

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

**O. M. BEKETOV NATIONAL UNIVERSITY
of URBAN ECONOMY in KHARKIV**

Methodological guidelines

for practical work

on the subject

“English”

(special course)

*(for 2nd year of full-time Bachelor degree students of the specialty
191 – Architecture and Town Planning)*

Kharkiv – O. M. Beketov NUUE – 2018

Methodological guidelines for practical work on the subject “English” (special course) (for 2nd year of full-time Bachelor degree students of the specialty 191 – Architecture and Town Planning) / O. M. Beketov National University of Urban Economy in Kharkiv; com. S.O. Zubenko. – Kharkiv : O. M. Beketov NUUE, 2018. – 52 p.

Compiler S. O. Zubenko

Reviewer Ph. D. in Philology O. L. Ilienکو

Recommended by the department of foreign languages,
record № 7 of 6.02.2018.

CONTENT

Unit 1	Architect And Architecture	
Text 1 A	Architecture	3
Text 1 B	What Do Architects Do?	5
Text 1C	Southern California Institute Of Architecture	7
	The Royal Institute Of British Architects	
Unit 2	Famous Architects	
Text 2A	Antonio Rinaldi	10
Text 2 B	Robert Adam	12
Text 2C	Tadao Ando	14
Unit 3	Ancient Egyptian Architecture	
Text 3 A	Ancient Egyptian Architecture	16
Text 3 B	The Great Pyramid Of Giza	18
Text 3 C	Cultural Differences	20
Unit 4	British Architecture	
Text 4 A	Stonehenge	24
Text 4 B	Hadrian Wall	26
Text 4 C	St. Paul's Cathedral	29
Unit 5	Greek Architecture	
Text 5 A	Greek Architecture	32
Text 5 B	Orders Of Architecture	35
Text 5 C	Parthenon, Erechtheum, The Temple Of Athena Nike Monument Of Lysicrates	39
Unit 6	Roman Architecture	
Text 6 A	Ancient Roman Architecture	41
Text 6 B	Roman And Greek Architecture	44
Text 6 C	The Roman Coliseum	47

UNIT 1.

ARCHITECT AND ARCHITECTURE

TEXT 1A

ARCHITECTURE

Architecture (in Greek *αρχή* = first and *τέχνη* = craftsmanship) is the art and science of designing buildings and structures. A wider definition would include within its scope the design of the total built environment, from the macrolevel of town planning, urban design, and landscape architecture to the microlevel of furniture.

According to the very earliest surviving work on the subject, Vitruvius' *De Architectura*, good building should have Beauty (Venustas), Firmness (Firmitas) and Utility (Utilitas); architecture can be said to be a balance and coordination among these three elements, with none overpowering the others. A modern day definition sees architecture as addressing aesthetic, structural and functional considerations. However, looked at another way, function itself is seen as encompassing all criteria, including aesthetic and psychological ones.

Architecture is a multi-disciplinary field, including within its fold mathematics, science, art, technology, social sciences, politics, history, philosophy, and so on. In Vitruvius' words, "Architecture is a science, arising out of many other sciences, and adorned with much and varied learning: by the help of which a judgement is formed of those works which are the result of other arts". He adds that an architect should be well versed in fields such as music, astronomy, etc. Philosophy is a particular favourite; in fact one frequently refers to the philosophy of each architect when one means the approach. Rationalism, empiricism, structuralism, poststructuralism, and phenomenology are some directions from philosophy influencing architecture. Architecture is also the art of designing the human built environment. Buildings, landscaping, and street designs may be used to impart both functional as well as aesthetic character to a project. Siding and roofing materials and colors may be used to enhance or blend buildings with the environment. Building features such as

cornices, gables, entrances, and window treatments and borders may be used to soften or enhance portions of a building. Landscaping may be used to create privacy and block direct views from or to a site and enhance buildings with colorful plants and trees. Street side features such as decorative lighting, benches, meandering walkways, and bicycle lanes may either enhance or degrade the experience of a project site for passersby, pedestrians, and cyclists.

Vocabulary:

craftsmanship	майстерність
landscape	пейзаж
scope	масштаб, розмах, сфера
cornice	карниз
gable	фронтон
border	кромка

1. Match words with definitions.

- | | |
|----------------------|--|
| 1. architecture | a) someone who is walking, especially along a street or other place used by cars |
| 2. town planning | b) the style and design of a building or buildings |
| 3. built environment | c) the air, water, and land on Earth, which can be harmed by man's activities |
| 4. pedestrian | d) places where there are buildings and roads, and not the countryside |
| 5. environment | e) the study of the way towns work, so that roads, houses, services etc can be provided as effectively as possible |

2. Fill in the gaps using words below.

privacy architect including designing science

Architecture is the art and 1)_____ of designing buildings and structures. Architecture is a multi-disciplinary field, 2)_____ mathematics, science, art, technology, social sciences, politics, history, philosophy, and so on. An 3) _____ should be an expert in music, astronomy and philosophy. Architecture is also the art of 4)_____ the human built environment. Landscaping may be used to create 5)_____ and block direct views from or to a site and add to buildings colourful plants and trees.

TEXT 1 B

WHAT DO ARCHITECTS DO?

Architects are designing the built environment that will surround us in the 21st Century. As professionals in the field of building design and construction, architects use their unique creative skills to advise individuals, property owners and developers, community groups, local authorities and commercial organizations on the design and construction of new buildings, the reuse of existing buildings and the spaces which surround them in our towns and cities.

The work of architects influences every aspect of our built environment. Because of their ability to design and their extensive knowledge of construction, architects' skills are in demand in all areas of property, construction and design. Architects' expertise is invaluable when we need to conserve old buildings, redevelop parts of our towns and cities, understand the impact of a development on a local community, manage a construction program or need advice on the use and maintenance of an existing building.

Architects work closely with other members of the construction industry including engineers, builders, surveyors, local authority planners and building control officers. They spend a lot of time visiting sites in Ukraine and abroad, assessing the feasibility of projects, inspecting building work or managing the construction

process. They also spend time researching old records and drawings, and testing new ideas and construction techniques.

Society looks to architects to define new ways of living and working, to develop innovative ways of using existing buildings and creating new ones. We need architects understanding the complex process of design and construction to build socially and ecologically sustainable cities and communities.

Vocabulary:

invaluable	неоціненний
impact	вплив, поштовх
to manage	керувати
maintainance	експлуатація
surveyor	топограф
assess	оцінювати
feasibility	можливість виконання
sustainable	життєздатний

1. Find Word combinations.

- | | |
|-----------------|--------------|
| 1) professional | a) owners |
| 2) property | b) process. |
| 3) local | c) new ways |
| 4) construction | d) experts |
| 5) to define | e) community |

2. Questions.

1. What do architects do?
2. When is the architect's expertise invaluable?
3. Who do they work closely with?
4. How do architects organize their activity?
5. What does society expect from architects?

3. Translate into your native language

- professional experts
- design and construction
- unique creative skills
- commercial organizations
- the reuse of existing buildings
- energy efficient buildings
- to be invaluable
- manage a construction program
- surveyor
- to assess the feasibility of a project
- drawing
- construction technique.
- develop innovative ways
- sustainable cities

TEXT 1 C

SOUTHERN CALIFORNIA INSTITUTE OF ARCHITECTURE

1. Before reading match words with definitions.

- | | |
|----------------------|--|
| 1. outnumber | a) the first level of university degree; BA |
| 2. lecture | b) the art and practice of planning and designing buildings: |
| 3. bachelor's degree | c) one of three periods of equal length that the year is divided into in some school |
| 4. trimester | d) a university degree such as an MA or an MSc, which you get by studying for one or two years after your first degree |
| 5. master's degree | e) a long talk given to a group of people on a particular subject, especially as a method of teaching in universities |
| 6. resident | f) to be more in number than another group |
| 7. architecture | g) someone who lives or stays in a place such as a house or hotel |

- | | |
|---------------------------|--|
| 8. campus | h) someone who has completed a university degree course, especially for a first degree |
| 9. graduate student | i) especially BrE a student who is doing a university course for a first degree |
| 10. undergraduate student | j) the land and buildings of a university or college |

2. Read and discuss

Southern California Institute of Architecture

Southern California Institute of Architecture architect-training school. It was founded in 1972 in Santa Monica, California. Enrollment is roughly 500 students, with the numbers of undergraduates and graduate students being almost equal. Men considerably outnumber women. About half the students are state residents, and approximately a quarter are from foreign countries.

