

POLITEKNIK
Jabatan Pengajian Politeknik

EXAMINATION AND EVALUATION DIVISION
DEPARTMENT OF POLYTECHNIC EDUCATION
(MINISTRY OF HIGHER EDUCATION)

CIVIL ENGINEERING DEPARTMENT

FINAL EXAMINATION
JUNE 2012 SESSION

CA203 : INTRODUCTION TO HISTORY OF ARCHITECTURE

DATE : 22 NOVEMBER 2012
DURATION : 2 HOURS (2.30PM – 4.30PM)

This paper consists of **FIFTEEN (15)** pages including the front page.

SECTION A : OBJECTIVE (25 QUESTIONS – ANSWER ALL)

SECTION B : ESSAY (4 QUESTIONS – ANSWER 3 ONLY)

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INVIGILATOR

SECTION A

OBJECTIVES (25 marks)

INSTRUCTION:

This section consists of **TWENTY FIVE (25)** objective questions. Answer **ALL** questions in the answer booklet.

1.

<ul style="list-style-type: none">• The roof of the house is flat to collect some rain water to cool the hot air in the house.• The house has few openings to avoid direct sunlight penetration.• The house uses clay as the construction material
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Which climate is the house probably located in? (CLO 2)

- A. Hot climate
- B. Cold climate
- C. Equator
- D. Hot and cold climate

- | |
|---|
| <ul style="list-style-type: none">• Helps to provide the structural logic of form.• Architects must understand the relationship between technologies to produce architecture that satisfy the needs of users without destroying nature –balance. |
|---|

2. Based on the above statement, what are the factors affecting architecture? (CLO 2)
- A. Religion
 - B. Climate and geographical
 - C. Science and technology
 - D. Material

3. Which of the following explain the climatic and geographical factors that affect architecture? (CLO 2)
- i. Building should be as to provide the most suitable and comfortable built environment according to different climatic requirements.
 - ii. Design according to surrounding: site, weather, vegetations and soils.
 - iii. Design with the emphasis of the natural elements around the site.
 - iv. Protect occupant from undesirable environmental/nature force such as rain, sun and wind.
- A. i and ii
B. i, ii and iii
C. ii, iii and iv
D. i, ii, iii and iv
4. Which of the following statement is **NOT TRUE** about Egypt? (CLO 1)
- A. Ancient Egypt was called the 'Land of Khem' and the 'Land of Pharaohs.'
B. Egypt lies in the Sahara Desert, bordering the Mediterranean Sea, the Sinai Peninsula and the Red Sea.
C. Egypt was known for its great monuments such as the Pyramids and temples.
D. Egypt has cold and dry climate throughout the years.
5. _____ is the architectural style that evolved between the early 15th and early 17th centuries in different regions of Europe, in which there was a conscious revival and development of certain elements of ancient Greek and Roman thought and material culture. (CLO 1)
- A. Romanesque architecture
B. Classicism architecture
C. Renaissance architecture
D. Baroque and Rococo architecture

6. Which building was commissioned by Sultan Hassan bin Al –Nasir Muhammad bin Qalawun between the year of 1356 AD and 1363 AD? (CLO 1)
- A. The Great Mosque of Cordova
 - B. The Mosque of Sultan Hassan
 - C. The Taj Mahal
 - D. The Hagia Sophia
7. Gothic Architecture is an architectural style which flourished during the high and late Medieval Period. It evolved from the _____ and was succeeded by the _____.(CLO 1)
- A. Romanesque Architecture; Gothic Architecture
 - B. Romanesque Architecture; Renaissance Architecture
 - C. Renaissance Architecture; Baroque and Rococo Architecture
 - D. Gothic Architecture; Classicism Architecture
8. This building was built with the Classicism architectural style on Ludgate Hill, the highest point in the city of London, and is the seat of the Bishop of London. The present building dates from the 17th century and was designed by Sir Christopher Wren. This building refers to (CLO 1)
- A. St. Paul’s Cathedral
 - B. San Carlo alle Quattro Fontane
 - C. St Andrea Mantua
 - D. Notre Dame de Paris



Figure 1
The Hagia Sophia, Constantinople, Turkey

9. The above building was a former orthodox patriarchal basilica and later changed to a mosque. When did this building serve as a mosque? (CLO 1)
- A. 29th May 1453 until 1934
 - B. 20th May 1453 until 1934
 - C. 29th May 1553 until 1934
 - D. 29th May 1453 until 1834
10. These are the benefits of studying architectural history **EXCEPT**: (CLO 1)
- A. Architectural history trains us to be creative in creating good designs for temple, tomb and citadel
 - B. Architectural history is used as a supplement for architecture and urban planning programs.
 - C. Architectural history teaches us about preservation and importance of architecture in urban development.
 - D. Architectural history allows us to develop a broad framework in economics, philosophy and art

