A

[illegible]: _ _ _ _ _ _ _ _ _ _ _ _ _

[illegible] 3:30 [illegible] /(فيزيا) [illegible]

[illegible] 2020– 2021 [illegible]

1 SN: 3000001

[illegible]

1. [illegible] :

A) [illegible] B) [illegible] C) $\frac{1}{4}$ [illegible] D) [illegible]

2. [illegible] (CD) [illegible] 0.06 m [illegible] (CD) [illegible] 1.8m/s [illegible] 0.03m [illegible]?

A) 30 m/s B) 0.03 m/s C) 0.9 m/s D) 3.6 m/s

3. [illegible] 0.525 Hz [illegible] a_g =9.81 m/s^2 ?

A) 0.9 m B) 4.5 m C) 1.25 m D) 3.5 m

4. [illegible] .... [illegible] ?

A) [illegible] B) [illegible] C) [illegible] D) (C+A) [illegible]

5. [illegible] 2.5 m [illegible] 35° [illegible] ?

A) 1.4 m B) 4.1 m C) 36 m D) 22.5 m

6. [illegible] 10 s [illegible] ?

A) 0.314 rad/s B) 2.23 rad/s C) 0.63 rad/s D) 31 rad/s

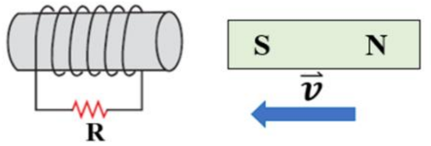
7. [illegible] 1.2 rad/s [illegible] 12 m [illegible] ?

A) 17.28 m/s^2 B) 1.728 m/s^2 C) 172 m/s^2 D) 1282 m/s^2

8. [illegible] ?

A) (τ)[illegible] B) (L)[illegible] C) (I)[illegible] D) (F)[illegible]

9. [illegible] R. [illegible]:



A) [illegible] B) [illegible] C) [illegible] D) [illegible]

10. [illegible] ?

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

11. [illegible] θ [illegible] ?

A) B sin θ B) B cos θ C) B cos θ tan θ D) AB tan θ

12. [illegible] 1200Hz [illegible] 72 km/h [illegible] 340 m/s [illegible]:

A) 1000 Hz B) 1129.4 Hz C) 1270.6 Hz D) 1700 Hz

13. [illegible] 456 Hz [illegible] 331 m/s [illegible] 367 m/s [illegible] ?

A) 250 Hz B) 507 Hz C) 750 Hz D) 1000 Hz

14. [illegible] ?

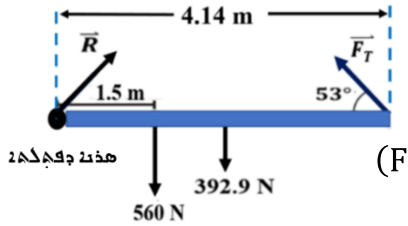
A) [illegible] B) [illegible] C) [illegible] D) [illegible]

15. [illegible]:

α_{avg}	$\Delta\omega$	Δt
?	$-1.2\ rev/s$	$7\ s$

A) -0.25 rad/s^2 B) -0.5 rad/s^2 C) -1.07 rad/s^2 D) -2 rad/s^2

16. [illegible] (b) [illegible] 4.14 m [illegible] 392.9 N [illegible] 53^0 [illegible] (p) [illegible] 560 N [illegible] 1.5 m [illegible] (F_T) [illegible]:



A) 500 N B) 400 N C) 663 N D) 952.9 N

17. [illegible]:

A) [illegible] B) [illegible] C) [illegible] D) (C+B) [illegible]

18. [illegible]?

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

19. [illegible] ....:

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

20. [illegible]

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

21. [illegible] 0.77 kg [illegible] 0.3 m [illegible]?

A) 0.25 N/m B) 2.5 N/m C) 20 N/m D) 25 N/m

22. [illegible] (a_g= g= G $\frac{m_E}{r^2}$)?

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

23. [illegible] $\vec{F_c}$ [illegible] $\vec{a_c}$ [illegible]:

A) 0° B) 45° C) 90° D) 180°

24. [illegible] L ?

