SR ELITE ***Date : 26.03.19***

TIME : 3 Hrs. *NEET UNIT TEST – 2* ***Max.Marks : 180***

IMPORTANT INSTRUCTIONS :

- **Pattern of the Entrance Examination** :
  Paper containing 180 objective type questions from Biology, Physics and Chemistry.
- **Use Blue/Black Ball Point Pen only** to darken the appropriate circle. Answers marked with pencil would not be evaluated.
- Each item carries **4marks**. For each correct response the candidate will get 4 marks. For each incorrect response **1mark** will be deducted from the total score.

[illegible] [illegible]

[illegible] *Datura*

2 *Dolichos*

[illegible] *Dahlia*

[illegible] *Derris*

2 [illegible]

[illegible] *Bryophyllum*

2 *Nepenthes*

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible] *Carica, Chara*

2 *Cycas, Carica*

[illegible] *Chara, Marchantia*

[illegible] *Marchantia, Musa*

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] [illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible]

(1) [illegible]

(2) S[illegible]

(3) [illegible] – [illegible]r

(4) [illegible]

[illegible] – I [illegible] – II [illegible]

	[illegible] – I		[illegible] – II
[illegible]	[illegible]	[illegible]	Tr[illegible]
[illegible]	[illegible]	[illegible]	Neisseria
[illegible]	T[illegible]	[illegible]	Leishmania
d	[illegible]	[illegible]	Rickettsia

[illegible]

	[illegible]	[illegible]	[illegible]	d
(1)	[illegible]	[illegible]	[illegible]	[illegible]
(2)	[illegible]	[illegible]	[illegible]	[illegible]
(3)	[illegible]	[illegible]	[illegible]	[illegible]
(4)	[illegible]	[illegible]	[illegible]	[illegible]

M[illegible] T [illegible]

(1) [illegible]

(2) 2[illegible]

(3) [illegible]

(4) [illegible]

Tr[illegible]

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

[illegible]

(1) [illegible]

(2) T[illegible]

(3) T[illegible]

(4) [illegible]

[illegible]

(1) [illegible]

(2) T[illegible]

(3) [illegible]

(4) [illegible]

[illegible]

	[illegible]	M d [illegible]	S [illegible]
(1)	[illegible]	T[illegible]	I[illegible]
(2)	[illegible]	I[illegible]	[illegible]
(3)	[illegible]	T[illegible]	S[illegible]
(4)	[illegible]	[illegible]	S[illegible]

[illegible]

(1) E[illegible] T[illegible]

(2) [illegible] S[illegible] Locusta

(3) S[illegible] S[illegible]

(4) M[illegible] M[illegible]

2[illegible] T[illegible] S[illegible]

(a)

(b)

(c)

(d)

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible] 2

[illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible] Cycas

[illegible] Citrus

[illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible]

2[illegible] [illegible]

[illegible] 2

[illegible]

[illegible]

[illegible] Rhabditis

[illegible] Schistosoma

[illegible] Wuchereria

[illegible] Locusta

[illegible]

[illegible] Exocoetus

[illegible] Hippocampus

[illegible] Scoliodon

[illegible] Labeo

[illegible]

[illegible]

[illegible]

[illegible] Dentalium [illegible]

[illegible] Loligo – [illegible]

[illegible] Aplysia [illegible]

[illegible] Pila [illegible]

□□□ □ □ □□□ □□□ □□□□□ □□□ □r□□□□ □□ □□□□ □□□ □ r□ □□□□□□□□□□r□□□□ □r□

□□□ T□□□ □ □r□

(2□ □□□□r□□

□□□ □□□□d□ □r□

□□□ □□□ □ □r□

□□□ □ □□□□□ □□□ □□□ □□□□□□□□ □□□□□□ □□

(□ Down's syndrome

(2□ S□□□□ □□□□□□□□ □□

(□ □r□d□□□□□□□□dr□□ □

(□ Turner's syndrome

□□□ □ □□rr □□d□ □□□□□

(□ □ □□r□□□□□ □ □□□r□ □□□□ □

(2□ S□□□r□□ □r□r□ □ □□□r□ □□□□ □

(□ I□□r□ □□□r□ □□□□ □

(□ E□r□□□□□□r □N□ □ □□□

□□□ T□□□□□□ □□ □□

(□ □ □□□□□□□□□ □r□□□□ □□□□□□ □□□□□□

(2□ □ □□□□□□□□ □r□□□□ □□□□□□ □□□□□□

(□ □□□r□□□r□□d □□ □ □□□□□r□□rd□□□□

(□ □□□r□□□r□□d □□ □□□□ □□ □□□□□d□r□ □□□□□□□□r□□□r□

□□□ Id□□□□□ □□□ □□rr□□□□□ □□□□□□□

□ □□□□ □□I □□r□□□□□ □	□ □□□□ □□II S□□d□□r□ □□□d □□□
□□□ Drosophila	□ □r□ □□□□
(2□ Apis	□ □□□□d□□□d□
□□□ □r□□□□□□□r	□□ □□□ □ □□□d
□□□ □□□□□r □□□ □	M□□□ □□□□r□□□□ □□□

□□□ U□r□□□d □□ □□□ r□□□r□□ □r□□□ □□Er□□M□□r □□

□□□ S□□□□ □□□□

(2□ □□dr□□□□

□□□ E□□□□□□

□□□ □□□□□□□r□□□□

(2□ S□□□□ □□□I □ I□ □□□□□□□□r □r□□□□□ □□ r□□r□d□□□□□ □□□□□□□□ □□□□ □ □□□ □r□□ □□□ S□□□□ □□□II □ I□ □ □□□r□□ □□ □□□□□r □□□□ □□□ □□d □□□□□ □r□□□ □□d r□□r□d□□□□□ □r□ □ □□□□□□ □□□□□□□□ □□□□□□