11. Which of these are the renowned building in Egypt? (CLO 2)
- i. The Acropolis Complex
 - ii. The Great Pyramid of Giza
 - iii. The Great Temple of Karnak
 - iv. The Pantheon
- A. I and II
B. I and III
C. II and III
D. I and IV
12. The construction of monuments and temples in Egyptian architecture was influenced by: (CLO 2)
- A. The belief in life or survival after death on preservation of the body as immortality was only for the privileged royal and priestly being.
 - B. The fear of the nature that surrounded them in their day to day life of the sun, the moon and stars; fertility and the grave.
 - C. The belief that their Pharaohs were God represented in person.
 - D. The existing of natural construction materials such as timber, brick, clay and stone as they largely determined the style of the architecture.
13. _____ was influenced by materials found in the locality of their conquest; such as earth, limestone and mud in North Africa; limestone, shale, gravel and timber in the British isle; volcanic earth, lava, travertine in Italy and marble and stone in Greece. (CLO 2)
- A. Greek Architecture
 - B. Islamic Architecture
 - C. Roman Architecture
 - D. Egyptian Architecture

- Inscriptions on numerous and precious offerings to the sanctuary of Athena (marble korai, bronze, and clay statuettes and vases)
- Three important temples: The Parthenon, The Erechtheum and the Temple of Athena Nike, dedicated to Athnea Parthenon, Athena Polias and Athena_Apteros Nike.

14. What is the main factor that influences the development of the buildings in the above statement? (CLO 2)
- A. Religious and belief
 - B. Materials
 - C. Climate
 - D. Social
15. Which of these are the style of Gothic architecture? (CLO 2)
- i. Pointed Arch
 - ii. Rounded Arch
 - iii. Barrel Vault
 - iv. Rib Vault
- A. I and II
 - B. I and III
 - C. I and IV
 - D. II and III
16. Which of the following is NOT the MAIN factors affecting Renaissance Architecture? (CLO 2)
- A. Religious
 - B. Climate
 - C. Philosophic
 - D. Political

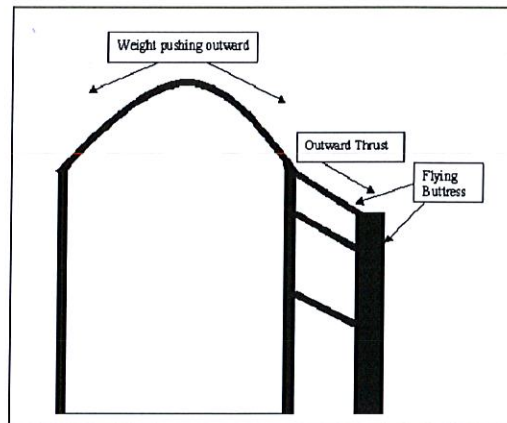


Figure 2

17. What is the main factor affecting the construction of the Figure 2? (CLO 2)
- A. Religious
 - B. Political
 - C. Climate
 - D. Materials and technology

- After the Renaissance period, the architects of the era started to get bored with the symmetry and same old forms they had been using for the last 200 years.
- Two main architects were Bernini and Borromini.
- The façade of San Carlo alle Quattro Fontane did not use very much symmetry.

18. What is the architectural style related to the above statement? (CLO 2)
- A. Renaissance Architecture
 - B. Classicism Architecture
 - C. Gothic Architecture
 - D. Baroque and Rococo Architecture

19. These are the characteristics of Piacenza Cathedral : (CLO 3)
- i. It consists of nave and two aisles
 - ii. It is decorated with capitals and Romanesque statues
 - iii. The façade is in Veronese pink marble and gilded stone
 - iv. It has Rose window at the rear building façade
- A. i, ii
B. i, iii
C. i, ii, iii
D. i, ii, iv
20. Which of the followings statement is the most appropriate to define Romanesque architecture? (CLO 3)
- A. Massive opening with few different thickness of walls
 - B. Massive thickness of wall with few and comparatively small openings
 - C. Walls and openings in few different massive thickness
 - D. Small wall with few and comparatively massive openings
21. Minaret is one of the components in Mosque architecture which functions as (CLO 3)
- A. a place for Imam to lead congregational prayer
 - B. a place for Muslim to read the Holy Quran
 - C. a place to perform sermon
 - D. a place for Bilal to call (adhan) for prayer

- Thick heavy walls which support stone roofs
- A blocky, earth bound appearance
- Large, simple geometric masses

