



**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

B.ARCH. FOURTH YEAR - SEMESTER VII (APRIL 2018) (ATKT)

SUBJECT: ARCHITECTURAL BUILDING CONSTRUCTION 7

Duration: 2 hours

TOTAL MARKS: 50

Date: 23/04/2018

Notes:

- Question 1 is compulsory.
- Attempt any 3 questions from Question No 2 to Question No 8.
- Support all answers with neat sketches.
- Question one carries 20 Marks and Question 2,3,4,5,6,7 & 8 carry 10 Marks each.

Q1. Draft any two types of construction technology used in building a High Rise. Give details wherever necessary. Data can be considered on an individual basis.

OR

Q1. Sketch different stages in the construction methodology of a Diaphragm Wall. Also sketch different equipments used in the construction of Diaphragm Wall.

Write down pre- work preparations in the construction of Diaphragm Walls with neat sketches.

Q2. Write short notes on the following: (Any Four)

- a. Silty Soil
- b. Steel Piles
- c. Basements
- d. Liquefaction of Soil
- e. Effects of earthquake on R.C.C. structures.

Steam Hammer method in Pile foundation Driving

Q3. Elaborate on driving of piles in pile foundations. Write in detail various methods of pile driving. Give sketches wherever necessary.

Q4. What are different elements of design of High Rise buildings? Elaborate each element in detail with necessary sketches.

Q5. What are deep foundations? State soil bearing capacities of different types of soils. Write short information about every type of soil.

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Q6. Discuss different materials used for earthquake resistant construction.

Q7. Give advantages and disadvantages of diaphragm wall.

Q8. Define High Rise buildings. Explain in detail three types of formwork systems used for High Rise buildings. Support your answer with neat sketches.



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B.ARCH. FOURTH YEAR- SEMESTER-7, APRIL 2018

SUBJECT: Arch. Building Services

Duration: 2 hours

TOTAL MARKS: 50

Date: 25/04/2018

- Question no. 5 is compulsory, attempt any two from remaining.
- Numbers on the right hand side indicate marks.
- Draw neat and proportionate sketches wherever required.

Q1. Write brief Notes on any three:

{15}

- (1) Cooling tower operation
- (2) A.C. Duct and its insulation
- (3) Factors affecting thermal comfort
- (4) Why an HVAC system is required. Give three reasons.

Q2. Explain the refrigeration cycle of an Air conditioning system and its components with a neat diagram, and explain the working of a chilled water based central air conditioning system with neat sketch?

{15}

Q4. What are the different types of fans that are commonly used in a ventilation system?

Explain the working and features of a split air conditioner. Support your answers with neat diagrams.

{15}

Q5. Design a mechanical ventilation system for a basement parking lot as shown on the attached sheet.

Requirements: Duct layout showing all the components of a plenum-exhaust system of

Ventilation. Layout should be complete with plenum and exhaust location, duct sizes, diffuser

Locations. (Attach the page with the answer book)

