- Create a PowerPoint presentation on Artificial Intelligence? Mention the modern and new era development.

Submission Guidelines:

1. Submit your answers in a neatly typed document.
2. Ensure each part is clearly labeled and questions are numbered.
3. Include any references or sources you used to gather information.

4: Physics:

1. Numerical of chapter 1 and 2 from the Abbottabad board book.
2. Example and Assignment of chapter no 1 and 2 from Abbottabad board book.
3. Chapter no 3
 - Projectile Motion
 - Elastic collision
4. Make at least 20 MCQS from 1st three chapters.

5. اسلامیات و مطالعہ قرآن

- سوال 1: بنیادی عقائد پر نوٹ لکھیں۔
- سوال 2: سورت بقرہ کا، شان نزول بیان کریں۔
- سوال 3: سورۃ البقرہ آیات 1 تا 20 کا با محاورہ ترجمہ لکھیں۔
- سوال 4: اسلام کا تعارف بیان کریں۔
- سوال 5: قرآن مجید کی خصوصیات بیان کریں۔

6: English:

1. Comprehension Passage:

Read the following Stanza and answer the questions below:

The tree that never had to fight
For sun and sky and air and light,
But stood out in the open plain
And always got its share of rain,
Never became a forest king
But lived and died a scrubby thing.

Questions:

1. Define enjambment and choose its example from the stanza.
2. Define metaphor and choose its example from the above stanza.
3. Write down the rhyming scheme of the stanza.
4. What type of tree is described in stanza?
5. What doesn't become a forest king?

2. Poetic Devices:

1. Define, with examples, the following poetic devices.:
a) Extended metaphor, b) hyperbole, c) alliteration d) assonance, e) Simile

3. Grammar:

1. Differentiate between possessive adjective and possessive pronoun with suitable examples.
2. Differentiate between abstract and concrete noun with examples.
3. Define transitional words and also use the following in your sentences.
a) meanwhile, b) furthermore, c) although, d) anyhow, e) consequently

4. Short Questions:

1. Where and when did the Quaid deliver his speech "The Responsibilities of the Youth"?
2. Which particular advice regarding the selection of career is given by the Quaid?
3. What is being called by the Quaid "The Rut"?
4. How did the mother of the seagull help him to fly?
5. Define setting and also write down the setting of the action of His First Flight.

5. Paraphrasing:

Paraphrase the following stanza.

The man who never had to toil
To gain and farm his patch of soil,
Who never had to win his share
Of sun and sky and light and air,
Never became a manly man
But lived and died as he began.

6. Application Writing:

Write an application to the principal of your college requesting him to give you full concession in monthly tuition fee.

7. Letter Writing:

Write a letter to the MD of your company for considering your rehiring after your termination.

7: Math:

Practice sheets are attached with the file

8: Chemistry:

Practice sheets are attached with the file.

Feel free to reach out if you have any questions or need further clarifications. Good luck!