A) $\lambda_1 = L$ B) $\lambda_1 = 2L$ C) $\lambda_1 = 3L$ D) $\lambda_1 = 4L$

25. [illegible]?

A) [illegible] B) [illegible] C) [illegible] D) [illegible]

26.ܗܐܟܐ ܗܕܡܐ ܣܘܪܓܐ 25 cm ܡܫܝܢܐ ܠܦܐ (ܬܹܠܵܐ) ܕܪܵܕܹܐ ܠܗܘܢܐ 5 A ܓܘ ܣܦܪܐ ܗܝܟܐ ܠܡܘܕܐ ܥܠ ܠܚܝܠܐ ܡܓܢܛܝܣܝܐ ܠܗܘܢܐ 0.6 T. ܡܐ ܝܠܗ ܚܘܝܠܐ ܕܚܝܠܐ ܡܓܢܛܝܣܝܐ ܡܚܒܫܢܐ ܠܗ ܗܝܟܐ ؟

0.075 N (A　　7.5 N (B　　0.75 N (C　　75 N (D

27.ܡܘܕܪܐ ܡܓܢܝܬܢܐ ܚܘܝܠܗ 5 kg ܘܦܠܓܐ ܕܩܘܛܪܗ 0.1 m ܦܪܐܠ ܒܡܘܪܘܒܐ ܕܘܪܢܝܐ ܚܘܝܠܗ 20 rad/s ܣܟܡ ܣܒܝܪܘܬܗ ܕܘܪܢܝܐ:

$0.2\ kg\frac{m^2}{s}$ (A　　$0.3\ kg\frac{m^2}{s}$ (B　　$1\ kg\frac{m^2}{s}$ (C　　$0.5\ kg\frac{m^2}{s}$ (D

28.ܡܫܡܥܢܐ ܕܩܠܐ ܐܝܠܗ ܪܘܟܒܐ ܡܢܐ ܒܩܠܐ ܪܡܐ ܦܢܝܐ ܕܡܬܠܬܐ ܕܩܠܐ ܢܫܡܐ ܡܢܗ ܪܚܘܩܐ 5 m ܓܘ ܣܦܪܐ ܡܫܡܥܢܐ ܕܩܠܐ ܕܡܫܡܥܢܐ 3.14×10^{-3} W. ܡܐ ܝܠܗ ܚܘܝܠܐ ܕܚܘܝܠܐ ܕܩܠܐ ܕܡܛܐ ܠܐܕܢܐ ؟

0 dB (A　　30 dB (B　　40 dB (C　　70 dB (D

29.ܚܝܠܐ ܡܓܢܛܝܣܝܐ ܠܦܐܦܐ ܐܘܦܢܐ (ܣܠܘܢܝܕܐ) ܗܕ ܟܠ ܐܝܢܐ ܡܢ ܚܒܘܫܝܐ (ܚܘܦܐܝܐ) ܕܐܝܬܠܗ:

A) ܡܢܝܢܐ ܕܟܠܝܬܐ ܠܣܕܝܘܬܐ ܕܣܘܪܓܐ

B) ܠܗܘܢܐ ܕܠܦܐ (ܬܹܠܵܐ)

C) ܚܒܘܫܝܐ ܕܢܦܘܫܘܬܐ ܡܓܢܛܝܣܝܬܐ ܠܡܨܥܝܐ (μ)

D) ܟܠܗܘܢ ܦܘܢܝܐ ܗܕܡܐ ܝܠܗܘܢ

30.ܠܐܪܡ ܠܦܦܐ ܚܒܘܫܝܐ ܕܚܕܘܪܐ ܡܫܚܠܦܢܐ 1.06 H ، ܣܟܡ ܡܫܘܚܐ ε ܚܕܝܬܐ ܠܗ ܣܘܪܓܐ (ܕܘܪܬܐ) ܐܪܒܥܬܐ ܓܘ. ܥܘܣܠܦܠܗ ܠܦܐ (ܬܹܠܵܐ) ܠܗ ܣܘܪܓܐ (ܕܘܪܬܐ) ܥܪܘܩܬܐ ܡܢ 0 A ܠ 9.50 A ܒܡܫܚܐ 0.0336 s .

