B.E. Mining Engineering Seven Semester

MN703 - Computer Application In Mining

P. Pages : 1 **GUG/W/18/1844**

Time : Three Hours * 1 4 4 3 * Max. Marks : 80

Notes : 1. Assume suitable data wherever necessary.
2. Illustrate your answers wherever necessary with the help of neat sketches.
3. Marks are indicated to right.

1. What are the advantages of modern DBMS over traditional file systems? Illustrate your answer with examples. **16**

OR

2. What is GPS? **4+8+**
Discuss in brief the component / parts of GPS. **4=16**
Discuss the scope of its use in mines.

3. Describe stepwise, how to create a new data base Design and create a table having 5 different types of fields using MS-Access. Use suitable example to illustrate your answer. Also describe different data types. Available in MS-Access for creating a field. **16**

4. **6+10**

OR **=16**

Discuss, briefly, different types of keys available in MS-Access.
What is a filter? Discuss, using an example, the procedure to apply filter on a database.

5. What is Robotics? **4+6+**
State types of Robots. **6=16**
Discuss in brief the applications of robotics in modern mining.

OR

6. What is artificial intelligence? Discuss its applications in modern mining. **16**

7. Write a program in C to calculate underground coal pillar strength. Give user choice to select a method from a list including Salomon & Munroe's Formula and CMRI Formula. **16**

OR

8. Write a program in C to compute equivalent Resistance of three resistances R_1, R_2, R_3 connected in. **5+6+**
i) Series and ii) Parallel **5=16**
Also write a program to calculate equivalent orifice of a mine.

9. Write a program in C to draw well labelled diagram of a **8+8**
i) Single circular operating, and **=16**
ii) Single Elliptical opening.

OR

10. a) What is a scanner? Discuss its applications in modern mining. **8**

b) Attempt a comparative evaluation of dot matrix, inkjet and laser printers. **8**

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