{20}

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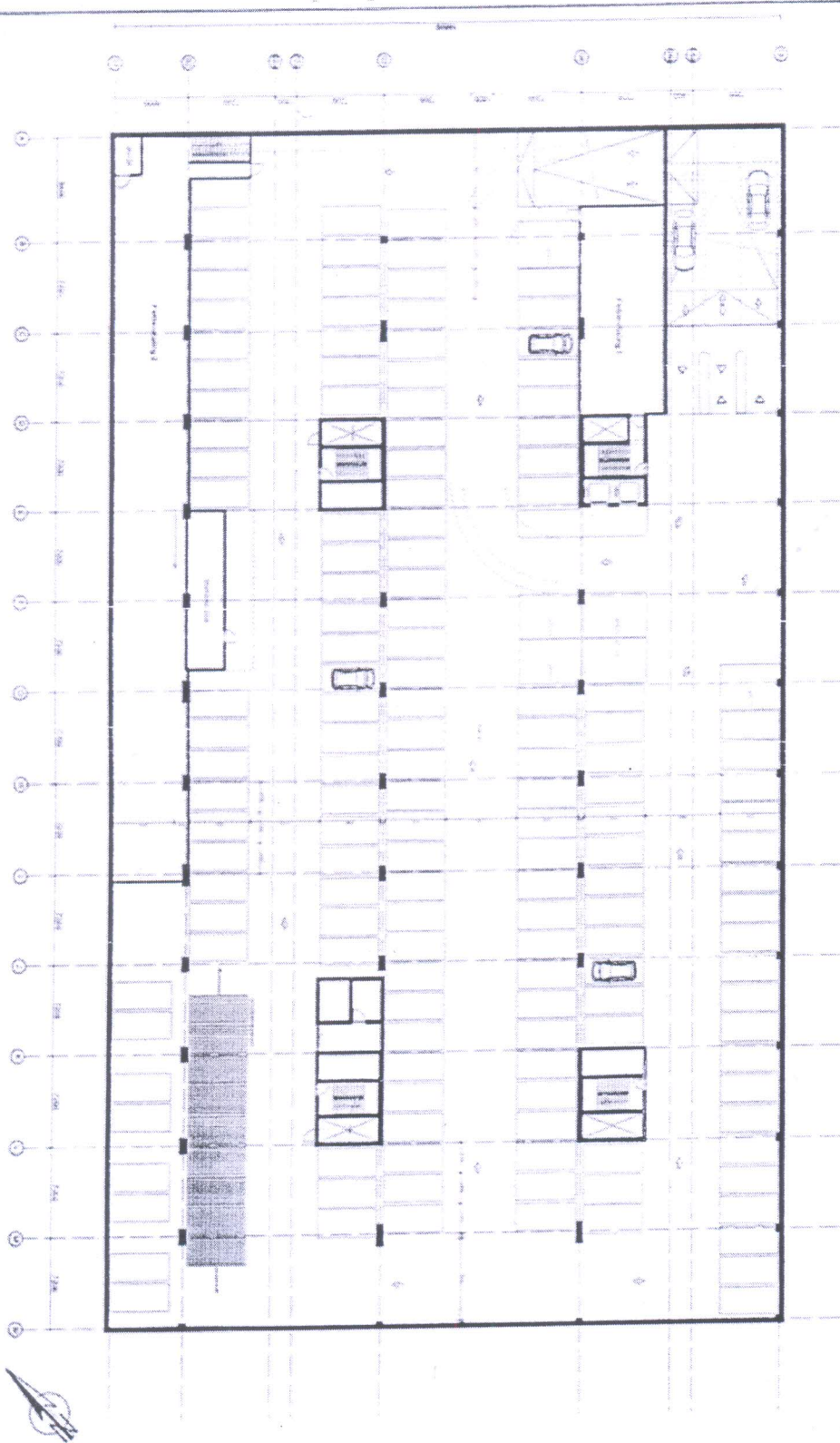
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School of Architecture

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Directorate of Technical Education, Govt. of Maharashtra Affiliated to: University of Mumbai

SEMESTER: VII

MAXIMUM MARKS: 50

DATE: 26/04/2018

SUBJECT: PROFESSIONAL PRACTISE 1

PASSING: 20 MARKS

DURATION: 2 HOURS

[ALL QUESTIONS ARE COMPULSARY]

[ASSUME SUITABLE DATA WHEREVER NECESSARY]

Q1] HOW DO YOU PRACTISE ARCHITECTURE IN A MEGA CITY LIKE MUMBAI?

OR

Q1] WHAT ARE INFORMATION TO BE GIVEN IN A TENDER NOTICE-EXPLAIN? [15 MARKS]

OR

Q1] WHAT IS THE ROLE OF THE ARCHITECT IN PROPERTY PROFESSION AND JUSTIFY WHY AN ARCHITECT IS NEEDED FOR BUILDING CONSTRUCTION?

Q2] WRITE SHORT NOTES ON (ANY 2) [10 MARKS]

- EARNEST MONEY DEPOSIT
- CLERK OF WORK
- ARCHITECT' REGISTRATION ACT 1972
- LIQUIDATE DAMAGES

Q3] WHAT ARE THE MAIN POINTS RESPONSIBLE FOR TERMINATION OF CONTRACT GIVE EACH PROCESS WITH EXAMPLE? [15 MARKS]

OR

Q3] WHAT DOES AN ARCHITECT SHOULD CONSIDER WHILE SETTING UP HIS OWN OFFICE AND ABOUT ITS MANAGEMENT?

Q4] DESCRIBE IN BRIEF (ANY2) [10 MARKS]

- SECURITY DEPOSIT
- DEFECTS LIABILITY PERIOD
- TERMINATION OF CONTRACT
- JOINT VENTURE CONTRACT