117 V (A　　245 V (B　　- 300 V (C　　300 V (D

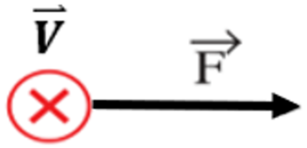
31.ܦܝܫ ܠܦܐ (ܬܹܠܵܐ) ܕܡܪܕܐ ܠܗ ܣܠܡܬܐ (ܡܬܘܪܨܬܐ) ܡܢ ܚܕ ܠܦܦܐ ܡܫܚܘܗ 50 cm ܣܟܡ ܠܗܘܢܐ ܕܠܦܐ (ܬܹܠܵܐ) ܓܘ ܕܘܟܐ ܠܗܘܢܐ ܕܚܝܠܐ ܡܓܢܛܝܣܢܐ ܠܓܒ ܡܫܚܘܗ ܕܣܠܡܬܐ $2\pi\times10^{-5}T$ ، ܓܘ ܡܕܝܢܐ [μₒ=4π×10^{-7} T.m/A] ؟

10 A (A　　20 A (B　　25 A (C　　30 A (D

32.ܠܦܦܐ ܕܡܪܕܢܐ ܣܘܪܓܗ 10 cm ܘܥܡܠܣܘܬܐ ܕܦܬܝܐܝܬܗ 24.88 cm^2 ܘܡܢܝܢܐ ܕܟܪܟܗ 400 ܟܪܟܐ ܘܟܠܝܗ ܗܘܝܬܐ (ܗܘܐ). ܣܟܡ ܚܒܘܫܝܐ ܕܚܕܘܪܐ ܡܓܢܐ ܠܠܦܦܐ، ܓܘ ܡܕܝܢܐ [μₒ=4π×10^{-7} T.m/A]

2 × 10^{-3} H (A　　5 × 10^{-3} H (B　　3 × 10^{-5} H (C　　3 × 10^{-4} H (D

33.ܡܦܠܣ ܨܘܪܬܐ ܕܠܘܚܡܦܐ ܡܚܘܫܬܐ ܒܚܣܘܢܝܬܐ ܗܘܡܟܬܐ ܘ ܨܘܪܬܐ ܕܚܝܠܐ ܡܓܢܛܝܣܝܐ ، ܦܠܚܐ ܚܠܗ ܠܚܒܝܬܐ ܕܨܘܪܬܐ ܕܚܝܠܐ ܡܓܢܛܝܣܝܐ، ܐܝܟ ܕܝܠܗ ܠܠܐ ܠܗ ܐܗܡܝܬܐ ܒܪܘܡܝܬܐ:



A) ܡܢ ܠܠܠ ܕܦܐܬܐ　　B) ܡܢ ܡܥܢܝܐ ܕܦܐܬܐ

C) ܡܢ ܒܪܝܐ ܕܦܐܬܐ　　D) ܡܢ ܠܐܡܣ ܕܦܐܬܐ

34.ܘܡܕ ܠܘܥܡܦܐ ܕܢܠܦܐ (q=3.2×10^{-19} C) ܒܡܘܪܘܒܐ 2.5×10^{6} m/s ܠܡܘܕܐ ܥܠ ܚܝܠܐ ܡܓܢܛܝܣܝܐ ܚܘܝܠܗ 2 × 10 $^{-4}$ T . ܡܐ ܝܠܗ ܚܘܝܠܐ ܕܚܝܠܐ ܡܓܢܛܝܣܝܐ ܡܚܒܫܢܐ ܠܗ ܠܘܥܡܦܐ؟

1.6 × 10^{-16} N (A　　−1.6 × 10^{-16} N (B　　4.0 × 10^{-9} N (C　　ܗܦܟܐ (D

35.ܡܝܢܐ ܙܒܢܐ ܠܦܚܠܬܐ ܕܠܘܥܡܐ ܣܒܪ ܗܕܐ ܡܦܣܩܐ :