The academic calendar is divided into trimesters. A five-year program leads to a bachelor of architecture degree, and a master's degree takes from one and a half to three and a half years to complete (depending on the student's undergraduate experience). Studies focus on architectural history, theory, technology, and practice. A student committee organizes the Design Forum lectures that bring professional architects to campus to exhibit their work and share their perspectives. Students can study abroad at the institute's villa in Switzerland or through exchange programs with the Shibaura Institute of Technology in Tokyo and the Moscow Institute of Architecture in Russia.

The Royal Institute of British Architects

The course for the diploma examinations of the Royal Institute of British Architects (RIBA), seven years in all, comprises two degrees, firstly a Bachelor of Art (=BA) and then a Bachelor of Architecture. The B.A. course is three years long. The B.Architecture degree starts with two years out of the college in an office. The

student pursuing a programme of training under the guidance of practicing architect, during a break usually between the third and the fourth years, is called architect-in-training or intern architect. All candidates must have two years practical experience before taking the examinations in the Professional Practice and Practical Experience in the school approved by the RIBA for this purpose. Then two further years in the University, then a final year out in which the final RIBA exams are taken before one can qualify for corporate membership of the RIBA.

Vocabulary

to pursue дотримуватися

Focus on Wit & Wisdom

Match the beginning of a proverb with the end.

- | | |
|-------------------------|-------------------------------|
| 1. A bad workman | a) spoil the broth |
| 2. Too many cooks | b) makes perfect |
| 3. Where there's a will | c) mice will play |
| 4. Practice | d) always blames his tools |
| 5. Necessity | e) is the mother of invention |
| 6. When the cat's away | f) there is a way |

Explain their meaning. Find out equivalents in Russian or Ukrainian.

TEXT 3A

ANTONIO RINALDI

Antonio Rinaldi (1710 - April 10, 1794) was an Italian architect, trained by Luigi Vanvitelli, who worked mainly in Russia.



In 1751, during a trip to England, he was summoned by hetman Kirill Razumovsky to decorate his residences in Ukraine. To this early period belong the Resurrection cathedral in Pochev near Bryansk and the Catherine Cathedral in Yamburg, now Kingisepp near St Petersburg, where Rinaldi successfully expressed the domed, centrally-planned form required by traditional Russian Orthodox practice in a confident Italian Late Baroque vocabulary.

His first important secular commission was the Novoznamenka chateau of Chancellor Woronzow. In 1754, he was appointed chief architect of the young court, i.e., the future Peter III and Catherine II, who resided at Oranienbaum. In that town he executed his best-known baroque designs: the Palace of Peter III (1758-60), the sumptuously decorated Chinese Palace (1762-68), and the Ice-Sliding Pavilion (1762-74).

In the 1770s, Rinaldi served as the main architect of Count Orlov, who was Catherine's prime favourite and the most powerful man in the country. During this period he built two grandiose Neoclassical residences, namely the Marble Palace on the Palace Embankment in St Petersburg and the roomy Gatchina Castle, which was subsequently acquired for Emperor Paul and partly remodeled. He also designed for Orlov several monuments in Tsarskoe Selo, notably the Orlov Gates, Kagul Obelisk and the Chesma Column. He completed the work started by Jean-Baptiste Vallin de la Mothe on the Catholic Church of St. Catherine.

Rinaldi's last works represent a continuous transition from the dazzling rococo of interiors to the reserved and clear-cut treatment of facades characteristic of

Neoclassicism. These include two St Petersburg cathedrals, one dedicated to St Isaac the Dalmatian and subsequently demolished to make way for the present Empire-style structure, and the other, dedicated to Prince Vladimir and still standing.

In 1784, the old master resigned his posts on account of bad health and returned to Italy. He died in Rome in 1794.

Vocabulary

dazzling

сліпучий

reserved

закритий

1. Match the words from the article on the left with their synonyms on the right.

- | | |
|------------------|---------------------------|
| 1. vocabulary | a) pompous, flamboyant |
| 2. secular | b) to devote |
| 3. commission | c) material, worldly |
| 4. sumptuously | d) evolution, shift |
| 5. grandiose | e) terms, lexis, glossary |
| 6. subsequently | f) stunning, amazing |
| 7. transition | g) because of |
| 8. dazzling | h) order |
| 9. on account of | i) later, next |
| 10. to dedicate | j) luxuriously, opulently |

2. What do these figures refer to: 1710, 1751, 1754, 1970s, 1784, 1794.

3. INTERNET: Search the Internet and find more information about Robert Adam. Talk about what you discover with your partner(s) in the next lesson.

TEXT 2B

ROBERT ADAM

1. Choose the correct heading for each paragraph

- A. His family* *B. Palladianism and Adam's rebellion*
C. The Grand Tour *D. Early work*

This Scot architect had a profound effect on Georgian life, and the classical design of English Country Houses.

1) _____ Robert Adam was born in 1728, the son of a stonemason. He moved to Edinburgh at the age of 11, where his father William became the pre-eminent architect in Scotland. Robert attended Edinburgh University, but he never did graduate, due to the twin specters of illness and The '45 Jacobite rebellion. At the age of just 20 his father died and Robert joined the family architectural firm, which became known as Adam Brothers.

2) _____ After a few short years of practice, Robert left on an extensive "Grand Tour" of France and Italy, where he studied classical Roman ruins and learned drafting and drawing skills. When he returned he moved to London and hung out his shingle as a practicing architect. It did not take him long to become the fashionable architect of the high society set.

3) _____ England at that time was undergoing a surge of interest in classical architecture, prompted by the "Palladian" movement, named after Renaissance architect named Andrea Palladio, who tried to recreate the style and proportions of the buildings of ancient Rome. Adam was something of a rebel against the Palladians, who insisted on following strict Roman lines and proportion. They copied, Adam innovated and experimented, and the result was a body of work that approached genius.

4) _____ His first successes were the Admiralty Arch at Whitehall, and the interior apartments at Hatchlands. Adam was most often asked to remodel existing houses, so much of his work is interior. Adam was a success in part

because he insisted on designing everything himself, down to the tiniest detail. The result is work that has a sense of overall unity, or flow. He moved beyond the Roman classical style, and borrowed heavily from Greek, Byzantine, and Italian Baroque influences. Robert Adam died in 1792 at the age of 64. Some of his work was replaced or remodeled as fashions in interior decoration changed over the next centuries, but enough remains that his legacy cannot be forgotten.

Vocabulary:

rebellion	повстання, бунт	unity	єдність
drafting	креслення	legacy	спадщина
drawing	рисування, малювання;		

2. Match words with their definitions.

- | | |
|-----------------|--|
| 1. graduate | a) the upper classes, |
| 2. rebellion | b) something whole or complete that is composed of separate parts |
| 3. shingle | c) a group of people with a common ideology, esp a political or religious one |
| 4. drawing | d) organized resistance or opposition to a government or other authority |
| 5. high society | e) a picture or plan made by means of lines on a surface, esp. one made with a pencil or pen without the use of colour |
| 6. movement | f) something handed down or received from an ancestor or predecessor |
| 7. strict | g) a small signboard or nameplate fixed outside the office of a doctor, lawyer, etc |
| 8. unity | h) severely correct in attention to rules of conduct or morality |
| 9. legacy | i) to receive or cause to receive a degree or diploma |
| 10. genius | j) a person with exceptional ability, esp of a highly original kind |

3. What do these figures refer to: 1728, 11, 20, 45, 64.

4. INTERNET: Search the Internet and find more information about Robert Adam. Talk about what you discover with your partner(s) in the next lesson.

TEXT 2 C
TADAO ANDO

1. Choose the correct word.

Tadao Ando was born in 1941 in Osaka, Japan. He is a *profile / prolific* architect and is in demand the world *under / over*. He designs buildings using his distinctive approach to architecture. His style uses simple *farms / forms*, lots of exposed concrete, and the creative use of natural light. People describe his *work / workers* as ‘international modernism’. A leading architectural critic said: "Ando is right in the Japanese tradition.”

Ando *spent / spending* his childhood making wood models. He spent hours in a carpenter’s shop *across / opposite* the street and learnt many techniques from the craftsmen. After leaving school he *drafted / drifted* from job to job. He was a truck driver and tried his *lucky / luck* as a boxer. He eventually got into architecture, even though he had no qualifications.

Ando began teaching *himself / him* the principles of designing buildings. He visited temples and shrines in Kyoto and Nara to get a *felt / feel* for traditional Japanese architecture. He also travelled to Europe to *sketch / scratch* the magnificent buildings there. His maiden project was Tomishima House in Osaka in 1973. Twenty years later he *completed / completion* his first international project – the Japanese Pavilion at Expo92 in Sevilla, Spain.