□□□ □□□□ S□□□□ □□□I □□d S□□□□ □□□II □r□ □□rr□□□

(2□ S□□□□ □□□I □□ □□rr□□□ S□□□□ □□□II □□ □r□□□

□□□ S□□□□ □□□I □□ □r□□□□ S□□□□ □□□II □□ □□rr□□□

□□□ □□□□ S□□□□ □□□I □□d S□□□□ □□□II □r□ □r□□□

□□□ Id□□□□□ □□□ □ □□□ □□□□

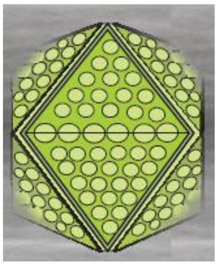
□□□ □□□□d□ □□ □□□

(2□ □□r□□□r□ □□ □□□

□□□ □□□□ □□□□□□ □□ □□□□□□□□□□□□□

□□□ □r□ □□□ □□ □□□

□□□ S□d□ □□□ □□□□□□ □□□ □□d d□□□□□ □□□ □□rr□□ r□□□□d □□ □□□d□□r□□



□□□ □d□□□□□r□□

(2□ □□□□□r□□r□r□□r□ □□□□□□□□□

□□□ N□□□□ □r□□□□

□□□ M□r□ □□□□ □□□ □□□□□

□□□ T□□ □□□□□ □□□ □□ □□□r□□□□d □□ □ □ □

□□□ □□□□ □□r□ □□□□□□□□□□□r□□□ □□ □□□□□□□ d□□□□□ □□□□□□□ □ □r□□□□□□ □□□ □□ □□□□ □□□

(2□ I□□r□□□ □□□□ □□ B_2

□□□ □□□□□r□□ □□ □□□□ □□rd

□□□ N□□ □□□□□ □□□□□

□□□ S□r□□□□□ □□□□ □□□□□□□□□ □□□□□□□□d □r□

□□□ Streptomyces griseus

(2□ Streptomyces nodosus

□□□ Streptomyces fradiae

□□□ Streptomyces kanamyceticus

□□□ Monascus purpureus

□□□ I□U□□□□□□□r □□□□r□□□

(2□ E□□□r□□□□ □□□□r□r□□□

□□□ □□□□□□□□ □□ □ □□□□ □□□□□□

□□□ □□□□□□ □□□□□□

□□□ Id□□□□□ □□□ □□□□rr□□□ □□□□□ □□□ r□□□rd□□□ □□□□□□ r□□□□ □□□

□□□ □r□ □r□ r□□□□ □□□□□ □□□□□□□□□□r□□□□ □□□

(2□ □□□□□ □r□ □ □d□□□ □□ □r□□r□□□□□ □□□□ □□□□

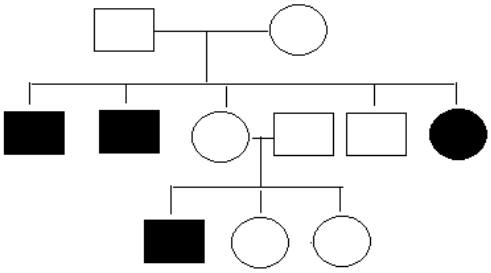
□□□ □□□□□□□d □□□d□□ □□□□□□□□ □□□□ r□□□r□□□□ □□d □□□□□r□□□□ □□□□

□□□ T□□ □ □□□r □□r□ □□ □□□□□□□d □□□d□□ □□ □□□ □□d □□□ □□□□□r□□□□ □□□d□□ d□□□□□r□ □ □□□□ □□□□□□ □□□□r□□□□ □□□□□r□□

□□□ *Id□□□□□□ □□□ □□rr□□□ □ □□□□ □r□□ □□□ □□□□□□ □□□*
□ □□□ r□□□□□□□□□ □□□□□□□r□□
□□□ □□d□□□rd □□ □□□□□□□□□□
□2□ □r□□□□ □□□□□ □□ □□□d□
□□□ *Trichoderma* □□r□□□r□□□□
□□□ *Bacillus thuringiensis* – □□□□□r□□□
□□□□r □□□□r□

□□□ *Chlamydomonas, Chlorella, Paramoecium □□d Amoeba* □□□□ □□□ □ □□ □□□□□□r□□ □□□□□□□
□□□ □□□□□□ □□ □r□□□□□□ □□□□d□□ □□□□rd□□□
□□ □□□□□□□□□□d□□ □□□□□□□
□2□ *U□□□□□□□□□r □□□□r□*
□□□ *E□□□r □□□□□ □□□□□□r□□□□r□*
□□□ *N□r□□□□□□□□□□□□*

□□□ *S□□d□ □□□ □□d□□r□□ □□□r□□□□□□ □□□□□*



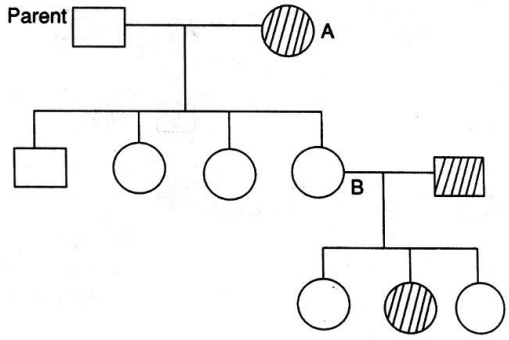
□ □□□d□□□ □□□□□□□ □
□□□ *T□□ □□d□□r□□ □□□r□□□ □r□□□ □□ □□□□□□ □□ □□□ □□□□□□□□□*
□2□ *I□□□r□□□□□□ □□ □ □□□d□□□□□ □□□□ □□ □□□□□□□□ □□r□□□□□□□□ r□□□*
□□□ *I□□□r□□□□□□ □□ □ □□□d□□□□□ □□□□ □□ □□□□□□□□ □□ r□□□□□□□□□ r□□□ □□□□□□□□d □□ □ □□r□□ □□□□□ □*
□□□ *I□□□r□□□□□□ □□ □ □□□□□□□□□□d □□□□r□ □rr□r □□□ □□□□□□□□□*

□2□ *□□□d □□□ □□□□□□□ □□□ d□□□rd□r□*
□□*S□□r□□□□□□r□d*
□□□□ □□ □□d □r□□□□□d □□□□□□□
□□□□*M□□□ □□□□□□ □□ □□□□□r □□□□*
□□□□□r□□□□□□ □□□□□ □ □□□□□
T□□ □□□□□□d□□□rd□r□□r□ □□□□□ □□
□□□ □r□□□□ □ □□2□
□2□ □□□□□ □□
□□□ □□□□□ □
□□□ □r□□□□ □ □□□□□

□□□ □□□□d □□□ □□□□□□□□ □□ d□□ □□□□□□ □r□□□ □□ □□□ □□□□□□□ □□□□□

□□□ *T□□□□□□□□□ □□*
□2□ □□□□□□□□□□□□□r□□
□□□ *S□□□□□□□□□□□□□□□□ □□*
□□□ *M□□□□□□□□d□□□r□□□□*