A) ܡܘܣܬܘܦܐ ܕܘܪܢܝܐ (Δθ)　　B) ܚܝܠܘܬܐ ܡܝܒܝܢܬܐ (a$_t$)　　C) ܡܘܪܘܒܐ ܕܘܪܢܝܐ (ω)　　D) ܚܝܠܘܬܐ (α)

36.ܦܪ ܡܥܒܢܐ ܠܗܘܢܐ ܕܚܝܠܐ ܡܓܢܛܝܣܝܐ $\overrightarrow{B}$ ܒܣܕܝܘܬܐ:

A) ܬܣܠܐ (T)　　$\frac{N}{A.m}$ (B　　$\frac{wb}{m^2}$ (C　　D) ܟܠܗܘܢ ܦܘܢܝܐ ܗܕܡܐ ܝܠܗܘܢ

37.ܠܘܕܬܐ ܢܝܚܡܬܐ ܚܘܝܠܗ 4.1 kg ܘܦܠܓܐ ܕܩܘܛܪܗ 0.05 m ܡܪܕܐ ܒܓܢܝܕܪܬܐ ܡܢ ܥܠܡܘܬܐ ܡܢ ܪܡܘܬܐ 2 m ܥܠ ܢܣܩܐ ܠܒܝܐ ܒܘܢܝܬܐ30° ܠܠܠ ܐܘܦܢܐ ܡܐ ܝܠܗ ܡܘܪܘܒܐ ܡܥܒܝܢܐ ܠܡܪܕܘܗܝ ܕܠܘܕܬܐ ܒܠܒܝܐ ܕܡܛܝܬܐ ܠܓܢܣ ܕܢܣܩܐ؟

6.727 m/s (A　　4.245 m/s (B　　5.29 m/s (C　　24 m/s (D

38.ܒܠܒܝܐ ܕܡܚܒܪܬܐ ܡܘܚܠܒܐ ܠܒܪܢܐ ܠܡܓܢܛܝܣܝܐ ܡܚܒܪܬܐ ܡܫܪܘܬܐ ܠܗ ܠܦܦܐ ܗܝܟܐ ܡܘܚܠܒܐ ܒܚܠܘܦܘܬܐ ܡܚܒܪ ܠܦܠܡܬܐ ܕܡܥܒܘܪܢܐ ܕܚܠܘܦܘܬܐ ܨܘܪܬܐ ܡܥܢܝܐ ، ܡܐ ܝܠܗ ܠܚܒܪܐ ܐܝܢܐ ܡܢ ܕܦܠܓ ܡܫܘܢܝܐ ܨܘܪܬܐ ܗܝܟܐ :

A) ܠܒܪܬܐ ܕܡܘܚܠܒܐ ܠܒܪܢܐ ܠܡܓܢܛܝܣܝܐ ܠܒܪܢܐ ܕܠܦܦܐ　　B) ܥܒܡܬܐ ܕܡܓܢܛܝܣܝܐ ܥܠܝܐ ܠܗ ܠܦܦܐ

C) ܘܚܡܬܐ ܕܡܘܚܠܒܐ ܗܡܥܢܐ ܠܡܓܢܛܝܣܝܐ ܠܓܘܝܐ ܕܠܦܦܐ　　D) ܗܪܘܝܗܝ ܦܘܢܝܐ (C+A) ܗܕܡܐ ܝܠܗܘܢ

39.ܠܗ ܐܝܢܐ ܡܢ ܡܐ ܕܐܬܐ ܡܥܢܝܐ ܕܚܕܫܐ ܒܪ ܠܒܘܪܐ (ܪܒܐ) ܡܢ ܡܥܢܝܐ ܕܡܬܒܪܐ ܐܝܡܢ ܕܒܪܐ ܬܹܠܵܐ ܚܠܝܐ ؟

