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Code No: 56088

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, May - 2019

MINE ENVIRONMENTAL ENGINEERING-II

(Mining Engineering)

Time: 3 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

1. Explain various indices for determination of susceptibility of coal to spontaneous heating. [15]
- 2.a) What are the factors to be considered before reopening of a sealed off area?
b) List the different methods of reopening of sealed off area. Explain stage method of reopening. [7+8]
3. How do you evaluate the chances of occurrence of firedamp explosion? [15]
- 4.a) What are the causes of coal dust explosion?
b) What are the different types of coal dust barriers, explain heavy type of coal dust barriers? [5+10]
5. Explain the preventive measures against inundation in mines. [15]
- 6.a) What are the sources of noise in underground mines?
b) What are the precautions to be taken against noise induced hearing loss? [5+10]
- 7.a) Describe the standards of Illumination in opencast mines.
b) Write about the maintenance and examination of flame safety lamps. [7+8]
- 8.a) What is reviving apparatus?
b) Explain about the principle, construction and operation of self contained breathing apparatus. [5+10]

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