

أجب على الأسئلة (على الوجهين)

1- Site these statements to the Arabic expressions. (١٥ Degrees)

Soil preparation machines	Food processing
Filling	Four strokes cycle
Excavator	Agricultural machinery
Mechanical efficiency	Relative humidity
Lubrication cycle	Flood irrigation

٢- أكتب المصطلح المقابل باللغة الإنجليزية (١٥ درجة)

إدارة الزراعة	بدن محراث قلاب
غفارة مجرورة	إصلاح زراعي
حفظ الأطعمة	آلة تبديل بالكبس
جرار بعجلتين دفع	الاشتعال بالضغط
خواص الهواء الجاف	آلة قطع لوزة القطن

3- Translate to Arabic (١٥ Degrees)

Farm tractor engine follow either a 2- or 4-strokes' cycle. A cycle refers to engine movement required before the events repeat. The necessary events in any internal combustion engine are (1) the intake of air, (2) the compression of the air, (3) combustion and expansion, and (4) exhausting the burned products. Fuel may be inducted with the air in carbureted engine or it may be injected during the combustion and expansion process.

In the 4-strokes' cycle, approximately 1 stroke is required for each event, or 2-complete revolutions are required for a cycle to be completed. In the 2-strokes' cycle, the exhaust and intake are shortened, so simultaneously the other events (compression and expansion) are shortened so that a complete cycle may occur in 1 revolution of the engine crankshaft.

Two-strokes' cycle engines are lightweight for power produced and efficient at low engine speeds. Using crankcase compression, they are able to operate in any position, are simply constructed, and inexpensive. Four-strokes' cycle engine have greater fuel efficiency at the high engine speeds most commonly used by farm tractors.

4. Read section 3 and Answer the following questions (25 Degrees):

4.1 Comprise between the 2- and 4- stroke cycle engines?

4.2 Choose the right answer: In two strokes' cycle engine, a complete event requires,

(a) one crankshaft revolution, (b) two crankshaft revolutions, (c) four crankshaft revaluations

4.3 Give the opposite of the underline words

4.4 Explain how fuel inters combustion champers in case of 2- and 4- stroke engines.

4.5 Both exhaust and intake as well as compression and expansion are shortened...Explain this statement

4.6 What are the major agricultural engineering branches and their aims?

٤-ترجم إلى الإنجليزية (١٠ درجات).

عمليات الحراثة (إعداد الأرض للزراعة) تجرى بغرض تفكيك الطبقة السطحية للتربة بغرض إعداد مهد جيد لنمو البذور وإنضاج المحصول، حيث بتفكيك وقلب الطبقة السطحية للتربة يتم التخلص من الحشائش وزيادة التهوية (المسامية)، مما يسهل نمو واختراق جذور النبات، والاحتفاظ بمياه الري بالمسام. وعليه يجب على مدير المزرعة الاهتمام بخواص كل عملية زراعية في الحقل من حيث وقت أجراءها، والمعدة المناسبة، حيث أن عمليات إعداد الأرض للزراعة تستهلك ٥٠% من القدرة المطلوبة لجميع عمليات إنتاج المحصول على المستوى العالمي.

Good luck for all

لجنة ممتحنين