



Knowledge Resource & Relay Centre (KRRC)

AIKTC/KRRC/SoA/ACKN/QUES/2018/19 /

Date: 25/07/2019

School: SoA-CBSGS

Branch: SoA

SEM: II

To,  
Exam Controller,  
AIKTC, New Panvel.

Dear Sir/Madam,

Received with thanks the following <sup>(Regular)</sup> ~~Semester/Periodic~~ question papers from your exam cell:

Sr. No.	Subject Name	Subject Code	Format		No. of Copies
			SC	HC	
1	Architectural Building Construction & Materials			✓	02
2	Theory & Design of Structures			✓	02
3	Humanities			✓	02
4	Environmental Studies				

Note: SC - Softcopy, HC - Hardcopy

(Shaheen Ansari)  
Librarian, AIKTC



**ANJUMAN-I-ISLAM'S  
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,  
Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai.

- SCHOOL OF ENGINEERING & TECHNOLOGY
- SCHOOL OF PHARMACY
- SCHOOL OF ARCHITECTURE

**FIRST YEAR B.ARCH- SEM II EXAMINATION APRIL 2019**

Subject: Architectural Building Construction

Max Marks: 70

Date: 18/04/2019

Duration: 3 Hrs

**Q.1 and Q.6 are compulsory, Attempt any 4 out of remaining.**

**Draft at appropriate scale wherever not mentioned. Write answers in pointers.**

- 
- Q1. Explain the following with the help of sketches (Any 3). 15M
- A. Extrados
  - B. Springing line
  - C. Abutment
  - D. Soffit
  - E. Skewback
- Q.2. A series of semicircular arches in brick need to be constructed on a span of 1.8m.each.  
Draft the elevation on appropriate scale. 10M
- Q.3. A hall of 3.5 M.x 6.0M. needs to be separated by partition.  
Design the partition and draft elevation showing construction details  
on appropriate scale. 10M
- Q.4. Draw and define any 4 types of arches in 1 brick thick wall. 10M
- Q5. Define and explain any 5 types of exterior wall finishes. 10M

P.T.O



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Q.6. A watchman's cabin needs to be constructed in 1Bk. thick load bearing construction.



Draw a detail section AA till plinth level on 1:10 scale.

15M

Q7. Draft L junction and T junction in rat trap bond.

10M



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**FIRST YEAR B.ARCH - SEM 2 (APRIL 2018-19 EXAMINATION)**

SUBJECT: THEORY AND DESIGN OF STRUCTURES II

Date: 15/04/2019

TOTAL MARKS: 50

Duration: 2 hours

Notes:

- 1) Question No 1 is compulsory.
- 2) From question no 2, 3, 4 - Attempt any two questions.
- 3) Use of non-programmable calculator is allowed.
- 4) Assume additional data and draw sketches wherever necessary, and specify the same.

Q1) Attempt any four

(20M)

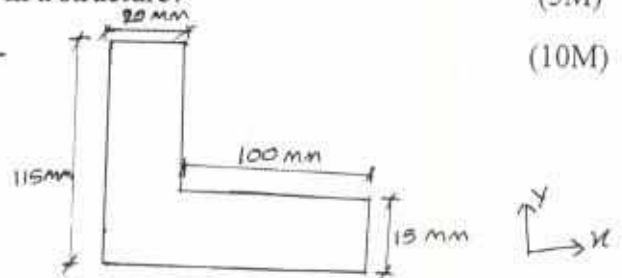
- i. What is Moment of Inertia, Modulus of Rigidity and Bulk Modulus?
- ii. Explain Hooke's Law with graph.
- iii. Explain different types of stresses.
- iv. What are Centre of Gravity and Centroid of a body? explain with examples
- v. Give SI units of Shear Force, Bending Moment, Moment of Inertia, Centre of Gravity & Strain

Q2) a) What is the importance of Centre of Gravity in a structure?

(5M)

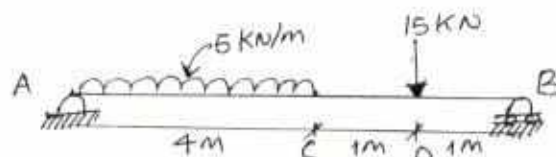
b) Calculate Centre of Gravity of the given section -

(10M)



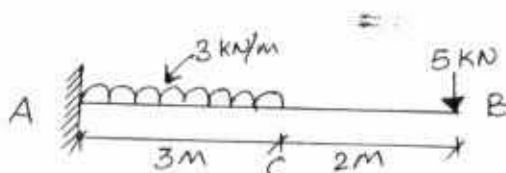
Q3) Analyse the following beam and calculate Reactions, SFD and BMD.

(15M)



Q4) Calculate reactions, SFD and BMD of the following cantilever beam:

(15M)



*Innovative Teaching - Exuberant Learning*

Vision : To be the most sought after academic, research and practice based school of Architecture that others would wish to emulate.



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**B.ARCH. FIRST YEAR -SEMESTER II  
APRIL 2019 EXAMINATION**

Subject: **Humanities**

Maximum Marks- 50

Date: 16/04/2019

**DURATION: 2 hours**

**Notes:**

- Attempt any **five** Questions.
- Numbers on the right hand side indicate marks for each question.
- Start answer of every new question on a new page.
- Support answers with relevant sketches/ graphics as much as possible.

- 
- Q1) Why do you think it is essential to know the beginnings of architecture. Support with examples and sketches. (10)
- Q2) Describe in detail an Ancient river Valley Civilization. (10)
- Q3) Explain in detail a Roman Structure. Did it hold any symbolic meaning reflecting values of the period in which it was made.
- Q4) Explain the meaning of Yin and Yang Symbol in Chinese Culture. (10)
- Q5) Differentiate between a Greek Agora and Roman Forum with example. (10)
- Q6) Differentiate between Etruscan, Greek and Roman Temple with the help of examples. (10)
- Q7) Comment on the dark ages in the Mediterranean basin. (10)
- Q8) Draw the Evolution of Pyramids. (10)

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