Ando was first recognized *for / of* his work in 1979, when he won the Annual Prize from the Architectural Institute of Japan. In 1995, he *scooped / snooped* the Pritzker Prize – the highest distinction in world architecture. He *donation / donated* the \$100,000 prize money to the orphans of the Kobe earthquake. A housing *complicated / complex* he designed in Kobe survived the earthquake undamaged.

Vocabulary:

dazzling	засліплювати, зачаровувати; вражати
prolific	плідний, родючий
secular	мирський, світський
scoop	черпак; ківш
transition	перехід; переміщення

2. Match the words from the article on the left with their synonyms on the right.

- | | |
|-------------------|---------------------------|
| 1. prolific | a) training, credentials |
| 2. distinctive | b) productive, creative |
| 3. leading | c) main beliefs |
| 4. eventually | d) principal, primary |
| 5. qualifications | e) unique, distinct |
| 6. principles | f) ultimately, in the end |

3. Match the following phrases from the article.

- | | |
|-----------------------------|--------------------------|
| 1. in demand | a) in world architecture |
| 2. his distinctive approach | b) making wood models |
| 3. the creative use | c) Japanese architecture |
| 4. Ando spent his childhood | d) complex |
| 5. learnt many techniques | e) to architecture |
| 6. the principles of | f) of natural light |

- | | |
|-----------------------------------|-------------------------|
| 7. get a feel for traditional | g) the world over |
| 8. the highest distinction | h) money to the orphans |
| 9. He donated the \$100,000 prize | i) from the craftsmen |
| 10. housing | j) designing buildings |

4. INTERNET: Search the Internet and find more information about Tadao Ando. Talk about what you discover with your partner(s) in the next lesson.

Unit 3

ANCIENT EGYPTIAN ARCHITECTURE

TEXT 3

ANCIENT EGYPTIAN ARCHITECTURE

For at least ten thousand years, the Nile valley has been the site of one of the most influential civilizations in the world. Even today, its architectural monuments, which include Great Pyramid and the Great Sphinx, are among the largest and most famous buildings in the world.

Characteristics. Due to the scarcity of wood, the two predominant building materials used in ancient Egypt were unbaked mud brick and stone. From the Old Kingdom onward, stone was generally reserved for tombs and temples, while bricks were used even for royal palaces, fortresses, the walls of temple precincts and towns, and for subsidiary buildings in temple complexes.

Most ancient Egyptian towns have been lost because they were situated in the cultivated and flooded area of the Nile Valley, although the dry, hot climate of Egypt preserved some mud brick structures. On the other hand, many temples and tombs have survived because they were built on ground unaffected by the Nile flood and were constructed of stone. The exterior walls, as well as the columns and piers, were covered with hieroglyphic and pictorial carvings in brilliant colors. Many motifs of Egyptian ornament are symbolic, such as the scarab, or sacred beetle, the solar disk,

and the vulture. Other common motifs include palm leaves, the papyrus plant, and the buds and flowers of the lotus. Hieroglyphics were decoration as well as records of historic events.

Influence upon European architecture. Ancient Egyptian architecture has had influence upon the architecture and art of medieval Europe, notably in the early 17th century, when Renaissance designers brought elements of Egyptian art into the ornamentation of castles and other buildings. Examples of this phenomenon are found in Scotland.

Vocabulary:

prophesy	пророцтво	scarcity	недолік
tomb	могила	vulture	шуліка
settlement	поселення	temple	земля
		precinct	прилегла до храму
solitude	усамітнення	carving	різблення

1. Match the following phrases from the article.

- | | |
|---|--|
| 1. For at least ten thousand years, the Nile valley has been the site | a) they were situated in the cultivated and flooded area of the |
| 2. Two predominant building materials used in ancient Egypt | b) such as the scarab, or sacred beetle, the solar disk, and the |
| 3. Most ancient Egyptian towns have been lost because | c) of one of the most influential civilizations in the world. |
| 4. Many temples and tombs have survived because | d) the architecture and art of medieval Europe |
| 5. Many motifs of Egyptian ornament are symbolic, | e) unbaked mud brick and stone |
| 6. Ancient Egyptian architecture has had influence upon | f) they were built on ground unaffected by the Nile flood and |

2. Answer the following questions.

1. What were the two predominant building materials used in ancient Egypt for?
2. Why have most ancient Egyptian towns been lost?
3. Are motifs of Egyptian ornament symbolic?
4. Why were Hieroglyphics used in ancient Egyptian Architecture?
5. Has the Ancient Egyptian architecture influenced the architecture and art of Europe?

TEXT 3 B

1. Read the text and answer the questions. Choose the correct variant.

THE GREAT PYRAMID OF GIZA

The Great Pyramid Of Giza, a monument of wisdom and prophecy, was built as a tomb for Pharaoh Cheops in 2720 b.c. Despite its antiquity, certain aspects of its construction make it one of the truly great wonders of the world. The four sides of the pyramid are aligned almost exactly on north, south, east, and west – an incredible engineering feat. The ancient Egyptians were sun worshipers and great astronomers, so computations for the Great Pyramid were based on astronomical observations.

Explorations and detailed examinations of the structure reveal many intersecting lines. Further scientific study indicates that these represent a type of time line of events – past, present, and future. Many of the events have been interpreted and found to coincide with known facts of the past. Others are prophesied for future generations and are presently under investigation.

Was this superstructure made by ordinary beings, or one built by a race far superior to any known today?

Vocabulary:

wisdom	мудрість
feat	прояв мистецтва
computations	обчислення
to worship	поклонятися
to coincide	співпадати

1. Approximately how long ago the Great Pyramid constructed?
 - (A) 640 years
 - (B) 2.720 years
 - (C) 4.000 years
 - (D) 4.700 years

2. On what did the ancient Egyptians base their calculations?
 - (A) observation of the celestial bodies
 - (B) advanced technology
 - (C) advanced tools of measurement
 - (D) knowledge of the earth's surface

3. Why was the Great Pyramid constructed?
 - (A) as a solar observatory
 - (B) as a religious temple
 - (C) as a tomb for the pharaoh
 - (D) as a engineering feat

4. Why is the Great Pyramid of Giza considered one of the Seven Wonders of the World?
 - (A) It is perfectly aligned with the four cardinal points of the compass and contains many prophecies.
 - (B) It was selected as the tomb of Pharaoh Cheops.
 - (C) It was built by a super race.
 - (D) It is very old.

2. Read the text and fill in the gaps. Choose the best variant to complete the sentence.

The Great Sphinx

To the south of Khafre's pyramid at Giza near Cairo sits a huge creature with the head of a 1)_____ and a lion's body. This monumental statue, the first truly colossal royal sculpture in Egypt, known as the Great Sphinx, is a national

2)_____ of Egypt, both ancient and modern.

The word "sphinx", which means 'strangler', was first given by the Greeks to a magnificent creature which had the head of a woman, the body of a 3)_____ and the wings of a 4)_____. In Egypt, there are numerous sphinxes, usually with the head of a 5)_____ wearing his headdress and the body of a lion. There are, however, sphinxes with ram heads that are associated with the god Amun.

- | | | | |
|----|------------|-----------|-----------|
| 1. | A) human | B) bird | C) lion |
| 2. | A) picture | B) symbol | C) figure |
| 3. | A) sparrow | B) king | C) lion |
| 4. | A) bird | B) horse | C) whale |
| 5. | A) king | B) earl | C) duke |

TEXT 3C

CULTURAL DIFFERENCES Cairo: City of Dead

Naema Zaki and her five children have been forced to make the cemeteries in Cairo's City of the Dead their permanent home because of the country's chronic housing crisis shortage. "We came to live in these cemeteries because they are inexpensive and practical for a starting point. However, soon we realized that it's not a temporary house and that we want to continue here... these people are kind and all of

us here care for each other, unlike other Cairenes.” said Zaki, a widow who lives in a tomb room in the Northern Cemetery with her children.

For many Cairenes the City of the Dead is a mysterious, foreboding area. Many Cairenes are aware of its existence but few understand this group of vast cemeteries that stretches out along the base of the Moqattam Hills.

Among these cemeteries lives a community of Egypt’s urban poor, forming an illegal but tolerated, separate society. “More than five million Egyptian live in these cemeteries, and have formed their own enterprises,” said Malak Yakan, an anthropologist and tour guide.

“There are five major cemeteries in this city there, the Northern Cemetery, Bab el Nasr Cemetery, the Southern Cemetery, the Cemetery of the Great, and Bab el Wazir Cemetery,” said Yakan.

From the Salah Salem Highway, the City of the Dead appears to be organized and proper, a match for the beige, sandy landscape of the distant Citadel. Inside, however these cemeteries bear witness to the centuries of Cairo’s history.