□□□ *T□□ □□□□□ □□d□□r□□ □□□□□ □ □□□□r□□□□□□ □□ □□□□□□□□ □□ r□□□□□□□□□ d□□□rd□r□ □ □□□ □r□ □□□ □□□□□□□□□□□□□ □□d □*



□□□ □□□□□
□2□ □□□□□
□□□ □□□□□
□□□ □□□□□

□□□ *S□□□□□□□ □□□ □□r□ □□□□ □□d□ □□ □□ □□□□ □r□ □□ □□□□□ □□□□□□□ □ □□□ d□□dr□□□ □□ □□□r □d□□□□□□ □□□r□□□□□□□ □□r□□ □□ □□□□□ □□□□□ □□□□ □ □□□*
□□□ □r□□□□□□ □□□□□□ □□□r □□□r□□□
□2□ □□□ d□□□r□□□□d □□ □□□ □□□ □□□r □□□r□□□ r□□□□□□□□□ □□ □ □□□ □□ □□□□□
□□□ □r□□□□□□ □□□ □□□ □□□r□□ □ □□□ □□□ □□□ □ □□□□□□□□□□
□□□ □□□r□□□□□ □□□□□ □□□r□□□ □□□□□□□□ □□□ □□□□□ □r□□□□□ □r□□ □□□□□ □□ □□□ □□□r□□ □□□□ □□□ □□□□ □□□□□□□□□r □□□r□□

□□□ □□r□□r□□□□□□□ □□□□d □□r□□□□□□□ □□r□□□□ □□□ □□ □□□ □□□□□□□ □□□□□□□□□□□

□□□ □□r□□□□□□□□□□
□2□ □□□rd □□□□r□□□□
□□□ □□□r□□ □□□□r□□□□
□□□ □□r□□r□□□□□□d□□□

□□□ *I□ □ □d□□□□□□ □□□□r □□ □□□□□□ □□□□□□□□□ □□ □□□□r□□□d□ □ □□□□ □□□ □□ □□□ □□□□□□□ □□□□ □□□□ r□□□d□□ d□□□□□□□ □□□□ □□ □□□ □□□□□ □□□□ □□□ □□□□□□□ □□□□d*
□□□ □□□□□□□□□□
□2□ □□□□□□□□
□□□ □□d□□□
□□□ □□□□r□d□

□□□ *T□□ □□r□□ □□□ S□r□□□ □□ □r□□□□□□□□□□□r□□ □□□ □□□□d□□□□d □□□ □□□□□ □□□□□□ □□□□□□*
□□□ □□□□□□□□□□□□□□□□□□□r□□□□□□r □□□□□
□2□ □□□□□□□□□□□□□□□□□□□□r□□□
□□□ □□□□□□□□□□□□r□□□□□□ □□□□□□□□□□□□□□□□
□□□ □□□□□□□□□□□□r□□□□□□ □□□□□□□□□□□□□□□□

□□□ T□□ □□□r□r□□□□ □□□r □r□□□□ □□□ □□□ □□r□□ □□ □□□□□ □□ □□□ □□□□ □□□□□□ d□□□□□□□□ □□r□□□ □□□ □ □□□ □□□□□ □□d □□□d□□□ □□ r□□□□□□r □ □□□□□□□□□ □□ □□□ □□□□ □□□

Id□□□□□□ □ □□□ □□d □ r□□□□□□□□□□□

□□□ □r□□□□□□□□□□ □□□r□□□ □□□□□□□□□ □□□□□□□ □□□□□□□□□ □ □□ □r□□□

□2□ □□□□□□□□□□□□ □□□r□□□□□□□□□□□ □□□□□□□r□□ □□□□□□□□□ □ □□ □r□□□

□□□ □□□□□□□□□□□□ □□□r□□□□□□□□□□□ □□□□□□□ □□□□□□□□□ □ □□ □r□□□

□□□ □r□□□□□□□□□□□ □□□r□□□□□□□□□□□ □□□□□□□r□□ □□□□□□□□□ □ □□ □r□□□

□□□ □ □□□ □ □□□r□□ □□ □□□□□□□d□□□□□□□ □□□ □□ □□□□□□□ □□□□□ r□□□□□□□ □□□ □□□□□□□ □ □□ □r□□□ □□ □□□ □□r□□□□□□□ □ □r□ □□r□ □□□□□□ □□ □□□ □□d □□□r□□ □□ □□r□ □□□□□□□ □□ □□□ □□□□

□□□□□□□ □□□ □□rr□□□□□□□□□□d □□□□□□□

□□□ N□□□

□2□ □□N□

□□□ □□□□N□

□□□ N□□□□

□□□ □□□□ □□□□□□□□□□□ □□□□□r□□□□□ □□□□□r□□ □□□d□□□ □□□ □□□□□□□ □□□ □□□□□□□□□□□□ □□d □□□ □□□ r□□□□□□□d □□□r□□ □□r □□□□r □T□ □r□d□□□□□□

□□□ □ □ □ □□□□

□2□ N□r□□□

□□□ E□□□ □□□□□□□□□□□□r

□□□ □□□□□□□ □□□□□

□2□ Id□□□□□□□ □□□ □□□□rr□□□r□□□rd□□□ Euglena

□□□ S□□□ □□ □□□□□□□

□2□ S□□□ □□□□□□r□□□□□□ □□□r□□□□□ □□□□

□□□ □□□□□□□□ □□□□r□□□□□□□

□□□□□ □□□□ □ □□□□□□□□□□□□□□

□□□ T□□ □□□□□□□□ □□ □□□ □ □□□ □□ □□r□□□□□□□ □r□□□□□□□

□□□ Amoeba

□2□ Plasmodium

□□□ Trypanosoma

□□□ Entamoeba

□□□ □rr□□□□ □□□ □□□□□□□ □□□ □□ □ □□□□□□□□□□ □□□□□□□□r d□r□□□ □□□ □□□□□□□ □ □□ □□□□□□

□□M□□□□□□□ □□□□□□□□ □□□□□ □

□□□ r□□□□□□ □

□ □□□□□□□□ □□□□ □ □□□□□□□□□□□□□ □□□□□□

□□□ □ → □ → □ → □

□2□ □ → □ → □ → □

□□□ □ → □ → □ → □

□□□ □ → □ → □ → □

□□□ Id□□□□□□□ □□□ □□□□□□ □□□ d□□□r□□

□□□ Mucor

□2□ Aspergillus

□□□ Agaricus

□□□ Alternaria

□□□ Claviceps, Ustilago, Trichoderma, Albugo, Alternaria, Puccinia, Neurospora, Mucor, Aspergillus. □□□ □□□□ □□□□□□ □□□□□□ □□ □□□ □□□□□□□r□□□ □

