

REG.NO:.....

NAME:.....

**EIGHTH SEMESTER B.TECH DEGREE EXAMINATION**

**(2013 Scheme)**

**13.806.11 OFF ROAD VEHICLES (U)**

**Time: 3 Hours**

**Max. Marks: 100**

**Part A**

*(Answer all questions; each carries 2 marks)*

1. What are the types of off road vehicles used for land clearing?
2. What you mean by tracked vehicles?
3. Describe the working of a brush cutter?
4. Difference between cable and hydraulic dozers
5. What is the purpose of scraper?
6. Explain the working of elevating grader?
7. What are the different types of shovels and cranes?
8. Explain the working of a man lifter?
9. Explain container supports and hauling equipments?
10. Explain any four special purpose vehicles?

**(10 X 2 = 20 Marks)**

**Part B**

*(Answer any one question from each module. Each question carries 20 marks)*

**MODULE-1**

11. (a) Explain the working of brush cutter with neat sketch?  
(b) Write short notes on
  - 1) Tree Dozer
  - 2) Ripper

**(OR)**

12. (a) Briefly Explain Bulldozer and its types with neat sketches?  
(b) What is a scraper, Explain it's working with neat sketch?

**MODULE-2**

13. (a) Explain loaders and its types with neat sketch?  
(b) Explain the running and steering mechanism of a tracked vehicle?

**(OR)**

14. (a) Compare the working of scraper and Elevating grader?  
(b) Explain the working of elevating scraper with neat sketch?

### **MODULE-3**

15. (a) What is a shovel, Explain the working of a power drag shovel with neat sketch?  
(b) What is drag line, Explain the necessity of using drag lines in power shovel?

**(OR)**

16. (a) Explain the construction and working of a mobile crane?  
(b) Write short notes on

- 1) Man lifter
- 2) Fork lifter

### **MODULE-4**

17. (a) Explain all special purpose truck types?  
(b) Explain container supports and hauling equipments?

**(OR)**

18. (a) Explain the purpose of using an oil tanker surveillance vehicle?  
(b) Write short notes on the following special type vehicles

- 1) Double Decker bus
- 2) Vestibule bus
- 3) Fire fighting vehicle.

**(4x20=80 Marks)**