Previously, Cairo rulers chose the area for their tombs outside the crowded city in a deserted location. “This area was used as a burial ground for the Arab conquests, Fatimids, Abbasids, Ayyubids, Mamlukes, Ottomans, and many more,” said Yakan.

The historic belief in Egypt is that the cemeteries are an active part of the community and not exclusively for the dead. “Egyptians have not so much thought of cemeteries as a place of the dead, but rather a place where life begins.” said Yakan.

In modern times, because of Egypt’s housing crisis, a lack of satisfactory and affordable housing for a rapidly growing population, many poor Egyptians have made these rooms their permanent homes.

These invaders have adapted the rooms to meet their needs. “We have brought in the electricity by wires over the roofs coming from the nearby mosque to be able to be able to live properly,” said Zaki.

The City of the Dead seems to its inhabitants ideal because it is already built, affordable, and partially equipped. However there are many disadvantages of living there. "They are joined by even a greater number of cockroaches, mosquitoes, flies, and vermin of all sorts", writes Nedoroscik in *The City of the Dead, A History of Cairo's Cemetery Communities*.

The rooms are also filled with the overwhelming smell of the garbage piled outside their doors and sewage leaking out of the un-drained tanks.

In addition, "The residents settling in the City of the Dead are insecure about their living status because they are living there against the law," said Yakan. It was the French occupation from 1978-1801 that began changing the image of the vast cemeteries of the City of the Dead.

"It has brought a more westernized attitude towards cemeteries in the Egyptian society, making the presence of people living and carrying out activities in the cemeteries ignored, condemned and shamed by the majority of Cairene society," writes Nedoroscik. The cemeteries built in the City of the Dead are much different than the western idea of cemeteries. This is because traditionally, Egyptians buried their dead in room-like "burial sites" so they could live in them during the long mourning period of forty days.

Today, the population of the City of the Dead is growing rapidly because of rural migration and it's complicated housing crisis that is getting worse. But the future of the City of the Dead remains uncertain. The residents of the city will not deliberately agree to relocate unless the government provides other housing for them.

"I will not move from this house after all these years to go out in the streets," said Zaki, "Of course I want to leave the depressed mood in this place, but that doesn't mean I want to live in the street. We deserve proper houses."

Vocabulary

permanent	постійний	vermins	шкідники, паразити
community	община	housing	житло
enterprise	підприємство	provide	Забезпечувати

1. Here is the interview with Naema Zaki. Write questions to complete the interview.

1. _____

Naema Zaki

2. _____

We made the cemeteries in Cairo's City of the Dead our permanent home because of the country's chronic housing crisis shortage.

3. _____

For many Cairenes the City of the Dead is a mysterious, foreboding area.

4. _____

More than five million Egyptian live in these cemeteries

5. _____

Today, the population of the City of the Dead is growing rapidly because of rural

TEXT 4A***STONEHENGE***

Age: 5000 years

Visitors per year: 800,000

Historical fact: The largest of the Sarsen stones transported to Stonehenge weighted 50 tones. Modern calculations show that it would have taken 500 men using leather ropes to pull one stone, with extra 100 men needed to lay the huge rollers in front of the sledge.

Greatest wonders: No one really knows why it was built.

There is nothing quite like Stonehenge anywhere in the world. The name Stonehenge originates from Anglo-Saxon period – the old English word “henge” meaning hanging or gibbet. So what we have is literally “the hanging stones”. There are some wonderful myths and legends about the construction and purpose of the most fascinating stone monuments in the world. People have speculated about this circle of megaliths (large stones) for as long as it has been standing. This is a long time indeed. There is the same time between the fall of the Roman Empire and today as between the first and the last phase of the construction of Stonehenge. Stonehenge was built in several phases spanning 2000 years, from the Neolithic to the Bronze Age (3100BC to 1600 BC).

Archeologist estimate that Stonehenge took more than 120 million hours to build!

The biggest of the stones (weighting 50 tonnes) came from faraway Wales, though no one knows how.

But why was Stonehenge built? Some seriously argue that it is a landing platform for UFOs. Others think that it was a place for ritual sacrifices during the summer solstice. Some see it as a giant lunar and solar calendar. And there are still those who believe in Druidic religion performed rituals and magic on the site. But Stonehenge could not

be built by Druids. By the time they appeared in Britain, Stonehenge had already been abandoned.

Some theories recognize that Stonehenge served some astronomical purpose. And from excavations there is no doubt that the monument also was a burial ground, although there is no evidence at all of human sacrifice. A UNESCO World Heritage Site since 1986 claims, Stonehenge has had spiritual significance for many different groups over a long period of time. It is a symbol of the great achievement of an ancient people.

Vocabulary

Sarsen stone	Сарацинський камінь, сарсен (піщаний валун)	UFO Unidentified flying object	НЛО
leather rope	шкіряний канат	sacrifice	жертва
extra	додатковий	solstice	сонцестояння
roller	валик	solar	сонячний
Sledge	візок	site	місце
Plain	рівнина	Abandoned	залишений
Salisbury	Солсбері	purpose	призначення
speculate	розмірковувати	Burial ground	місце поховання
megalith	арх. мегаліт	evidence	свідчення
span	охоплювати(про період часу)	World Heritage Site	Світова організація
BC	до нашої ери		охорони
Before Christ			історичних пам'яток

1. Phrase match.

- | | |
|--|---|
| 1. The name Stonehenge originates | a) sacrifices during the summer solstice. |
| 2. Archeologist estimate that Stonehenge took | b) many different groups over a long period of time |
| 3. Others think that it was a place for ritual | c) more than 120 million hours to build |
| 4. Stonehenge has had spiritual significance for | d) Anglo-Saxon period |

TEXT 4B

HADRIAN WALL

One of the greatest monuments to the power and limitations - of the Roman Empire, Hadrian's Wall ran for 73 miles across open country.

Why was it built?

At the time of Julius Caesar's first small invasion of the south coast of Britain in 55 BC, the British Isles, like much of mainland Europe was inhabited by many Celtic tribes loosely united by a similar language and culture but nevertheless each distinct. He returned the next year and encountered the 4000 war chariots of the Catevellauni in a land "protected by forests and marshes, and filled with a great number of men and cattle." He defeated the Catevellauni and then withdrew, though not before establishing treaties and alliances. Thus began the Roman occupation of Britain.



Nearly 100 years later, in 43 AD, the Emperor Claudius sent Aulus Plautius and about 24,000 soldiers to Britain, this time to establish control under a military presence. Although subjugation of

southern Britain proceeded fairly smoothly by a combination of military might and clever diplomacy, and by 79 AD what is now England and Wales were firmly under control, the far North remained a problem. However, the Emperor Vespasian decided that what is now Scotland should also be incorporated into the Roman Empire. Under his instructions the governor of Britain, Julius Agricola, subdued the Southern Scottish tribal clans, the Selgovae, Novantae and Votadini by 81 AD. Further to the North lived loose associations of clans known collectively as the Caledonians. Agricola tried to provoke them into battle by marching an army into the Highlands eventually forcing a battle with the Caledonian leader Calgacus in present day Aberdeenshire at a place called Mons Graupius. 30,000 Caledonians were killed, but the Roman victory was a hollow one, for the next day the surviving clansmen melted away into the hills, and were to remain fiercely resistant and independent. By the time Hadrian became Emperor in 117 AD the Roman Empire had ceased to expand. Hadrian was concerned to consolidate his boundaries. He visited Britain in 122 AD, and ordered a wall to be built between the Solway Firth in the West and the River Tyne in the east "to separate Romans from Barbarians".

Vocabulary

encounter	несподівано зустрічатися з	subjugation	підкорення; підпорядкування
withdraw	відкликати; відводити (війська)	fairly	чесно; справедливо
treaty	договір, угода	subdue	підкоряти; скорят
alliance	союз; альянс	cease	зупиняти, припиняти

1. Put events into the chronological order.

Julius Caesar defeated the Catevellauni.	
The Emperor Claudius sent Aulus Plautius and about 24,000 soldiers to Britain to establish control under a military presence.	
Julius Caesar invaded the south coast of Britain.	1
The governor of Britian, Julius Agricola, subdued the Southern Scottish tribal clans.	
30,000 Caledonians were killed.	
Julius Caesar encountered the 4000 war chariots of the Catevellauni in a land "protected by forests and marshes".	
The Roman occupation of Britain began.	
Emperor Hadrian visited Britain in 122 AD, and ordered to build a wall between the Solway Firth in the West and the River Tyne in the east "to separate Romans from Barbarians".	
By 79 AD what is now England and Wales were firmly under control, but the far North remained a problem.	
Agricola tried to provoke other clans into battle by marching an army into the Highlands and forcing a battle with the Caledonians.	
The surviving clansmen melted away into the hills, and were to remain fiercely resistant and independent.	

