Dear Sir/Madam.



# School of Engineering & Technology

# KALSEKAR TECHNICAL CAMPUS

School of Pharmacy

Knowledge Resource & Relay Centre (KRRC)						
AIKTC/KRRC/SoA/ACKN/QUES/2019-20 /		Date:				
School: SoA-CBSGS	Branch: SoA	SEM: <u>VII</u>				
To, Exam Controller,						
AIKTC, New Panvel.						

Received with thanks the following Semester/Periodic question papers from your exam cell:

Sr.	Subject Name	Subject Code	Format		No. of
No.			SC	HC	Copies
1	Architectural Building Construction	BARC 703	57.0	/	02
2	Architectural Building Services	BARC 708	X.	V	02
3	Professional Practice	BARC 710	T. A.	/	02
	2010	N S	P.		
	WAVI MUMBAL	Nan			

Note: SC - Softcopy, HC - Hardcopy

Sem. VIII - No theory papers only professional training of 16 week.

(Shaheen Ansari) Librarian, AIKTC





### ANJUMAN-I-ISLAM'S

# KALSEKAR TECHNICAL CAMPUS, NEW PANVEL

Approved by : All India Cauncil for Indiainal Education, Council of Architecture, Pharmony Cauncil of India New Debis, Recognized by : Directorate of Technical Education, Govt. of Maharantora, Affiliated to : University of Mumbal. SCHOOL OF ENGINEERING & TECHNOLOGY

SCHOOL OF PHARMACY

M SCHOOL OF ARCHITECTURE

## B.ARCH FOURTH YEAR - SEMESTER VII ( OCTOBER 2019-20 REGULAR EXAM)

Subject: Architectural Building Construction

**Duration: 3hours** 

Total Marks: 50 MARKS

Date: 25-10-2019

#### NOTE:

- 1. Question no.1 is compulsory
- 2. Attempt any 3 from the remaining 7
- 3. Draw neat sketches wherever necessary

### QUESTIONS

- 1. Design a Basement in plan and draw the necessary phases of construction for the given Park and Ride building designed for ground and first floor. The site is in Riyadh and design the vehicular circulation accordingly as per given site plan. Primary wind direction in a year on site is from North and varies through the year from north east to south east. The foundation to be used is Pile foundation. Pile Diameter measurements to be used will be 450mm. Column sizes 300mm x 300mm x 300mm x
  - a. Phases of excavation
  - Sections along compound wall indicating type of shoring, retaining wall/diaphragm wall and Pile cap.
- c. Reinforcement in plan and section of Pile cap design with column detail.
- . d. Basement Raft-Pile foundation detail
- e. Location of Underground water tank (UGWT)
- f. Mechanical Ventilation system.

(Compulsary question)

20 Marks

2. Explain Secant Pile Wall Construction with phases of construction with sketches

10 Marks

3. Elaborate types of Piles.

10 Marks

4. Explain Ground Anchor and its pros and cons with sketches

10 Marks

5. Explain Sheet Pile Wall Construction with phases of construction with Sketches

10 Marks

6. Describe Basement Construction: Any 2

a. Retaining Wall and Raft Basements

10 Marks

b. Box and Cellular Raft Basements

c. Piled Basements

7. Explain Diaphragm Wall Construction and phases of construction with Sketches

10 Marks

8. Explain Mastic Asphalt Tanking and its types with neat sketches

10 Marks

### End of Paper

Innovative Teaching - Exuberant Learning

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



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□ SCHOOL OF ENGINEERING & TECHNOLOGY ☐ SCHOOL OF PHARMACY

Duration: 2 hours

SCHOOL OF ARCHITECTURE

## B.ARCH. FOURTH YEAR- SEMESTER-7, OCTOBER 2019

SUBJE	CT: Arch. Building Services	Duration: 2 hours					
TOTA	TOTAL MARKS: 50 Da						
	Question no. 1 & 2 are compulsory, attempt any two from remaining. Numbers on the right hand side indicate marks.  Draw neat and proportionate sketches wherever required.	=1					
Q1.	Write brief Notes on following:	{10}					
a,		130.75					
ь.	Compare: Ducted Plenum-Exhaust System of Mechanical Ventilation vs Jet Fan based System of						
	Mechanical Ventilation						
Q2.	An institutional building uses a centralized air conditioning system which consist	of a water cooled					
	chiller and AHUs. Describe the system with the help of schematic diagram and ex	plain various					
	components of the system.	{10}					
Q3,	A) Draw a schematic diagram of refrigeration cycle of an Air conditioning system.						
	B) Explain the purpose and working of smoke damper.	{10}					
Q4.	What is a VAV system? Explain its working by comparing it with a CAV system.	{10}					
Q5.	Explain various filters used in mechanical ventilation system.	{10}					
Q6.	What is thermal comfort? Write in detail about various factors of thermal comfort	t. {10}					



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□ SCHOOL OF PHARMACY

SCHOOL OF ARCHITECTURE

Subject - Professional practice - I Maximum Marks - 50

Semester - 7

Date - 22/10/2019,

Time - 2 Hours.

Notes - 1) 4th Question is Compulsory 2) Attempt Any 2 From remaining 3) Start Answer of New Question on a New page

### QUESTION - I (any -2)

16 Marks

- [1] How dou you practice as architect in mega city like Mumbai?
- [2] What is the role of relation between owner & Architect when processer is going on with attachment with contractor also justify.
- [3] What type of tender document nature is fit for railway department, as well as P.W.D. Here justify.

### QUESTION - II (any -2)

16 Marks

- [1] What are the main point responsible for terminated of contect with example.
- [2] How Architect, can be helpful in cast cutting of the projects.
- [3] What you understand by tender and what is rate of relation between, owner & architect when processer in going on in invitation processer.

# QUESTION - III Write Short Notes (any -4)

16 Marks

- [1] Rentention Money, [2] Item Rate Contract, [3] Architect Act 1972, [4] Labor Tender,
- [5] Architect Copy Writes.

### QUESTION - IV (any -9)

18 Marks

Correct the sentence, or fill up the Blank or Answer in 2 to 3 lines.

- [1] Rera (Act) effective form year ----- and not implementation in how many state of India
- [2] In year of 1974 Architect Act came in force and its second name is ----- act.
- [3] "Rera" (Act) why necessary ----- and what is main aspect and what is full form of Rera.
- [4] What are the main point covered in tender documents.
- [5] What is name of fund, when in Emergency contraction can distribution necessary amount to give to all labours.
- [6] Give Atleast, 4 Nos. factors which are depends for life of a buildings.
- [7] Temporary and semi permanent structure can be remove or demolish by component authorities.
- [8] In which type of contracts we came maintain Quality of work in construction.
- [9] Unit price contects is also knows its ----- raite contract
- [10] What is the name of deposit ----- which is return after the O.C. of running project

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