

**GRADE 11 PHYSICAL SCIENCES**

**NOVEMBER EXAMINATION PAPER 1: PHYSICS**

**SECTION A**

**QUESTION 1**

Various options are provided as possible answers to the following questions. Choose the correct answer and write **ONLY** the **LETTER (A-D)** next to the **QUESTION NUMBER** in your answer book.

- 1.1 An example of a vector quantity:
- velocity
  - displacement
  - speed
  - mass
- 1.2 A boy sits on a chair. Gravitational force pulls him down, the force that keeps him from moving down would be:
- friction
  - applied force
  - gravity
  - normal force
- 1.3 Two forces  $F_1$  and  $F_2$  have a net force of 100N if they act in the same direction and are balanced if they act in the opposite direction. The individual forces of  $F_1$  and  $F_2$  will be:
- 70N and 30N
  - 100N and 0N
  - 60N and 40N
  - 80N and 20N

Use the circuit diagram below to answer QUESTIONS 1.4 and 1.5



- 1.4 The voltage over the parallel resistors will be:
- 6V
  - 7V
  - 20
  - 30
- 1.5 The total resistance of the circuit if all resistors were identical with a resistance of 20:
- 100
  - 4/50
  - 50
  - 60
- 1.6 A box is pushed forward with a force of 200N but does not move. A possible reason for this is that:
- frictional force is also 200N
  - frictional force is more than 200N
  - frictional force is less than 200N
  - none of the above
- 1.7 The diagram below shows a coil and a magnet with a pole **P**. A magnetic field is induced in the coil due to the motion of the magnet.



Which **ONE** of the following combinations will result in an induced magnetic field with **NORTH POLE** at point **B**?

	DIRECTION OF MOTION OF MAGNET	POLARITY OF P
A	into the coil	North
B	up and down inside the coil	North
C	into the coil	South
D	up and down inside the coil	South

# Grade 11 Physical Science Paper1 November 2013 Ncs

**AW Chickering**



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E. J. Van Zyl,V. Craul,A. Meyer,C. Muller,L. P. Spies,1999-01     *Everything Science* ,     Physical Sciences 11 ,2012

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32 mechanism which consists following parts rack

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web dec 17 2021 what is the optimum distance between a rack and centerline of a pinion in the image below i have two racks opposite each other and the teeth surfaces are tangent to the faces the center pinion is a 20 tooth 2 module gear

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web aug 7 2017 calculating the rack and pinion gear ration involves determining the amount of revolutions achieved by the pinion to produce the distance of the rack and is commonly used in vehicle and other types of engines and mechanical devices to calculate speed and power capacity

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web we can calculate the accuracy of various low backlash gearboxes racks pinions and complete systems from 250 mm up to 90 meters and more from module 1 to 12 rack quality 4 to 10 straight or helical teeth and so on accuracy is the starting point of the total drive which is why we can provide the calculation and accuracy sheet for your

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*design and fabrication of rack and pinion lift idosi* - Jun 17 2022

web design and fabrication of rack and pinion lift thirugnanam praphul das and lenin rakesh department of mechanical engineering bharath institute of science and technology p o 600073 chennai india abstract a rack and pinion lift is composed of two gears and a rack and pinion arrangement