□□□ □

□2□ 2

□□□ □

□□□ □

□□□ I□□□rr□□□r□□□rd□□□ □□□ □r□□□□□ □□

□□□ □r□□□□ r□ □□□ □□r □□ □□□□ □□ □r□□□□

□2□ T□□□ □□□□□ □□□r□□□□□□□□□d□□□□□□□

□□□ N□□□□□□ □□d □□□ □□r□□□r □ □□□□□□□

□□□ M□d□ □□ □□□□□□ □r□□□□□□

□□□ S□□d□ □□□ □□□□□□ □□□ d□□□r□□ □□d □d□□□□□ □□□ □□rr□□□□□□□ □□□

□□□ □□□□□ □□□□ □□□ □□□□□r□□□□

□2□ □□□□□□□□□ □□□ □□□□r□□□□□□□□□

□□□ □□□□r□□□□□□□□□ □□□□ □□□□□□d

□□□ □ □□d 2

□□□ Id□□□□□□□ □□□ □ □□□ □□□□

		□r□□□ □□□□□	□r□□ □ □□□□□	□□d □□□□□
□□□	□□□□□ □□□□□	□□□□□□ □	□□□□□□□□	□□□□□d
□2□	S□□r□d □□□d	S□□r□□	M□□□□□□□□□ □□□ □□□r□□	□□□r□d□□□ □□□r□□
□□□	□□□□□□□□□ □□□ □□r	2□□	2	2
□□□	□□□□□ □□□	□□□□□□ □□□	□□□□□□□□□□□ □□□□□	□□□□□□□□□□□ □□□□□□□ □□□□□□□□□□□ □□ □□□□r□

[illegible]

[illegible] *Marchantia* [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

(2) *in situ* [illegible]

[illegible]

[illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

[illegible]

[illegible] *Azolla*

(2) *Salvinia*

[illegible] *Equisetum*

[illegible] *Selaginella*

(2) [illegible] *Cycas* [illegible] *Pinus* [illegible]

[illegible]

(2) [illegible]

[illegible]

[illegible]

□□□ U□□□□□ □□□□□r□ □□□□ □□□□□□□ r□ □□□

□□□ □r□□□

□2□ □ □□□□□□ □□r□□□□□□□□□

□□□ Tr□□□□d □□d□□□□ r□

□□□ □□□□□□□□□□□□

□□□ Id□□□□□□ □□□ □ □□□ □□□□

	□□□□□	□□□□ □□□□□
□□□	*Fucus*	□□ □□□□□□□□
□2□	*Ectocarpus*	□□ □□□□d□□□□□□□
□□□	*Cycas*	□□ □□□□□□□□
□□□	*Spirogyra*	□□ □□□□d□□□□□□□

□□□ □□□ □ □□ □□□r□□□r □□□□ □□□ □r□□□□□□□□ □□d □□□r d□□□□□□□□□

□□□ □□□□□□□□□ □□□□

□2□ □□□ □□□ □□□ □□□□□□□□ □□□r□□□□□□□□□

□□□ □□□d□□□□ □□□□□□□□ □ □□d □□□□ □□□□□□□ □ □□□□ □□□□□□□ □□□ □□□ □□□□

□□□ □□□□□□□□□□

□□□ □ □ □□r □□□ □ □ □□□□□□□ □□□□ □□□□□□□□□□□□□□□ □□ □□□ □□□□□□ □ □□d□□□r □r□□□□□□ □□ □□□□ □□ □□□□□□□

(□□ □□□

(2□ □□□

(□□ 2□□

(□□ 2□

□□□ T□□ □□□ □□r □□ □□□□ □□□r□ □□ □□□ □□□ □□ □□r□□ □□□□□ □ □□□r□□□ T□ □ □□□□□□

(□□ 2□□ □□

(2□ □□ □□

(□□ 2□□□ □□

(□□ □□□□□ □□

(□□ □□□□□

(2□ □ □□□□

(□□ □□□ □□

(□□ □□r□□

□□□ □□□ □ □□□ □□□□□□□□□□ □□□□ □□□□ □d□□□□□□□d □□ □□□ □□ □□□□□□ □ □ □□r□SN□□□□□□r□

(□□ □□□ □ □□□□□□

(2□ 2□□ □ □□□□□□

(□□ □□□ □□□□□□□

(□□ 2□□ □□□□□□□

□□□ S□r□□□ □ □□□□□□□□ □□□□d□□□□□□ □ □□□ □□□□□□□□□□□□□ r□d□□□□□□□□r□ □□□d □□

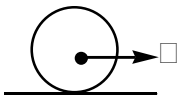
(□□ □ r□□ r□d□□□r□□□□

(2□ □T

(□□ M□I

(□□ EE□

□□□ □ r□□□ □□ r□□□□□□ □□□□□□□□ □□□□□□□ □□ □ horizontal plane with velocity ‘v’ and □□□□□□r□□□□□ □□T□□ □□□□□□r□□□□□ □□ □□□□□ □□ □□□□□□□□□□



□□□ □ □r□□□□□□□□□□ □□□ □rd□r□□□□□

□2□ □ □r□□□□□□□□□□ □□□ □rd

□□□ □ □r□□□□□□□□ d□□ □□□ □rd

□□□ □□r□

□2□ □ □□□ □□ □□□□d□□□ □□ □ d□□□ r□□□□□□□□ □□□□□□□□ □□r□□□□□ □□□ □□□□r□□ □ □ □□□□□□ □□□ □r□ □ □□□□ □rd□ □□□ □□□□□ r□d□□□□□ □□□ moment of inertia by a factor ‘m’. The new □□□□□□□r □□□□d □□ □□□ d□□□ □□□□□□ □□ d□□□□□□ □□ □□□□□□□□□□□□□□ I□□□□ □□□□□□□□□ □□ □□□□□□□□ r□□□ of the boy is ‘I□’ then moment of inertia of the d□□□ □ □□□□□