A) ܡܓܪܐ ܒܕܝܠܐ　　B) ܐܢܒܘܒܐ ܦܓܪܐ ܕܗܪܡܝܗ ܠܒܢܝܢܐ

C) ܐܢܒܘܒܐ ܕܓܒܪܐ ܕܣܕ ܠܝܢܐ　　D) ܟܠܗܘܢ ܦܘܢܝܐ ܗܕܡܐ ܝܠܗܘܢ

40.ܡܘܡܟܡ ܝܠܗ ܥܣܠܦܬܐ ܕܠܠܦܘܡܣܬܐ ܠܦܘܠܡܣܬܐ ܒܡܥܡܠܬܐ ܕܠܘܝܐ .... ܠܡ ܠܠܦܘܡܣܬܐ:

A) ܪܡܥܬܐ ܪܒܐ ܒܢܡܒܦܘܬܐ　　B) ܪܡܥܐ ܪܒܐ ܒܗܝܒܘܡܘܬܐ

C) ܢܣܓܝܬܐ (ܒܓܘܪܬܐ) ܪܒܐ ܒܗܝܒܘܡܘܬܐ　　D) ܢܣܓܝܬܐ (ܒܓܘܪܬܐ) ܪܒܐ ܒܢܡܒܦܘܬܐ

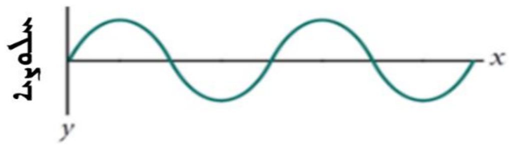
41.ܓܘ ܣܦܪܐ ܠܘܥܡܐ ܒܐܚܒܘܬܐ ܕܗܘܦܠܐ ܦܝܠܐܢܐ .ܐܝܢܐ ܡܢ ܡܐ ܕܐܬܐ ܝܠܗ ܗܕܡܐ:

$\sum\tau=0$ (A　　$\alpha=0$ (B　　C) ܡܘܪܘܒܐ ܕܘܪܢܝܐ ܗܡܡܬܐ　　D) ܟܠܗܘܢ ܦܘܢܝܐ ܗܕܡܐ ܝܠܗܘܢ

42.ܓܢܝܕܪ ܡܘܕܪܐ ܚܘܝܠܗ 0.5 kg ܘܦܠܓܐ ܕܩܘܛܪܗ 0.1 m ܥܠ ܢܣܩܐ ܕܠܐ ܥܪܩܬܐ.ܡܐ ܝܠܗ ܗܘܡܦܐܘܡܢܐ ܚܠܝܢܐ ܠܡܘܕܪܐ ܒܠܒܝܐ ܕܦܘܫܐ ܠܗܘ ܡܘܪܘܒܐ ܚܪܢܐ ܠܡܓܕܪܘܗܝ 1 m/s ، $\left[I=\frac{1}{2}\,m\,r^2\right]$؟

