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**SUBJECT CODE NO:- H-5024**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**S. Y. Arch. (Sem-IV)**  
**E.S.S.-II**  
**[Revised]**

**[Time: Three Hours]****[Max. Marks:100]**

Please check whether you have got the right question paper.

- N.B.: 1) Question No.1 from Section A and Q.No.5 from Section B are compulsory.  
 2) Solve any two question from remaining from Section A and B each.  
 3) Assume data wherever required.  
 4) Draw neat sketches.

SECTION – A

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|-----|---|----|
| Q.1 | Describe the necessity of studying acoustics. Explain the behavior of sound on different surfaces with help of sketches.                      | 20 |
| Q.2 | What are defects of sound? Give the remedies with neat sketches.  | 15 |
| Q.3 | Give the acoustical design for a open air theater with the help of sketches.  | 15 |
| Q.4 | Write short notes ( <u>any three</u> )<br>a) Sound foci-dead spot<br>b) Concrete floating floor<br>c) Frequency of sound<br>d) Types of noise | 15 |

SECTION – B

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|-----|--|----|
| Q.1 | What is reverberation and reverberation time? Give reverberation time for auditorium, Lecture hall, and cinema hall.   | 20 |
| Q.2 | Give different methods to reduce air born noise.   | 15 |
| Q.3 | Explain in detail different types of acoustical defects.   | 15 |
| Q.4 | Write short notes ( <u>any three</u> )<br>a) Inverse square law.<br>b) Sound audition at night time and at day time<br>c) Impact noise and structure born noise<br>d) Acoustical correction. | 15 |