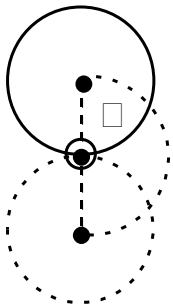
□□□ $\frac{2I_o}{m}$

□2□ $I_{\square}\left(\square - \frac{2}{m}\right)$

□□□ $I_{\square}\left(\square - \frac{\square}{m}\right)$

□□□ $\left(\frac{I_{\square}}{2m}\right)$

□□□ □ r□□□ □□ □r□□ □□ □ □□□ □□ □□r□□□□□□□□ □□□□□ □□ □□□□ □□□□□□□□ □□r□□□□ □□□ □□r□□□ □□r□□□□ □□d □□r□□□d□□□□□r □□ □□□ □□□□□□□□□ □□□ □□□□r□□□□□□d □r□□ □□□ □ □□□□□□□□□□□□□□□ □□□□□r □□□□d □□ □□□ □□□□r□ □□ □ □□□ □□ □□□ r□□□ □□ □□□ □□□ □□□ □□□□□□□□□ □□



□□□ $\sqrt{\frac{\square g}{R}}$

□2□ $\sqrt{\frac{2g}{R}}$

□□□ $\sqrt{\frac{g}{R}}$

□□□ $\sqrt{\frac{g}{2R}}$

□□□ A body of mass ‘M’ is moving on a circular track of radius ‘r’ in such a way that its □□□□□□□ energy ‘k’ depends on the distance travelled by the body ‘s’ according to relation $k = \beta s$ □ □ □□r□ β □□ □ □□□□□□□□□□ $\mathcal{T}$□□ □□□□□□r □□□□□□r□□□□ □□□□ □□r□□□□ □□

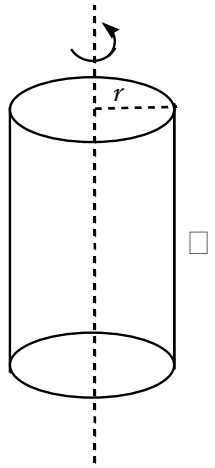
□□□ $\frac{\beta r}{M^2}$

□2□ $\sqrt{\frac{\beta r}{M}}$

□□□ $\frac{Mr^2}{\beta}$

□□□ $\frac{\beta}{Mr}$

□□□ A solid cylinder of mass ‘m’ and radius ‘r’ is r□□□□□□□ □□□□□□□□ □□□□ □□□□ □ □□□□□□□□□□□□□□r □□□□d□I□□□□□d □□□ □□r□□□□□ □□□r□□□ □□r□□□□□ □□ □□ □□□□□ □□□□ r□□□□□□□□□□ □□□□□□□ □□□r□□ □□ □□□ □□□□□□□d□r □□



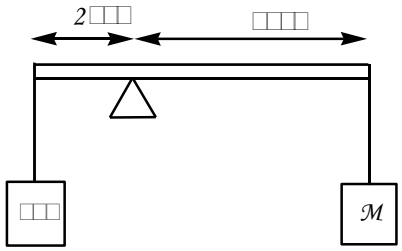
□□□ $\frac{\square}{\square} mv^2$

□2□ $\frac{\square}{2} mv^2$

□□□ $\frac{\square}{\square} mv^2$

□□□ mv^2

□□□ $\mathcal{T}$□□ □□□□□□ □□$\mathcal{M}$□□□ □□□□□ □□□□r □ □□□□□ □□□ □□□□□ r□d □□□□□□□□ □□ □□□□□□□□r□□□ □□



□□□ □ □□
□2□ 2 □□
□□□ □ □□
□□□ □ □□

□□□ □ □□r□□□□□ □□ $\mathcal{S}$□□$\mathcal{M}$□ □□ d□□r□□d □□ □□□ d□□□□□□□□□ □□□ □□□□□□□□□ $x\square t\square = a\square\square\square\omega t + \theta$□□ I□ □□□ □□□□□□□□ □$t =$ □□ □□□□□□□□□ □□□□ □□r□□□□□ □□ □ cm □□□□□□□□□□□□□□□ □□ π cm□s □□d □□□ □□□□□□□r □r□□□□□□□□ □□ π rads$^{-\square}$, then it’s amplitude is

□□□ □cm

□2□ $\sqrt{2}$ cm

□□□ 2 cm

□□□ 2□□cm

□□□ □ □□r□□□□□□ □□□□□□□□□ □□□ □□□ □□r□ □□□□□ □ □□□□□ □□□ □ □r□□□□□□□□ f □ $\mathcal{T}$□□ □r□□□□□□□□□ □□□□ □ □□□□ □□□ □□□□□□□□□□□ □□□r□□ □□□□□□□□□□□□

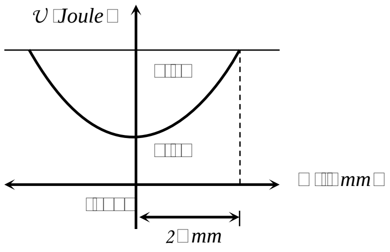
□□□ f □2

□2□ f

□□□ 2f

□□□ □f

[illegible] T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] T[illegible] [illegible] [illegible]



(1) [illegible] N/m

(2) [illegible] N/m

(3) [illegible] N/m

(4) [illegible] N/m

[illegible] [illegible] [illegible] [illegible] [illegible] kg [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] cm [illegible] [illegible] 2[illegible] kg [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] cm [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ($g = $ [illegible] m/s^2)

(1) [illegible] (2) [illegible]

(3) 2[illegible] (4) [illegible]

[illegible] I[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] S[illegible]M [illegible] [illegible] [illegible] $a = -\frac{\pi}{\square}\,\square\left(\frac{\pi}{\square}t - \frac{\pi}{\square}\right)$ T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

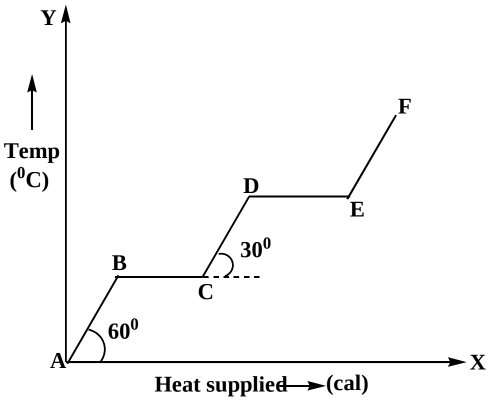
(1) [illegible]

(2) [illegible]

(3) [illegible]2[illegible]

(4) [illegible]

[illegible]2[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]



(1) T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

(2) T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

(3) T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

(4) T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I[illegible] C_b [illegible] C_a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] C_a [illegible]