0.375 J (A　　3.75 J (B　　375 J (C　　3.75 ×10^{3} J (D

43.ܡܐ ܝܠܗ ܐܕܪܐ ܕܬܹܠܵܐ ܗܘ ܕܡܦܘܫܝܠܗ ܪܡܥܐ ܒܡܢܬܐ؟



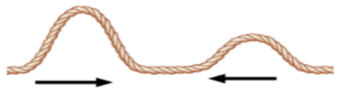
A) ܬܹܠܵܐ ܦܓܘܪܐ　　B) ܬܹܠܵܐ ܡܘܪܓܢܐ

C) ܬܹܠܵܐ ܕܡܪܘܡܓܢܛܝܣܝܐ　　D) ܬܹܠܵܐ ܪܕܝܘܦܢܐ

44.ܐܝܢܐ ܡܢ ܬܹܠܵܐ ܡܠܝܐ ܕܐܬܐ ܡܥܒܪ ܒܪ ܒܡܘܪܘܒܐ (ܒܡܘܪܘܒܐ ܒܪ ܠܒܘܪܐ) ܠܗ ܗܘܐ ؟

A) ܠܠܠܐ ܥܡܒܝܐ　　B) ܠܠܠܐ ܗܣܘܦ ܢܡܫܝܐ　　C) ܠܠܠܐ ܚܝܠ ܢܡܫܝܐ　　D) ܟܠܗܘ ܡܥܒܪ ܒܡܘܪܘܒܐ ܒܝܬܗ

45. ܡܐ ܝܠܗ ܐܕܪܐ ܕܚܠܠܬܐ ܕܒܪܐ ܐܝܡܢ ܕܗܦܟܝ ܗܪܘܝܗܝ ܪܦܝܬܐ ܠܠܝܐ (ܐܝܟ ܠܗ ܐܗܡܝܬܐ ܠܠܝܐ)؟



A) ܚܠܠܬܐ ܡܘܒܪܝܬܐ (ܡܣܝܠܬܐ)　　B) ܚܠܠܬܐ ܢܒܝܬܐ

C) ܚܠܠܬܐ ܡܘܒܪܝܬܐ ܠܡܒܪܬܐ　　D) ܠܐ ܒܪܝܐ ܚܠܠܬܐ

46.ܠܗ ܡܠܒܝܬܐ ܕܣܟܠܐ ܠܡܦܠܬܐ ܕܘܠܒܐ ܗܘܐ ܦܘܠܓܬܐ ܣܘܡܩܐ ܦܠܚܬܐ ܡܢ ܣܟܠܐ ܠܣܒܩܐ ܘܣܟܠܐ ܕܣܢܒܬܐ 36 N.m ܣܒܪ ܕܘܠܒܐ .ܦܥܠܗ ܡܘܝܣܩܐ ܣܟܠܐ ܠܡܫܚ 6 s ܒܪ ܪܡܠܗ ܡܘܪܘܒܐ ܕܘܪܢܝܐ ܠܕܘܠܒܐ ܡܢ 0 ܠ 12 rad/s ܒܐܪ ܗܕܝ ܦܥܠܗ ܡܘܒܪܐ ܣܟܠܐ ܡܢ ܕܘܠܒܐ ܘܚܠܠܗ 65 s ܣܟܡ ܣܘܡܩܐ ܕܣܟܠܐ ܕܣܢܒܬܐ؟

-11 N.m (A　　−26.5 N.m (B　　−33 N.m (C　　−3.3N.m (D

47.ܒܘܢܝܬܐ ܕܡܘܪܓܐ ܕܪܕܝܐ ܕܪܡܫܐ ܕܐܬܐ ܡܥܒܪ ܠܗ ܚܘܝܠܐ ܕܣܘܡܩܐ ܠܣܒܩܐ ܠܘܢܒܬܐ ܕܘܠܒܐ ܠܡܒܪܡܐ ܕܪܕܝܬܐ ܗܘܝܬܐ ؟

A) ܘܡܕ　　B) ܒܪܘܪ　　C) ܒܪܘܪ ܠܦܠܓܐ　　D) ܠܐ ܢܣܝܠܗ

48.ܗܘܡܬܐ ܢܣܝܠܗ ܗܘܡܦܐ ܡܒܢܒܒܢܐ ܠܗܘܡܦܐ ܕܡܪܢܐ.

A) ܡܘܠܕܢܐ　　B) ܡܫܘܪܐ　　C) ܢܡܥܬܐ　　D) ܠܡܢܝܬܐ (ܡܫܠܕܘܦܝ)

49.ܗܢܪܝ(H)=...............:

$\Omega.m$ (A　　$Wb.m^2$ (B　　$\frac{wb}{A}$ (C　　$N.m$ (D

50.ܓܘ ܘܡܕܠܗ ܡܘܪܘܒܐ ܕܦܠܓܐ ܕܠܦܦܐ ܕܡܫܘܪܐ :

A) ܘܡܕ ܣܟܠܐ ܘܠܘܦܐ ܕܡܪܕܢܐ ܠܪܒܝܐ ܕܠܡܘܒܠܐ

B) ܢܝܫ (ܒܪܘܪ) ܣܟܠܐ ܘܠܘܦܐ ܕܡܪܕܢܐ ܠܪܒܝܐ ܕܠܡܘܒܠܐ

C) ܢܝܫ (ܒܪܘܪ) ܠܦܐ (ܬܹܠܵܐ) ܠܗ ܠܦܦܐ

D) ܗܪܘܝܗܝ ܦܘܢܝܐ (C+A) ܗܕܡܐ ܝܠܗܘܢ

A