TEXT 3 C

ST. PAUL'S CATHEDRAL



The Cathedral stands in the heart of the City at the head of the Ludgate Hill. It stands on a site that knew several earlier churches.

The first cathedral is attributed to Ethelbert, king of Kent, about the year 604. Tradition placed on this place a Roman temple of Diana. The church was dedicated to St Paul. It was destroyed by fire in 1087. During the slow rebuilding it was damaged by fire in 1136, enlarged in 1230 and 1256, a tall spire was added in 1315, and a chapter-house in 1332. It was a magnificent monument of Norman Early English and Early Decorated styles. In 1561 lightning struck the spire and fired the church. The spire was never rebuilt. In the time of James I Inigo Jones was commissioned to restore the cathedral. He added a classical portico to the west front and made some alterations to the transepts. In 1666 Dr (afterwards Sir) Christopher Wren was to prepare a scheme of restoration. All his plans were complete in August, but in September the Great Fire of London almost destroyed the building, and rendered it beyond restoration.

The foundation stone of the present building, the largest Protestant cathedral in England, was laid in 1675, the last stone was laid in 1710. The material is Portland stone. Christopher Wren received his knighthood in 1674 as the result of the King's approval of his bold plan to rebuild the cathedral with a dome. This idea was resisted by some critics and Wren had to compromise by adding a spire. Wren had to make some other changes in his original plan: he insisted on the style of the Renaissance, and his first design was for a building in the form of a Greek cross, but the general wish was that at least the ground plan of the Old English cathedral should be followed, and the form of a Latin cross was forced upon him.

The cathedral miraculously survived the heavy bombing during the Second World War which destroyed so much of the City – one delayed-action bomb which fell beside the cathedral never exploded!

The exterior is very effective and groups well with the central dome. The facades have two Orders, the lower Corinthian and the upper Composite. The aisles are only one storey high, so the part above them is a screen-wall introduced to give dignity and to act as a counterweight to the flying buttresses concealed behind it. The Western facade, approached by a broad flight of steps, has a central two-storeyed portico of coupled Corinthian and Composite columns superimposed, surmounted by a pediment with a carved representation of the Conversion of St Paul, whose statue stands upon its apex. St Peter and St James stand on his right and left. The portico is flanked by two beautifully proportioned towers with statues of the four Evangelists at the angles. The left (north) tower contains the 17-ton bell, "Great Paul", and that on the right (south) the clock. The external dome is probably the finest in Europe. The peristyle round the drum is very effective with its three-quarter columns. Above the colonnade is the "Stone Gallery", and attic supporting the dome, which is crowned with lantern, ball, and cross, weighing 850 tons, rising to a height of 366 ft above the pavement. The towers are 212 ft 6 in above the nave floor. The extreme length of the cathedral is 513 ft, the breadth across the transepts 248.

The choir terminates in an apse. The great central space at the crossing is suitable for vast congregations and is crowned by a dome painted by Sir James Thornhill. The north and south transepts end in semicircular porticoes. The windows in the clearstory are not visible from the exterior.

The dome is carried on eight piers, and is 112 ft in diameter at the base of the high drum, at the level of the Whispering Gallery (it takes its name from the fact that one can hear what is whispered at the other end of the gallery), diminishing to 101 ft at the top of the drum, and is of triple construction. The inner dome is of brick, 18 in thick, has its eye 214 ft 3 in above the floor, while the intermediate conical dome, of brick 18 in thick, strengthened by a double chain of iron, supports the stone lantern, ball, and cross; the outer dome also rests on this intermediate cone and is formed of timber covered with lead. Eight openings are formed in the upper part of the outer dome, these eight wells light the inner dome.

St Paul's contains many memorials to the famous people and to those who have served England in time of war, there is even American Chapel. Wren is buried not far from two of England's greatest heroes, Nelson and Wellington. On Wren's grave one can read the following words in Latin: "If you want to see my monument, look around you."

Vocabulary:

spire	шпиль	apex	гребінь, коньок (на даху)
commission	доручення; повноваження	peristyle	перистиль
portico buttresses	портик, галерея контрфорс	apse terminates	апсида завершити; покласти край
superimpose	накладати (одну річ на іншу)	lead	свинець
conversion	навертання (до віри і т.д.)	clearstory	ряд вікон у верхній частині стіни церкви, що відділяють неф від проходу

1. Match words with definitions.

- | | |
|------------------|---|
| 2. lantern | a) straight line passing through the centre of a circle or sphere to its edges |
| 3. cross | b) lamp with a transparent case protecting a flame etc. 2 raised structure on a dome, room, etc., glazed to admit light |
| 4. knight | c) pillar, usu. of circular section and with a base and capital |
| 5. spire | d) the highest point |
| 6. column | e) distance or measurement from side to side of a thing |
| 7. apex | f) representation of this as an emblem of Christianity |
| 8. counterweight | g) tapering structure, esp. on a church tower |
| 9. diameter | h) hist. a man, usu. noble, raised to honorable military rank after service as a page and squire |
| 10. breadth | i) counterbalancing weight |

2. Translate into your native language in writing.

spire; a classical portico; alterations; transepts; a scheme of restoration; foundation; a ground plan; a central dome; a façade; an aisle; a screen-wall; a counterweight; a flying buttress; to be superimposed; carved; an apex; an external dome; a portico; a lantern; an apse; a drum; a chapel

3. Answer the questions:

1. What is the history of the cathedral?
2. Is it the largest Catholic Church in England?
3. Why did it have to be restored after 1666?
4. Why did Christopher Wren have to change his original plan?
5. When did it have to be repaired and why?
6. What can you say about its exterior and style?

Unit 5

GREEK ARCHITECTURE

TEXT 5A

GREEK ARCHITECTURE

Although Greek architecture did not emerge from its archaic or primitive state until about the seventh century B.C., the few remains of the earlier works are interesting.

The earliest known inhabitants of Greece were the Pelasgi, but it is probable that the civilization which produced the great works, at first developed in Crete, an island to the south of Greece.

Explorations reveal a marvellous civilization which existed in Crete over four thousand years ago. The high degree of their civilization is illustrated by the fact that, at the palace at Knossos, there was a drainage system, which was not equaled in Europe until the nineteenth century.

Cretan settlements were established on the mainland at Mycenae and Tiryns, the former of which gives the name of "Mycenaean" to this early Greek architecture.

Mycenaean Period. This period is usually considered to last until the eighth century B.C. The remains found in many parts of the country are chiefly of town walls, fortifications, and tombs. The chief feature of the work is the use of massive blocks of stone, which were built in their rough state or hewn into rectangular blocks and bonded together ; mortar was not generally used. This masonry is called "Cyclopean", tradition ascribing its origin to the legendary giants, the Cyclopes.

At Mycenae, the town wall contains the famous Gate of Lions, the carved panel over which is probably the earliest example of Greek sculpture remaining.

Perhaps the oldest existing Greek structure of architectural importance is the Treasury of Atreus at Mycenae ; this was undoubtedly built as a tomb.

This chamber is about 50 ft. broad and 50 ft. high ; the great size of the stones used in its erection will be appreciated when it is said that the lintel over one of the doorways is 2.7 ft. long and 16 ft. deep'

Hellenic Period.

The architecture of the Hellenic Period differs greatly from the early works of the Greeks.

The study of a map of the Mediterranean Sea will show that the position of Greece was such that contact with Egypt and Asia was inevitable. The Greeks came into touch with Egypt through commerce, and were doubtless influenced by the columns used there; it is quite possible that the fluted column of the Doric Order was inspired by columns at the rock-cut tombs at Beni-Hasan. The Greeks were great colonists and established –settlements in Asia . In this way they became acquainted with the buildings of the Assyrians and Persians, from which they got a love of rich detail.

Greek architecture rarely contains just simple copies of foreign details, but rather some carefully selected features, which have been refined by their wonderful feeling for delicacy and proportion.

Many races are known to have settled in Greece during the early centuries ; the resulting people, known as the Hellenes, were never a united nation, but rather a group of self-governing states, drawn together by a passion for athletic games, religious festivals, and a love of fine arts, the drama, and music.

The history of Greece during the Hellenic period, known as the Golden Age.

Vocabulary

tomb	гробниця	rough	сирий
		hewn	обтесаний

1. Synonym Match

- | | |
|-----------------|--------------|
| 1. archaic | a) the same |
| 2. inhabitants | b) ancient |
| 3. civilization | c) town |
| 4. equal | d) residents |
| 5. settlement | e) progress |

2. Phrase Match

- | | |
|---|--|
| 1. The earliest known inhabitants | a) at first developed in Crete |
| 2. The civilization which produced the great works, | b) in Crete over four thousand years ago |
| 3. Crete is an island | c) of Greece were the Pelasgi |
| 4. A marvellous civilization existed | d) to the south of Greece. |

3. There are a number of quite difficult words in the text, but you should be able to work out what they mean from the context. Choose the most likely meaning (A,B or C) for the following words.