(1) $2C_b$

(2) $\sqrt{2}\,C_b$

(3) C_b

(4) $\frac{\square}{\sqrt{2}}C_b$

[illegible] T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] C_V [illegible] C_P [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] T[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

(1) $C_v = \square, C_p = \square$

(2) $C_V = \square, C_P = \square$

(3) $C_v = \square, C_p = 2$

(4) $C_V = \square, C_P = \square 2$

[illegible] [illegible] [illegible] [illegible] [illegible] $2\square^{o}C$ [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] $\frac{\square}{\square 2}$ [illegible] [illegible] [illegible] MS [illegible] [illegible] [illegible] [illegible] [illegible]

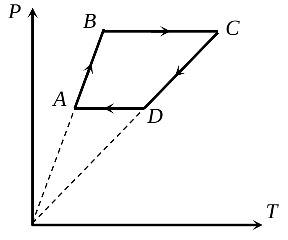
(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

[illegible] S[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I[illegible] [illegible] [illegible] [illegible] T_A [illegible] K, T_B [illegible] K, T_C [illegible] 22[illegible] K [illegible] T_D [illegible] 2[illegible] K [illegible] [illegible] [illegible] [illegible] [illegible]



(1) 2[illegible] Kj (2) [illegible] kJ

(3) [illegible] kJ (4) [illegible] Kj

[illegible]

[illegible] C [illegible] I [illegible]

[illegible] K

2 [illegible] 2 [illegible] K

[illegible] K

[illegible] K

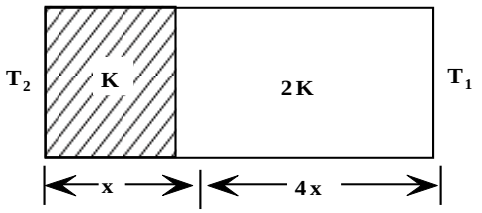
[illegible]

[illegible]

2 [illegible]

[illegible] T [illegible] T_2 [illegible] T_1 [illegible] T_1 [illegible] T_2 [illegible] T_1 [illegible] T [illegible]

$\left(\frac{(T_2 - T_1)KA}{X}\right) f$ [illegible]



[illegible]

2 [illegible] $\frac{\quad}{2}$

[illegible] $\frac{2}{\quad}$

[illegible] $\frac{\quad}{\quad}$

[illegible] I [illegible] T_1 [illegible] T_2 [illegible] $_2$ [illegible] T [illegible] $_2$ [illegible] T [illegible] T_1 [illegible] T_2 [illegible]

[illegible]

2 [illegible]

[illegible] 2 [illegible]

[illegible]

[illegible] T [illegible] $2T_1$ [illegible]

[illegible] $\frac{2P_1V_1}{RT_1}$

2 [illegible] $\frac{P_1V_1}{2RT_1}$

[illegible] $\frac{2P_1V_1}{RT_1}$

[illegible] $\frac{P_1V_1}{RT_1}$

2 [illegible] T_2 [illegible] $\frac{T_1}{T_2}$ [illegible]

[illegible]

[illegible] $\sqrt{2}$

2 [illegible]

[illegible] $\sqrt{\quad}$

[illegible] $\frac{\quad}{\sqrt{2}}$

[illegible]

[illegible]

2 [illegible]

[illegible]

[illegible]

[illegible] $\frac{\quad 2}{\quad} Am^{-1}$

2 [illegible] $\frac{2}{\quad} Am^{-1}$

[illegible] Am^{-1}

[illegible] $2 Am^{-1}$

[illegible]

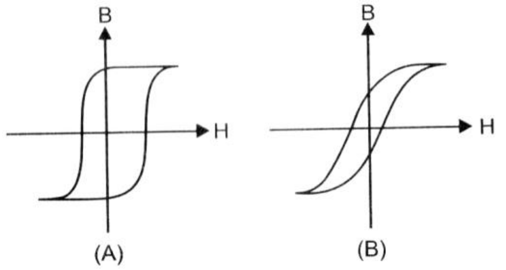
(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

[illegible]



[illegible]

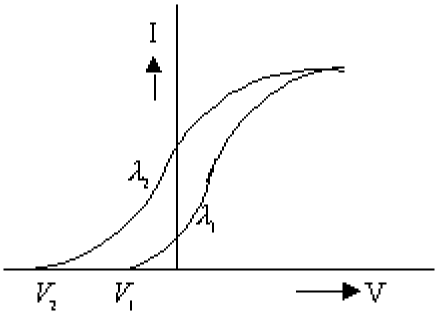
(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

[illegible] $V_2 > V_{[illegible]}$ [illegible]



(1) $\lambda_{[illegible]} = \sqrt{\lambda_2}$

(2) $\lambda_{[illegible]} < \lambda_2$

(3) $\lambda_{[illegible]} = \lambda_2$

(4) $\lambda_{[illegible]} > \lambda_2$

[illegible] 2[illegible]

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

[illegible]

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) [illegible]

2[illegible]

(1) [illegible]^2[illegible]

(2) 2 2[illegible]^2[illegible]

(3) [illegible]

(4) [illegible]

2[illegible] $\frac{h}{\pi}$, where ‘h’ is Planck’s constant. The [illegible]

(1) [illegible]

(2) [illegible]

(3) [illegible]

(4) 2[illegible]2 [illegible]

22[illegible] $E_{[illegible]}$ [illegible]

(1) $E_{[illegible]} = -2[illegible]2\ eV$ [illegible] $r_{[illegible]} = a_{[illegible]}$ [illegible]2

(2) $E_{[illegible]} = -2[illegible]2\ eV$ [illegible] $r_{[illegible]} = a_{[illegible]}$

(3) $E_{[illegible]} = -[illegible]\ eV$ [illegible] $r_{[illegible]} = a_{[illegible]}$ [illegible]2

(4) $E_{[illegible]} = -[illegible]\ eV$ [illegible] $r_{[illegible]} = a_{[illegible]}$

2[illegible] radius. The value of ‘n’ is

(1) [illegible]

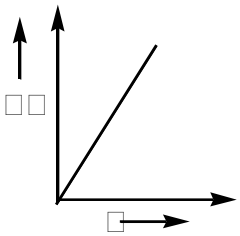
(2) [illegible]

(3) [illegible]

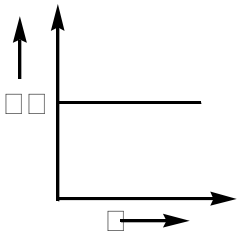
(4) [illegible]

