



UG-7005

B. Arch. III (Sem. VI) (ATKT) Examination

May/June - 2012

Building Service - II (AR - 606)

(Syllabus - B)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
B. Arch. III (Sem. VI) (ATKT)

Name of the Subject :  
Building Service - II (AR - 606)

Subject Code No. : 7 0 0 5 Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

- (2) Figures to the right indicate full marks.  
(3) Support your answers with neat sketches.

- 1 (a) True or false : 10
- (1) Using air pressure differences across barriers helps to evacuate people safely.
  - (2) Active fire control means designing the building for better fire resistance.
  - (3) Smoke detectors can be located inside false floors, false ceilings and actual ceilings.
  - (4) All stairs in public building to have fire resistance of not less than two hrs.
  - (5) Minimum stairs width for educational, inst/hospital bldg is 200 cms.
  - (6) No staircase shall be arranged around the lift shaft.
  - (7) Landing doors or lift enclosures shall open in the ventilated lobby or pressurized corridor with fire resistance not less than one hour.
  - (8) Fire safety services need to have an additional back-up of energy.
  - (9) Codes generally require elevator shafts to be provided with vent shafts at the top.

- (10) Three arms of fire triangle are heat, temperature and fuel.
- (b) What are key safety features of the escalators developed over time, with the help of an appropriate sketch list and elaborate at least five. **10**
- 2** Long answer type : (attempt any four) **10**
- (1) Discuss in detail the vertical transportation strategy for the sky scrapers with appropriate sketches.
- (2) With the help of a schematic chart show the different domains of buildings as maintained by Centrally Controlled Monitoring System. (CCMS)
- (3) Discuss the provision of fire hydrant in high rise buildings (both dry and wet).
- (4) What do you understand by sense of security in a built environment ? What measures can you take to ensure safety and security in a public mall.
- (5) How does fire spread, what are the main methods to control fire spread by passive means ?
- 3** (a) How can a building component be made fire resistant? Explain with an example. **10**
- (b) What are the safety and security concerns in museums and security planning strategies for the same. **10**
- OR**
- (b) What are the safety and security concerns in bank building and security planning strategies for the same. **10**
- 4** Attempt any four. **20**
- (1) Wet and dry risers for fire fighting in high rise structure.
- (2) Smoke detectors and alarming system.
- (3) Staircase design byelaws for fire safety.
- (4) Wired and wireless security options.
- (5) Access control methods.
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