- | | | | |
|------------------|------------------------|----------------------|---------------|
| 1. fortification | A) собор | B) укріплення | C) міст |
| 2. hewn | A) обтесаний | B) розмальований | C) розколотий |
| 3. to last | A) закінчуватися | B) тривати | C) грати |
| 4. lintel | A) горизонтальна брила | B) вертикальна брила | C) дошка |

5. masonry	A) вапно	B) бетонна кладка	C) камінна кладка
6. mortar	A) вапняний розчин	B) бетон	C) каміння
7. rough	A) мокрий	B) жорсткий	C) необроблений
8. tomb	A) гробниця	B) скарбниця	C) місто
9. treasury	A) фортеція	B) скарбниця	C) банк

TEXT 5 B

ORDERS OF ARCHITECTURE

The orders are the highest accomplishment of the pillar and beam construction. In classical architecture, the order is a column with base (usually), shaft, and capital, and entablature, decorated and proportioned according to one of the accepted modes. The Greeks developed the Doric, Ionic, and Corinthian orders. The Romans added the Tuscan and Composite.

The entablature is the upper part of a classical order, between columns and pediment, consisting of architrave (the lowermost part), frieze (in the middle), and cornice (the uppermost part).

The columns have entasis or the slight swelling towards their centres. Its object is to correct the optical illusion that the column is thinner in the middle if its sides were straight or parallel.

The Doric is the oldest order subdivided into Greek Doric and Roman Doric. The former is the simplest and the most massive, it has no base, as on the Parthenon. Its stylobate usually has three high steps. The columns are about five and a half diameters high. They have 20 elliptical flutes, separated only by sharp edges. The intercolumniation or clear space between the columns is about one diameter and a third. The height of the entablature is rather more than twice the diameter of the column. Roman Doric was like Greek Doric; but it did have a base, and was less massive.

The Ionic order originated in Asia Minor in the mid 6th century B.C. It is characterized by a moulded base; tall, slim column shafts with 24 semi-circular flutes separated by flat fillets. The columns are between eight and nine diameters high and a little more than two diameters apart. Its capitals have large volutes, or spiral scrolls. Its fascinating entablature has continuous frieze, usually dentils in the cornice. It was less heavy than the Doric and less elaborate than the Corinthian.

The Corinthian order was an Athenian invention of the 5th century B.C. It is the slenderest and most ornate of the three Greek orders. In its general proportions it is very like the Ionic. It is characterized by a high base, sometimes a pedestal; slim, fluted column shaft with fillets; bell-shaped capital with 8 volutes and two rows of acanthus leaves. It has an elaborate cornice. At first it was used for interiors only. Generally speaking, there are very few Greek examples. It was much used by the Romans for its showiness. The Roman abacus was sometimes enriched with egg-and-dart, as were also parts of the architrave. The Roman cornice was very richly treated and often has modillions carved with acanthus.

The Tuscan order is a simplified version of the Roman Doric, having a plain frieze and no mutules in the cornice. The columns are unfluted. The mouldings are fewer and bolder.

The Composite order is a late Roman combination of elements from the Ionic and Corinthian orders. This order is really a variety of the Corinthian. Its abacus has the plan of the Corinthian abacus - a square with convex sides. Under the projecting angles there are large volutes placed diagonally and, in some cases, springing from behind the band of egg-and-dart borrowed from the Ionic.

Any order whose columns or pilasters rise through two or more storeys of a building is called the Colossal order. Sometimes it is also named the Giant or Grand order. Its opposite is the Miniature or Dwarf order. The Romans applied it to windows or tabernacles (decorative niches often topped by canopies and housing statues).

Vocabulary:

bell-shaped	колоколоподібний	fillet	поясок, загдиблення
canopy	навіс, накриття	mould	профіль, форма
convex	випуклий	ornate	пишно прикрашений
dwarf	карлик(овий)	scroll	завиток, волюта
egg-and-dart	іоніки з стрілками	shaft	стержень колони
elaborate	детально (старанно)	swelling	припухлість

1. Match words with their definitions.

- | | |
|--|----------------------|
| 1. A clear space between the columns | a) entasis |
| 2. The upper part of a classical order between the columns and pediment | b) volutes |
| 3. The middle part of the entablature. | c) intercolumniation |
| 4. The slight swelling towards the centre of a column. | d) entablature |
| 5. The spiral scrolls of the Ionic and Corinthian capitals. | e) abacus |
| 6. A particular style of column with its entablature, having standardized details. | f) frieze |
| 7. The lowest part of the entablature. | g) capital |
| 8. The topmost member of a column, pilaster, or anta. | h) stylobate |
| 9. The uppermost member of the capital of a column. | i) architrave |
| 10. Any continuous base, plinth, or pedestal, upon which a row of columns is set. | j) order |

2. Translate the dialogue into English.

A: Давай обговоримо архітектурні ордери.

B: Не заперечую. Мені хотілося б взяти щось про доричний ордер.

A: Наскільки мені відомо, він досить потужний за своїми пропорціями. Дорична колона має подушкоподібну¹ капітель, тобто ехін², та квадратну плиту³, що називається абакою.

B: Що ти знаєш про доричний антаблемент?

A: Він має фриз з перемінними⁴ тригліфами⁵ та метопами⁶, а у карнизі є мутули, усіяні⁷ гутами⁸ або каплями⁹.

B: Який пам'ятник є найбільш характерним прикладом доричного стилю?

A: Це Парфенон¹⁰.

B: Хіба це так?

A: Я в цьому не сумніваюсь. Парфенон – це найдревніший існуючий приклад доричного ордеру.

B: Варто відмітити, що доричний, тосканський та іонічний ордери були описані Вітрувієм¹¹ у його десяти книгах “De Architectura”. Це єдиний повний трактат¹², який зберігся з античності.

A: Дякую за інформацію.

B: Будь ласка.

1. cushion-like; 2. echinus; 3. tablet; 4. alternating; 5. triglyphs; 6. metopes; 7. studded with; 8. guttae; 9. drops; 10. Parthenon; 11. Vitruvius; 12. treatise.

TEXT 5 C

PARTHENON, ERECHTHEUM, THE TEMPLE OF ATHENA NIKE MONUMENT OF LYSICRATES

Doric Order: **Parthenon** - temple of Athena Parthenos ("Virgin"), Greek goddess of wisdom, on the Acropolis in Athens. The Parthenon was built in the 5th century BC, and despite the enormous damage it has sustained over the centuries, it

still communicates the ideals of order and harmony for which Greek architecture is known.

Ionic Order: Erechtheum – temple from the middle classical period of Greek art and architecture, built on the Acropolis of Athens between 421 and 405BC. The Erechtheum contained sanctuaries to Athena Polias, Poseidon, and Erechtheus. The requirements of the several shrines and the location upon a sloping site produced an unusual plan. From the body of the building porticoes project on east, north, and south sides. The eastern portico, gave access to the shrine of Athena, which was separated by a partition from the western cella. The northern portico, stands at a lower level and gives access to the western cella through a fine doorway. The southern portico, known as the Porch of the Caryatids from the six sculptured draped female figures that support its entablature, is the temple's most striking feature; it forms a gallery or tribune. The west end of the building, with windows and engaged Ionic columns, is a modification of the original, built by the Romans when they restored the building. One of the east columns and one of the caryatids were removed to London by Lord Elgin, replicas being installed in their places.

The Temple of Athena Nike – part of the Acropolis in the city of Athens. The Greeks built the Temple of Apollo at Didyma, Turkey (about 300 BC). The design of the temple was known as dipteral, a term that refers to the two sets of columns surrounding the interior section. These columns surrounded a small chamber that housed the statue of Apollo. With Ionic columns reaching 19.5 m (64 ft) high, these ruins suggest the former grandeur of the ancient temple.

Monument of Lysicrates, a choragic monument in Athens victory in the contests won by Lysicrates in 334 B.C. when he was the leader of the chorus. From a slender square base rises a round temple; six engaged Corinthian columns surround its circular wall and support the entablature, on the frieze of which there representation of a scene in the legend of Dionysus; over the entablature is a flat dome made of a single block of marble and from the center of the roof rises a finial of

acanthus leaves, formerly crowned by the tripod which was the prize of victory. It is the earliest known instance of the Corinthian order used on the exterior.

