DEPARTMENT OF PHYSICS

(Al Ansar International School, Sharjah)

(2017-18)

Project Work – Term 1

IGCSE Physics "Grade 9"

Students' Name: _____

Grade / Section: _____

Complete the answer sheet on page 2, and submit to your teacher.

Department of physics – Al Ansar International School, Sharjah

Answer sheet - Term 1, Project work (2017-18)

Students name: _____ **Grade / Section:** _____

Total Marks = 10 **Marks obtained:** _____

Please highlight the correct option of each question.

Question Number	A	B	C	D
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Q1. What is the average speed of a child who runs to the store 4 Km away in 30 minutes?

A. 16 km/hr
B. 8 km/hr
C. 120 km/hr
D. 4 km/hr

Q2. Calculate the distance that the same boy runs if he maintains the average speed from question 1 for 1 hour.

A. 4km
B. 2km
C. 120km
D. 8km

Q3. A bicycle rider travels 50.0 Km in 2.5 hours. What is the cyclist's average speed?

A. 20 km/hr
B. 50 km/hr
C. 100 km/hr
D. 125 km/hr

Q4. What is the average speed of the car that travelled a total of 200 miles in 5 hours.

A. 200 miles/hr
B. 40 miles/hr
C. 1000 miles/hr
D. 100 miles/hr

Q5. An ant can travel approximately 30 meters per minute. How many meters could an ant move in 45 minutes?

A. 30meters
B. 1350meters
C. 60meters
D. 15meters

Q6. How much time would it take for the sound of thunder to travel 2000 meters if sound travels a speed of 330 meters per sec.

A. 0.165sec
B. 100sec
C. 6.061sec
D. 660sec

Q7. A car advertisement states that a certain car can accelerate from rest to 70 km/h in 7 seconds. What is the car's average acceleration?

A. 2.78m/sec^2
B. 10m/sec^2
C. 10000m/ sec^2
D. 136m/ sec^2

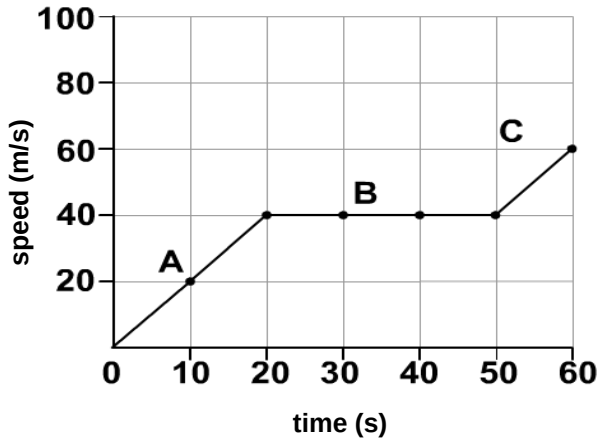
Q8. Which of the following is not a unit of speed?

A. m/sec^2
B. m/sec
C. km/ hr
D. miles/hr

Q9. For an object in uniform motion, which of the following is zero?

A. speed
B. distance
C. time
D. acceleration

Study the speed/time graph then use the information to answer the questions 10, 11 and 12:



Q10. In which section of graph the speed is steady?

A. A
B. B
C. C
D. None

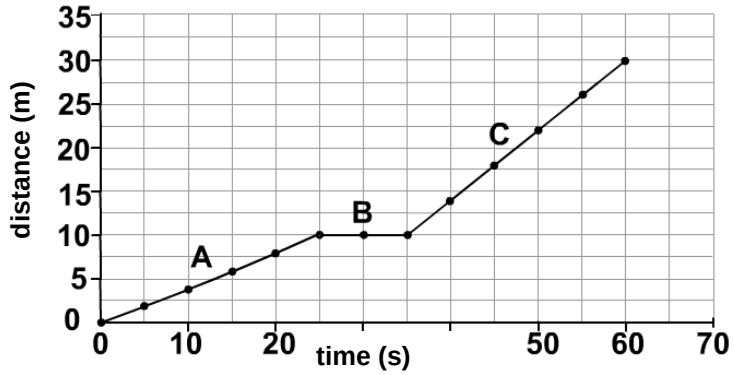
Q11. What is the total distance travelled for the whole journey?

A. 200m
B. 2100m
C. 2000m
D. 1700m

Q12. The acceleration for A is:

A. $2m/s^2$
B. $1m/s^2$
C. $0.5m/s^2$
D. $800m/s^2$

Study the distance/time graph then use the information to answer the questions 13, 14 and 15:



Q13. In which section of graph the speed is steady?

A. A
B. B
C. C
D. A and C

Q14. The average speed for the whole journey is:

A. 1m/s
B. 30m/s
C. 0.5m/s
D. 60m/s

Q15. In which section of graph the acceleration is zero?