□2□□Let 'R' represents the orbital radius of an □□□□r□□ □ □□□□□ □□ □□ □r□□□□d □ r□□r□□□□□□ □□□□□□□ □□r□□□T□□□ □□□ □□□□□□□□ □□ □□r□□□ □□□□ □r□□□□□□□□□□□□□□□□ □□□ □□r 'n' as

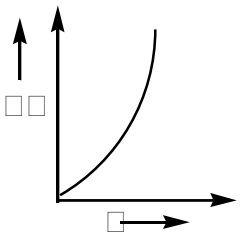
□□□



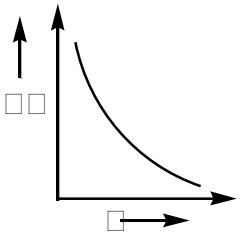
□2□



□□□



□□□



□2□□T□ □ r□d□□□□□□□ □□□□□□□□□□ □ □□d □ □□□□ d□□□□ □□□□□□□□□□ □□□□ □□□□ $\lambda_A = 2\lambda_B$ □□□□□ □□ number of nuclei of 'B' is twice of that of A. T□□□ □□□□r □ □□□□ □□ □□□□ r□□□□ □□ □□□□ □□r □□ □□□□□□□□□□□ □□ □□□□□□□□□□□□ □□r □□□□□□□□□□□□ □□ $\frac{□}{2e}$ □

□□□ $\frac{□}{2\lambda_B}$

□2□ $\frac{□}{\lambda_A}$

□□□ $\frac{2}{\lambda_B}$

□□□ $\frac{□}{\lambda_B}$

□2□□A nucleus of mass 'M' is at rest. An alpha particle of mass 'm' is emitted from the □□□□□□□□ □□□□ □□□□□□□□ □□□□ □□□□□□ □□ □□□ □□□□□□□r r□□□□□□□□ □□

□□□ $\frac{P^2M}{2m(M+m)}$

□2□ $\frac{P^2m}{2M(M+m)}$

□□□ $\frac{P^2M}{2m(M-m)}$

□□□ $\frac{P^2m}{2M(M-m)}$

□2□□T□ □□□□r□□□ □ □□□□r □□ □2 □ □□□□□□□□ □□□ □□□r □□ □□□□□□□□□ □□ V□□ □□r □□□□□□□ □□ □E□r□□ r□□□□□□d □□r □□□□□□□□ □ 2□□ M□□□ □□□□□□□□□□□□□□

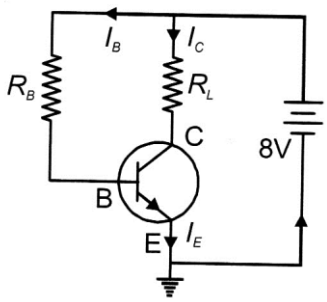
□□□ □×□□□

□2□ □×□□□

□□□ □□□

□□□ □×□□□

□2□□□r □□ □□□□□□ □r□□□□□□□r □□ □□□□□□ □□ □□r□□□□□ $I_□$□□□ □□□□□E□□□ □□□□E□□□□□ □□d $\beta_{dc} =$□□□□ T□□ □□□□□□ □□□□ □□



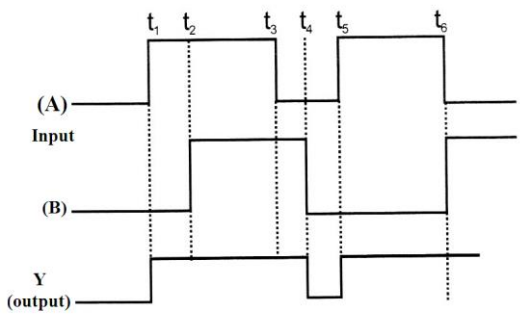
□□□ □kΩ

□2□ 2 kΩ

□□□ □kΩ

□□□ □kΩ

□2□□Id□□□□□□ □□□ □□□□□ □□□□ □□□□□ □□□□□□□ □□□ □□□□□□□□ □□□ □□□□□□□□□□□□□□□□r□



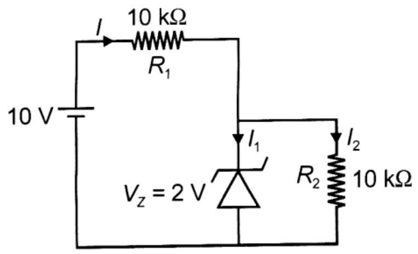
□□□ □□ □□□□

□2□ □N□ □□□□

□□□ N□T □□□□

□□□ □□□ □□□□

□□□□ □ □rr□□□ $I_□$ □r□□□□ □□□ □□□□r d□d□ □□□□ □ □□ □□□ □r□□□□□□



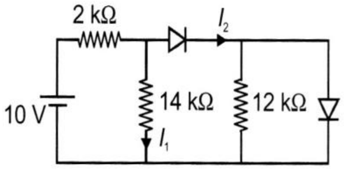
□□□ □□r□

□2□ □□□𝓜□

□□□ □2 □ □

□□□ □□□ □ □

□□□□ I□ □□□ □r□□□□□□□□ □□ $l_□$ □□d l_2 □r□r□□□□□□□□□ □I□d□d□□□r□ d□□□□



□□□ □□□

□2□ □ □ □ □□ □ □

□□□ □ □ □ □□

□□□ □□□ □ □

□2□ T□ □ □r□□□□ □ □□d □ □ □□□□ □□ □□□□□□ d□r□□□□□ □□□ d□□r□□□□ □ □□□□□□□□□□ $\lambda_□$ □□d λ_2 r□□□□□□□□□I□ □□□□ □□d□r □□ □ □□r□□□□ □□□□□□ □□□□□□□ □□ □□r□ □ □□r□□□□ □ □□□□ □□ d□Broglie wavelength of ‘C’ is

□□□ $\dfrac{\lambda_□\lambda_2}{\lambda_□+\lambda_2}$

□2□ $\lambda_□+\lambda_2$

□□□ $\lambda_□-\lambda_2$

□□□ $\dfrac{\lambda_□\lambda_2}{\lambda_□-\lambda_2}$

□□□□ T□□r□□□ □□□□ □□□r□□□ □□□ □ □□□□□ □□r□□□□ □□d □ □□□□□□ □□□□□□□I□□□r □□□□□□□□□r□ □□ □□r□□□ □□□□ □□□□ □□□r□□□ □□□□□r d□□r□□□□ □ □□□□□□□□□□