22. Which of the architectural style below is best described by the above architectural characteristics? (CLO 3)
- A. Gothic
 - B. Romanesque
 - C. Islamic
 - D. Byzantine
23. Which of the following are the distinct characteristics of Gothic Architecture? (CLO 3)
- i. Pointed Arch
 - ii. Ribbed Vault
 - iii. Semi circular Arch
 - iv. Flying Buttresses
- A. I , II and III
 - B. I, III and IV
 - C. II, III and IV
 - D. I, II and IV
24. Which one of these statements best described Villa Capra La Rotunda? (CLO 3)
- A. Perfectly symmetrical plan, central hall is crowned by an octagonal dome; each façade is paired with Doric column
 - B. Perfectly symmetrical plan, central room is a circular hall crowned by a low dome; each façade has a flight of steps leading to a portico.
 - C. A cross shape plan, a dome with a simple opening to the sky, decorative façade

D. A symmetrical plan, a central room crowned by pendentive dome, small openings

25. The architectural characteristics of Classicism can be described by: (CLO 3)
- i. Symmetry, proportion, geometry, regularity as in Greek and Roman architecture
 - ii. The used of semicircular arches, hemispherical domes, niches and aedicules
 - iii. Orderly arrangements of columns, pilasters and lintels
 - iv. The used of the ovals mostly appeared in churches were very prominent of the time.
- A. i, ii and iv
B. i , ii and iii
C. i, iii and iv
D. ii, iii and iv

SECTION B**ESSAY (75 marks)****INSTRUCTION:**

This section consists of **FOUR (4)** essay questions. Answer **THREE (3)** questions.

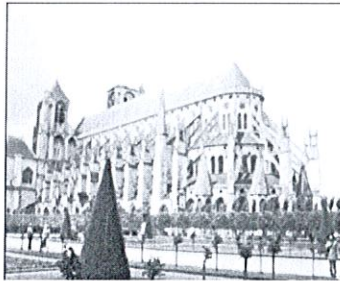
QUESTION 1 (CLO 2)

- a) Define Architecture. (4 marks)
- b) List **FIVE (5)** factors that affect the architecture. (5 marks)
- c) Based on the answer in (b), explain **TWO (2)** of the factors that affect architecture. (8 marks)
- d) Explain how was Climate and geographical play an important role in shaping the architecture of places below. (8 marks)
- i. Egypt
 - ii. Asian

QUESTION 2

Figure 2 shows four different styles in four different period .

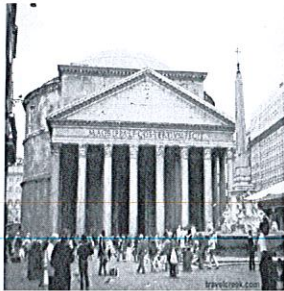
- (a) Name the buildings and the styles of architecture employed in Figure 2 below. (CLO 1)
(8 marks)
- (b) Based on your answer in (a), rearrange the styles of architecture according to its chronological order. (CLO 1)
(4 marks)
- (c) Provide 3 prominent characteristics to identify the architectural style of each building in figure 2 (CLO 1)
(13 marks)



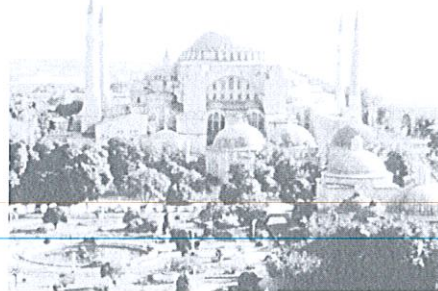
(i)



(ii)



(iii)



(iv)

Figure 2

QUESTION 3

(a) Religion and technology are factors influencing the styles of Gothic architecture.

- i. Explain how religion influenced Gothic architecture (CLO 2)
(10 marks)
- ii. Using sketches, discuss the advantages of the technologies available during the period. (CLO 2)
(15 marks)

QUESTION 4

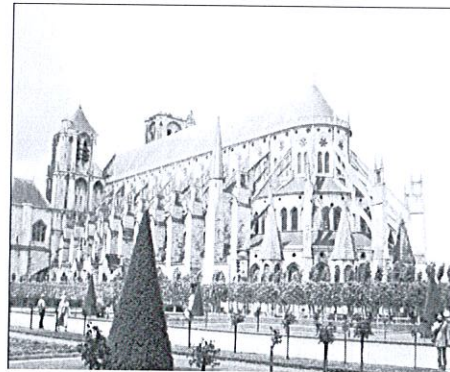


Figure 4a

- (a) The buildings in Figure 4a show Middle age architecture. (CLO 3)
Using sketches, differentiate **FOUR (4)** characteristic (16 marks)
between of these two Middle Ages architecture.



Figure 4b

- (b) The building in Figure 4b was built during the Classicism age. Discuss FOUR (4) characteristics of the building (CLO 3)
(9 marks)