

**PC-524**  
**(584) M.Sc. GEOLOGY (FOURTH SEMESTER)**  
**Examination JUNE 2020**  
Compulsory/Optional  
Group -  
Paper - I  
**MINING AND ENGINEERING GEOLOGY**

Time:- Three Hours ]

Maximum Marks : 80  
Minimum Passing Marks: 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

**UNIT - I**

1. Write an essay on the role of geologist in mining industry.

16

**OR**

White note on any two of the following.

- (a) Mine support. (b) Edit Tunnel and sbayt.  
(c) Mine subsidence.

**UNIT - II**

2. Describe the coal mining methods with neat sketches

16

**OR**

White note on any two of the following.

- (a) Caving and slicing (b) Limitations of open cast mining.  
(c) Engineering proportion of soil

**UNIT - III**

3. Describe various methods of tunnelling with neat sketches and suitable examples.

16

**Or**

White note on any two of the following.

- (a) Dam foundation problems (b) Types of support in tunnel  
(c) Classification of ground for tunnelling.

**UNIT - IV**

4. Describe the principle, economic importance and scope of marginal dressing.

16

**Or**

White note on any two of the following.

- (a) Crushing and grinding (b) Method of screening  
(c) Lination by sizes

**UNIT - V**

5. Describe in detail the concentration method with flow sheet of manganese are in India.

16

**Or**

White note on any two of the following.

- (a) Floatation method (b) Heavy media selection. .  
(c) Concentration method for Iron.