Vocabulary:

sustain	підтримувати; підпирати	replica	точна копія
shrine	святиня	finial	шпиль
cella	внутрішня кімната класичного храму	tripod	триніжок

1. True or false.

- 1) The Parthenon was built in Greece.
- 2) Greek architecture is famous for the ideals of order and harmony.
- 3) The Erechtheum contained several shrines and an unusual plan was used to correspond to all the requirements.
- 4) The west end of the Erechtheum contains original Ionic columns.
- 5) The Temple of Athena Nike was the smallest temple in the city of Athens.
- 6) Monument of Lysicrates was built to honor the leader of the chorus.

2. Read the text again and fill in the chart.

	Erechtheum	The Temple of Athena Nike	Monument of Lysicrates
Year of construction			
Purpose of construction			
Orders used			
Particular features			

TEXT 6A

ANCIENT ROMAN ARCHITECTURE

The early history of the great Roman Empire is so wrapped up in legend, that it is difficult to distinguish between fiction and truth. It is generally accepted, however, that Rome was founded in 753 B.C. by a number of people, who established themselves on the Palatine Hill. There they built a walled city, and soon obtained supremacy over the surrounding tribes. The best known were the Etruscans, a people whose origin is obscure. The Romans adopted the external language of classical Greek architecture for their own purposes, which were so different from Greek buildings as to create a new architectural style. The two styles are often considered one body of classical architecture. Sometimes that approach is productive, and sometimes it hinders understanding by causing us to judge Roman buildings by Greek standards.

Roman architecture represents a fusion of traditional Greek and Etruscan elements, with new structural principles based on the development of the arch and of a new building material, concrete. In Greek and Hellenistic architecture the column was the most important member; in Rome the column was often degraded to merely decorative uses, while the wall became an essential element. Tile-covered concrete quickly supplanted marble as the primary building material and more daring buildings soon followed, with great pillars supporting broad arches and domes rather than dense lines of columns suspending flat architraves. The freedom of concrete also inspired the colonnade screen, a row of purely decorative columns in front of a load-bearing wall.

In domestic architecture three types were developed: the domus or town house; the insula or multi-storey apartment house and villa or suburban or country house. The domus derived from the Greek and Hellenic house and was usually of one storey only and inward-looking, the rooms being grouped axially and symmetrically around

the atrium (a quadrangular court). A street façade was plain and defenestrated. The insula had several identical but separated floors and was often vaulted throughout with concrete construction. A decree of Augustus limited their height in Rome to 75ft. The villa was derived from traditional farm-house and was more casual and straggling in plan than the domus. Their exteriors were enlivened with porticoes and colonnades, rooms were designed to catch the view, or the sun in winter or the shade in summer.

The only two developments of the Roman architecture were the Tuscan and Composite orders; the first being a shortened, simplified variant on the Doric order and the Composite being a tall order with the floral decoration of the Corinthian and the scrolls of the Ionic. Innovation started in the first century B.C., with the invention of concrete, a stronger and available substitute for stone.

In smaller-scale architecture, concrete's strength freed the floor plan from rectangular cells to a more free-flowing environment. On return from campaigns in Greece, the general Sulla returned with what is probably the most well-known element of the early imperial period: the mosaic, a decoration of colorful chips of stone inset into cement.

This tiling method took the empire by storm in the late first century and the second century and in the Roman home joined the well known mural in decorating floors, walls, and grottoes in geometric and pictorial designs.

The final phase of Roman architecture from the 4th to the 6th centuries, primarily in church building, is called Early Christian architecture. It gave rise to Byzantine architecture.

A purely utilitarian theme in Roman architecture, which produced quantities of houses, apartment buildings, factories, roads, bridges - all those amenities which have returned to the world of architecture only in recent times – gives the Romans a claim to be the only precursors of the modern architect.

Vocabulary:

supremacy	панування; верховенство	supplant	витіснити, витиснути
obscure	похмурий, темний; тьмянний	pillar	стовп, колона;
to hinder	перешкоджати	mural	стінний
fusion	злиття, об'єднання	grotto	печера, грот
		precursor	предтеча, попередник

1. True or False.

1. The Greek architects preferred rounded forms such as arch, vault and dome.
2. In Rome the column was the most important construction element.
3. Roman architecture is based on a new building material, concrete.
4. Tuscan order is a tall order with the floral decoration of the Corinthian and the scrolls of the Ionic.
5. The final phase of Roman art of building is called Early Christian architecture.

2. Match words with the definitions.

- | | |
|------------------|---|
| 1. domus | a) multi-storey apartment house |
| 2. defenestrated | b) decorated with or consisting of flowers or patterns of flowers |
| 3. insula | c) town house |
| 4. villa | d) without windows |
| 5. floral | e) suburban or country house |

TEXT 6 B

ROMAN AND GREEK ARCHITECTURE

Roman architecture reached its apogee in the Pantheon, Rome (c. A.D. 100-25, with a dome 141ft in diameter). It is based on a sphere, the height of its walls being equal to the radius of the dome. Comparison of the Pantheon with the Parthenon reveals the contrast between the tectonic and extrovert nature of Greek architecture and the plastic, introvert nature of Roman architecture. This is equally evident in the most typically Roman of all buildings, the basilica, which with its interior colonnades, is like a Greek temple turned outside in. Other typically Roman buildings are: thermae, with their rich decoration and complicated spatial play; amphitheatres, of which the Colosseum, Rome (AD 69-79) is the largest; triumphal arches, a purely decorative type of building, always of the Corinthian or Composite order.

The chief differences between Greek and Roman architecture are the following. The Greeks used one order per facade. The Romans often used several, one above the other, as in the Colosseum.

The Greeks built primarily in trabeated manner. The Romans also used arcuated methods and combined both forms in one building. This too can be seen in the Colosseum, where arches are structural and the orders decorative.

Roman orders and ornament are generally coarser and heavier than the Greek. The Romans preferred to use the Composite and Corinthian orders.

The Romans were great builders and engineers, famous for their concrete vaults, public baths, bridges and aqueducts, as well as temples. The Greeks were perfectionists of the subtleties of the simple classical temple form.

1. Compare ancient Greek and Roman Architecture.

	Greek architecture	Roman architecture
types of buildings		
orders		
manner		

2. Read texts and choose the best word from the list below to complete the sentence.

Roman House. The ancient Roman.....(**житло**)¹ consisted of a (**чотирикутний**)² court (atrium) which was entered by the door of the house and which served as the common meeting place for the family. An(**проріз**)³ (compluvium) to the sky provided light and served as a(**димохід**)⁴ and as an(**вхідний отвір**)⁵ for rain which fell into the impluvium, a tank(**занурений**)⁶ in the floor(**нижче**).⁷ The tablinum served as the master's office. In some homes a garden surrounded by side buildings and covered colonnades was added at the(**позаду**)⁸ of the house; it was called the peristylum and usually was entered through corridors (fauces) located near the tablinum. Great houses had a kind of entrance hall (= vestibulum) raised above the street and approached by.....(**сходи**).⁹ In the ordinary house, there was only an(**тут. натяк**)¹⁰ of one (= vestibulum); the door led directly into the(**вітальня, коридор**)¹¹ , which opened directly into the atrium. In later Roman houses, a second storey became usual. As the dining room was generally in the upper storey, all the rooms in the upper storey were called(**з'єднані кімнати**)¹² There were three-storey houses in Rome as early as the end of the republic.

***sunk *dwelling *chimney *quadrangular *indication**
***beneath *inlet *stairs *opening *back *ostium *coenacula**

3. Read texts and choose the best word from the list below to complete the sentence.

Greek House. The ancient Greek house varied in design according to the period and the (**багатство**)¹ of the(**власник**)² but there were common features. The house was divided into two parts: the men's apartments (andron) and the

women's apartments (gynaecium or gynaekonitis). The entrance door of the house opened into a vestibule (prothyron); on both sides of the vestibule, in the interior, were the doorkeeper's room and(**майстерні**)³ for business and work. The vestibule led to an open(**двір**)⁴ (aula) which was surrounded on three sides by columns, in the middle of which was the altar of Zeus Herkeios, the patron.....(**бог-покровитель**)⁵ of domestic life. Large houses usually had a second court entirely (= wholly, = completely) surrounded by columns. At the.....(**сторони**)⁶ of the aula were rooms for eating, sleeping, and,.....(**склад**)⁷ as well as(**маленькі приміщення**)⁸ for the.....(**раби**)⁹ On the sides of the court opposite the vestibule there were no columns, but two pilasters which marked the entrance to an open room or vestibule called the prostas or parastas. On one side of the parastas was the sleeping room of the(**хазяїн**)¹⁰ and(**хазяйка**)¹¹ of the house (thalamos). Some houses had an upper story, usually smaller in area than the lower story. The(**криша**)¹² of the Greek house was.....(**плаский**).¹³ The rooms usually were lighted (= illuminated)(**через**)¹⁴ doors which opened into a court.