A. A
B. B
C. C
D. All of the sections

Q16. Unit for density is

A. m
B. mole
C. kg/m^3
D. Pa

Q17. The diameter and the length of a thin wire, approximately 50cm in length, are measured as precisely as possible. What are the best instruments to use?

	diameter	length
A	micrometer	rule
B	micrometer	vernier calipers
C	rule	tape
D	vernier calipers	rule

Q18. Is mass a scalar or a vector, and is acceleration a scalar or a vector?

	mass	acceleration
A	scalar	scalar
B	scalar	vector
C	vector	scalar
D	vector	vector

Q19. What is the acceleration due to gravity?

A. 10 m/s^2
B. 8 m/s^2
C. 6.8 m/s^2
D. 7.8 m/s^2

Q20. Vectors are the quantities that are described by:

A. Both magnitude and direction
B. Velocity
C. Magnitude
D. Direction

Q21. Which one is a scalar quantity?

A. Acceleration
B. Displacement
C. Speed
D. Velocity

Q22. Acceleration is:

A. The speed at any given instant in time
B. The rate at which an object moves
C. The rate at which an object changes its velocity
D. None of the above

Q23. Among the following which is the best conductor of heat?

A. Iron
B. Wood
C. Plastic
D. Water

Q24. Which of the following is not a temperature scale?

A. Celsius
B. Newton
C. Kelvin
D. Fahrenheit

Q25. In a pendulum, the distance between mean position and extreme position is called:

A. Time period
B. Amplitude
C. Frequency
D. Length

Q26. The phenomenon in which light hits a surface and bounces off is called:

A. Refraction
B. Reflection
C. Dispersion
D. Diffraction

Q27. One division on the main scale of a Vernier calipers is of:

A. 1 cm
B. 0.1 cm
C. 0.01cm
D. 0.001 cm

Q28. A meter rule is used to measure:

A. weight
B. mass
C. length
D. force

Q29. Least measurement possible with a screw gauge is:

A. 0.1 mm
B. 0.01 mm
C. 0.2 mm
D. 0.02 mm

Q30. A plane's average speed between two cities is 600 km/hr. If the trip takes 2.5 hrs. how far does the plane fly?

A. 1000km
B. 1200km
C. 1500km
D. 300km

Q31. Units given by system international for measuring physical quantities are called

A. IS units
B. SI units
C. S units
D. I units

Q32. If the diameter of a metal ball is found to be 2.5cm using a Vernier calipers, its radius will be:

A. 25mm
B. 1.25mm
C. 12.5mm
D. 1.5mm

Q33. Which of the following is not a vector quantity:

A. Velocity
B. Acceleration
C. Time
D. Weight

Q34. How long will it take a car to go from a complete stop to 44 km/hr if they are accelerating at 5 km/hr^2?

A. 10hr
B. 4.4hr
C. 5hr
D. 8.8hr

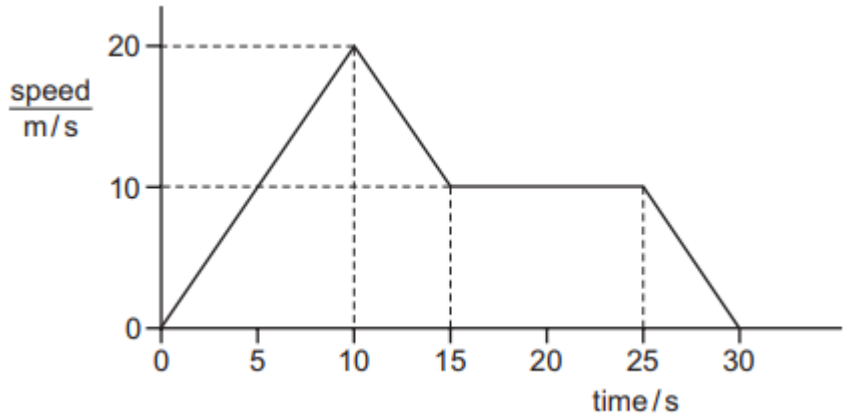
Q35. A person jogs 4.0 km in 22 minutes, then 2.0 km in 22 minutes, and finally 1.0 km in 16 minutes. What is the jogger's average speed in km per hour?

A. 14kmph
B. 8kmph
C. 7kmph
D. 12kmph

Q36. A student wishes to find the volume of a small, irregularly-shaped stone. A ruler and a measuring cylinder containing some water are available. Which apparatus is needed?

A. neither the ruler nor the measuring cylinder
B. the measuring cylinder only
C. the ruler and the measuring cylinder
D. the ruler only

Q37. The graph represents the motion of a car.



What is the distance travelled by the car while it is moving at a constant speed?

A. 100m
B. 150m
C. 250m
D. 300m

Q38. The mass of an object is measured on Earth. The mass is 5.0kg. The object is taken to the Moon. The mass of the object is measured on the Moon. What is the mass of the object on the Moon?

A. 0kg
B. more than 0kg, but less than 5.0kg
C. 5.0kg
D. more than 5.0kg

Q39. A person wishes to measure the time he takes to run around a jogging track. The instrument he needs for this purpose is:

A. Speedometer
B. Vernier caliper
C. Balance
D. Stopwatch

Q40. Joules is the measuring unit of:

A. Energy
B. Temperature
C. Volume
D. Acceleration