



## MONAD UNIVERSITY HAPUR (UP)

Course: Diploma(Ag.Engg.)

Subject: Hydraulics

Subject Code: DAGE-231

Assignment No: 1

Due date of submission: 10.11.2016

### Instruction

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Program me, and Enrolment No. clearly at the top of the page.

### Q.1.

(a) Write the classification of fluids.

(b) Explain the Pascal's law.

### Q2.

(a) Write the difference between path line and stream line.

(b) Define continuity equation and write the limitation of its.



**MONAD UNIVERSITY HAPUR (UP)  
(SCHOOL OF AGRICULTURE SCIENCE & ENGINEERING)**

Course : Diploma (Ag) III<sup>rd</sup> Semester  
Subject Name : Soil Science  
Sub. Code : DAGE-232  
Assignment No : 1

**Due date of submission: 10.11.2016**

**Instruction**

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme, and Enrolment No. clearly at the top of the page.

**Q.1:-**

- (i) Describe soil profile with Diagram?
- (ii) Explain the types of Soil?

**Q.2:-**

- (i) Define Soil? “Soil as a medium of plant growth”, Explain its?
- (ii) Explain the importance of soil particles in Agriculture?



**MONAD UNIVERSITY HAPUR (UP)**  
**(SCHOOL OF AGRICULTURE SCIENCE & ENGINEERING)**

Course : Diploma (Ag.Engg.)  
Subject Name : Farm Machinery & Power Engineering  
Sub. Code : DAGEN-234

Assignment No: 1

**Due date of submission: 10.11.2016**

**Instruction**

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HOD within the due date.
3. Write your Name, Programme, and Enrolment No. clearly at the top of the page.

**Q.1.**

- (a) Explain Engineering Terminology used in Agriculture machinery?
- (b) What do you mean by Engine? Explain briefly the classification of internal combustion Engine.

**Q2.**

- (a) Describe the different components of I.C. Engine with the help of a suitable diagram and also write down the difference between Two-stroke Engine and Four-stroke Engine.
- (b) For a 4-Stroke four cylinder engine, whose cylinder diameter is 30 cm, stroke-bore ratio is 2.0, clearance volume is  $4500 \text{ cm}^3$ , engine speed is 2400 rpm, mean effective pressure is  $7.0 \text{ kg/cm}^2$  and mechanical efficiency is 80%, Calculate:-
  - (i) I.H.P.
  - (ii) B.H.P.
  - (iii) Compression ratio
  - (iv) Swept Volume