

SD-6711

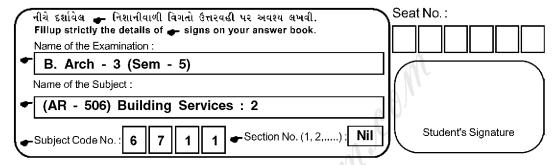
B. Arch. - III (Sem. - V) Examination May / June - 2011

(AR - 506) Building Services : II

Time: 3 Hours [Total Marks: 100]

Instructions:

(1)



- (2) Figures to the right indicate full marks.
- (3) All questions have to be attempted in one answer sheet only.
- (4) Support your answers with neat and clean sketches wherever necessary.
- 1 Answer in one or two line each:

10

- (1) Explain refrigerant cycle.
- (2) Which are the situations most likely to require air-conditioners?
- (3) Explain the horizontal and vertical transportation system with its organization chart.
- (4) What do you understand by cooling load af an AC?
- (5) What do you understand by cassette type AC?
- 2 (a) Explain typical passenger lifts with schematic plans, sections and necessary views and its basic principle of functioning.
 - (b) Explain difference between AC and desert coolers 7 with diagrams.

OR

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	AC system.	
3 (a)	Answer in brief: Explain split type AC. with schematic sketch. Suggest installation diagrams for 20 mt. × 14 mt. meeting hall with height of 3.5 mts. Having capacity for 60 persons in hall mentioning its capacity and other necessary details.	0
(b)	Short notes: (any three) (1) Branches of non-ducted air condition with its basic explanations for all the types. (2) Service lifts (3) Advantage and disadvantage of Central A.C. (4) Hydraulic lifts.	5
4 (a)	 True or False: "STC" value helps in assessing sound insulating properties of the materials. An open plan office with a lot of distrubance due to computer keys can have sound masking device. Musical concerts require more reverberation time as compared to lecture halls. Reverberation is a phenomenon which depends upon area alone of the enclosure. Sound behaves in the same manner as wind. The bathroom singers experience a rich quality of sound due to good absorbancy of bathroom tiles. The magnitude of sound is expressed in m/sec. When you talk to your friend it is 100 dB level of sound. The rear walls of an auditorium have absorbent finish. The speed of sound in m/sec is 100. 	0
5 (a)	What are the methods to control sound progagation 16 by manipulation of reflective property and absorptive property discuss with a seminar hall example?	
(b)	Discuss salient features of recording studio design, and its typical cross section. Draw and label any one joinery detail.	5
	OR	
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(b) Discuss the importance of regular maintenance of

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- (b) Discuss salient features of an auditorium hall design 15 meant for 200 people seating capacity, and its typical cross section. Draw and label any one joinery detail.
- 6 Short notes: (any three)

15

- (1) Absorption coefficient for building materials.
- (2) Construction details of any type of sound absorbent walls in auditoriums
- (3) Out door sound propagation
- (4) Movie hall sound system
- (5) Noise reduction stretegies.

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