*slaves *wealth *sides *mistress *owner *deity *roof *cells
 *through *mastershops *storage *court *flat

TEXT 6 C

THE ROMAN COLISEUM

The Colosseum or Coliseum, originally known as the Flavian Amphitheatre (lat. Amphitheatrum Flavium), is an amphitheatre in Rome, capable of seating 50,000 spectators, which was once used for gladiatorial combat. Construction was initiated by Emperor Vespasian and completed by his sons, Titus and Domitian, between AD 72 and AD 90. It was built at the site of Nero's enormous palace, the Domus Aurea.



The Colosseum hosted large-scale spectacular games that included fights between animals, the killing of prisoners by animals and other executions, naval battles up until AD 81, and combats between gladiators. It has been estimated that several hundreds of thousands died in the Colosseum games.

The Colosseum's name is derived from a colossus (a 130-foot or 40-metre statue) of Nero nearby. This statue was later remodeled by Nero's successors into the likeness of Sol, the sun god, by adding the appropriate solar crown. Nero's head was also replaced several times by the head of succeeding emperors. At some time during the Middle Ages, the statue disappeared; experts suspect that, since the statue was bronze, it was melted down for reuse.

The Colosseum was ingeniously designed. It has been said that most spectacle venues (stadiums, and similar) have been influenced by features of the Colosseum's structure, even well into modern times. Seating was divided into different sections. The podium, the first level of seating, was for the Roman senators; the emperor's private, cushioned, marble box was also located on this level.

The Structure

The Colosseum measures 48 metres high, 188 metres long, and 156 metres wide. The wooden arena floor was 86 metres by 54 metres, and covered by sand. Its elliptical shape kept the players from retreating to a corner, and allowed the spectators to be closer to the action than a circle would allow.

Above the podium was the *maenianum primum*, for the other Roman aristocrats who were not in the senate. The third level, the *maenianum secundum*, was divided into three sections. The lower part (the *immum*) was for wealthy citizens, while the upper part was for poor citizens. A third, wooden section was a wooden structure at the very top of the building, added by Domitian. It was standing room only, and was for lower-class women.

After the Colosseum's first two years in operation, Vespasian's younger son (the newly-designated Emperor Domitian) ordered the construction of the hypogeum (literally meaning "underground"), a two-level subterranean network of tunnels and cages where gladiators and animals were held before contests began.

Today the arena floor no longer exists, though the hypogeum walls and corridors are clearly visible in the ruins of the structure. The entire base of the Colosseum covers an area equivalent to 6 acres (160,000 m sq.). There are also tunnels, still in existence, configured to flood and evacuate water from the Colosseum floor, so that naval battles could be staged prior to the hypogeum's construction. Recent archaeological research has shown evidence of drain pipes connected to the City's sewer system and a large underground holding tank connected to a nearby aqueduct.

Another innovative feature of the Colosseum was its cooling system, known as the *valerium*, which consisted of a canvas-covered, net-like structure made of ropes, with a hole in the center. This roof covered two-thirds of the arena, and sloped down towards the center to catch the wind and provide a breeze for the audience. Sailors, standing on special platforms, manipulated the ropes on command. The Colosseum incorporated a number of *vomitoria* - passageways that open into a tier of seats from below or behind. The *vomitoria* were designed so that the immense venue could fill in 15 minutes, and be evacuated in as little as 5 minutes. Each entrance and exit was numbered, as was each staircase.

There were 80 entrances at ground level, 76 for ordinary spectators, two for the imperial family, and two for the gladiators. Spectators were given tickets in the form of numbered pottery shards, which directed them to the appropriate section. The *vomitoria* quickly dispersed people into their seats and, upon conclusion of the event, disgorged them with abruptness into the surrounding streets (giving rise, presumably, to the name).

The Colosseum was in continuous use until 217, when it was damaged by fire after it was struck by lightning. It was restored in 238 and gladiatorial games continued until Christianity gradually put an end to those parts of them which included the death of humans. The building was used for various purposes, mostly *venationes* (animal hunts), until 524. Two earthquakes (in 442 and 508) caused a great damage to the structure. In the Middle Ages, it was severely damaged by further earthquakes (847 and 1349), and was then converted into a fortress.

Colosseum nowadays

In 1749, in a very early example of historic preservation, Pope Benedict XIV forbade the use of the Colosseum as a quarry. He consecrated the building to the Passion of Christ and installed Stations of the Cross, declaring it sanctified by the blood of the Christian martyrs who were thought to have perished there. Later popes initiated various stabilization and restoration projects. Every Good Friday the pope leads a procession within the ellipse in memory of Christian martyrs.

The Colosseum has a prominent place in many motion pictures. In 1954's *Demetrius and the Gladiators* Emperor Caligula sentences the Christian Demetrius to fight in the Colosseum's gladiator games. In the Science Fiction film *The Core*, the Colosseum is destroyed by intense lightning strikes, which blast it to bits. In director Ridley Scott's 2000 film *Gladiator*, the Colosseum was re-created via computer-generated imagery (CGI) to "restore" it to the glory of its heyday in the 2nd century.

Vocabulary:

execution	страта	quarry	каменоломня
Tier	кріплення	perish	гинути, умирати
Shard	надкрилля (жука)	martyr	мученик
to disgorge	розвантажувати(ся),	consecrate	освячувати

1. True or False.

1. The Colosseum or Coliseum was used for gladiatorial combats only.
2. The wooden arena floor was 86 metres by 54 metres, and covered by sand.
3. Coliseum circular shape kept the players from retreating to a corner, and allowed the spectators to be closer to the action.
4. The podium, the first level of seating, was for the Roman senators.
5. A third, wooden section was a wooden structure at the very top of the building was for poor citizens.

2. Match words with definitions.

- | | |
|-----------------|---|
| 1. execution | a) an underground system, for carrying off drainage water and sewage |
| 2. gladiator | b) crystalline limestone capable of taking a polish, used in sculpture and architecture |
| 3. venue | c) carrying out of a death sentence |
| 4. sewer system | d) strong coarse cloth used for sails and tents etc. and for oil-painting |
| 5. marble | e) broken piece of pottery or glass |
| 6. shard | f) trained fighter in ancient Roman shows |
| 7. ellipse | g) place for a match, meeting, concert, etc |
| 8. canvas | h) a person killed for persisting in a belief |
| 9. martyr | i) regular oval, resulting when a cone is cut obliquely by a plane |

3. Answer the questions.

1. When and where was the Colosseum built?
2. What events did it host?
3. What does its name derive from?
4. Why was the elliptical form of Colosseum chosen?
5. What are the main parts of Colosseum?
6. Can you describe the cooling system of Colosseum?
7. What do the following figures refer to: 48, 6, 80, 1749?
8. How did Pope Benedict XIV stop the ruination of the Colosseum?

Resources

1. Беляев Н. Н. Вступая в мир зодчества. Пособие по английскому языку : для вузов по специальности «Архитектура» / Н. Н. Беляев. – М. : Высш. Шк., 1991 – 125 с.
2. Ивянская И. С. Архитектура Англии : учебное пособие по английскому языку/ И. С. Ивянская. – М.: Высш. шк., 2003. – 143 с.
3. <http://search.eb.com> Encyclopedia Britannica on Line
4. Civil Engineering Virtual Library
5. <http://howe.ce.gatech.edu/www-ce/home.html>
6. <http://wikipedia.com> Encyclopedia Wikipedia on Line

Виробничо-практичне видання

Методичні рекомендації до
організації практичної роботи
з навчальної дисципліни

«ІНОЗЕМНА МОВА» (спецкурс)

*(для студентів 2 курсу денної форми навчання спеціальності
191 – Архітектура та містобудування)*

Укладач **ЗУБЕНКО** Світлана Олександрівна

Відповідальний за випуск *О. Л. Ільєнко*

За авторською редакцією

Комп'ютерний набір *С. О. Зубенко*

Комп'ютерне верстання *І. В. Волосожарова*

План 2017, поз. 471 М

Підп. до друку 10.10.2018. Формат 60 × 84/16.
Друк на ризографі. Ум. друк. арк. 2,0.
Тираж 50 пр. Зам. №

Видавець і виготовлювач:

Харківський національний університет
міського господарства імені О. М. Бекетова,
вул. Маршала Бажанова, 17, Харків, 61002.
Електронна адреса: rektorat@kname.edu.ua
Свідоцтво суб'єкта видавничої справи:
ДК 5328 від 11.04.2017.