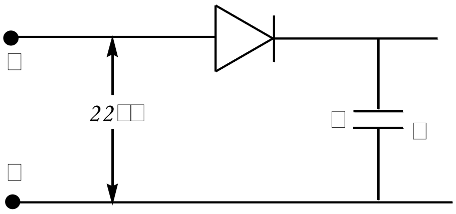
□□□ □ □□

□2□ □ □□

□□□ □□ □□

□□□ □ □□□

□□□□ □ $22□□$ □□ □□□□□□ □□ □□□□□□□□d □□□□□□ □□□□□□ □ □□d □ □□□□□r□□□ □ □□□ □ □□□ □□ □□□ □□□□□□□□ d□□r□□□□ □ □r□□□ □□□ □□□□□□ □□ □□□□□□□□r□



□□□ $22□□$

□2□ □□□□ □

□□□ □ □

□□□ $22□\sqrt{2}V$

□□□□ T□□ □r□□□□□□□□□□□□r□□ □□□□ □□□ □ □ □□□□□ □□d □□□□□r □r□□□□ □□ □ □□□ □ □□□□□ □□□□□ □□ Newton’s law $F = G\dfrac{M□m}{r^2}$, where ‘r’ is in □□ □□d

□□□ $M = m_{proton} + m_{electron}$

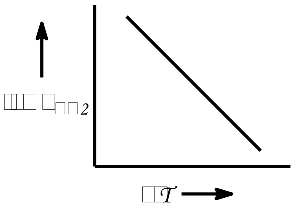
□2□ $M = m_{proton} + m_{electron} - \dfrac{B}{c^2}\left(where\,B = □□□eV\right)$

□□□ 𝓜 □□□□r□□□□d □□ □□□ □ □□□□□□□□ □□dr□□□□ □□□□

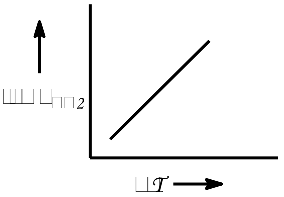
□□□ $M = m_{proton} + m_{electron} - \dfrac{|V|}{c^2}$

□□□r□ $|V|$ □□ □ □□□□□□d□ □□□□ □□□□□□□□□□□□r□□ □□□□□□□r□□ □□ □□□ □ □□□□□ □

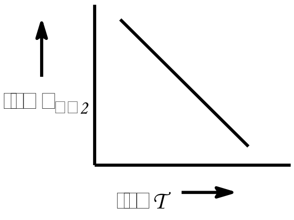
□□□□ □□r □□□ □□□□ □□□□ □□□□□□r□□ □□□□□ □□□ ⇌ □□□ □□ □ □□$_2$□□ □ΔH□ □□□ □□ d□□r□ □□□d r□□ □ □□□□ □□□ □□□□ □□□□□ □□□ □r□□□□□



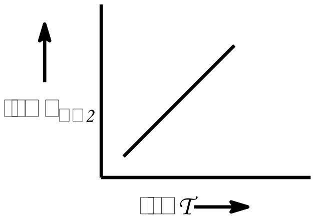
□□□



□2□



□□□



□□□

[illegible] T[illegible] $_2$ [illegible] M N [illegible] d [illegible]

1) 2 [illegible]

2) [illegible]

3) [illegible]

4) [illegible]

[illegible] $_2$ [illegible] 2 [illegible] I [illegible] r [illegible] d [illegible]

1) [illegible] r [illegible]

2) [illegible]

3) [illegible]

4) N [illegible]

I [illegible] r [illegible] r [illegible] d [illegible] r [illegible] M N [illegible]

1) [illegible]

2) [illegible]

3) [illegible]

4) [illegible]

[illegible] r [illegible] d 2 [illegible] rr [illegible] r [illegible] Δ [illegible]

1) T [illegible] r [illegible] r [illegible]

2) [illegible] rd r [illegible] d [illegible] r [illegible]

3) E [illegible] E [illegible]

4) T [illegible] d [illegible] r [illegible] r [illegible] r [illegible] d [illegible] T

S [illegible] r [illegible] M [illegible] r [illegible] r [illegible] 2 [illegible] I [illegible] r d [illegible] 2 [illegible] r [illegible]

1) $[illegible]\times[illegible]\left(\frac{W}{M}\right)$

2) $[illegible]\times[illegible]\left(\frac{W}{M}\right)$

3) $[illegible]\times[illegible]\left(\frac{W}{M}\right)$

4) $[illegible]\times[illegible]\left(\frac{W}{M}\right)$

[illegible]2 I [illegible] 2 M [illegible] dd d [illegible] M [illegible] T [illegible] r [illegible] 2 [illegible]

1) [illegible]

2) [illegible]

3) [illegible]

4) [illegible] 2 [illegible]

S [illegible] I [illegible] dd [illegible] r [illegible] r [illegible] r [illegible] r [illegible] d [illegible] r [illegible] $\Leftrightarrow$ [illegible] + [illegible] r [illegible] r [illegible] rd r [illegible]

S [illegible] II [illegible] dd [illegible] r [illegible] r [illegible] r [illegible] $\Leftrightarrow$ [illegible] + [illegible]

1) S [illegible] I [illegible] d [illegible] II r [illegible] r [illegible]

2) S [illegible] I [illegible] d [illegible] II r [illegible]

3) S [illegible] I [illegible] r [illegible] II [illegible]

4) S [illegible] I [illegible] II [illegible] r [illegible]

T [illegible] r [illegible] 2 [illegible] r [illegible] r T [illegible]

1) [illegible] = [illegible]

2) [illegible] < [illegible]

3) [illegible] > [illegible]

4) Can't be predicted

T [illegible] ΔG° for a reaction in [illegible] d [illegible]

1) [illegible] 2 [illegible] T

2) [illegible]

3) [illegible]

4) [illegible] 2 [illegible] T

T [illegible] r [illegible] r [illegible] 2 [illegible] $_2$ [illegible] $\rightarrow$ 2 [illegible] $_2$ [illegible] + [illegible] $_2$ [illegible] × [illegible] r [illegible] $_2$ [illegible] $_2$ [illegible] r [illegible] r [illegible] 2 × [illegible] M [illegible]

1) [illegible] × [illegible] M

2) 2M

3) [illegible] M

4) [illegible] M

For a first order reaction X(g) → Y (g) + Z(g), [illegible] r d [illegible] I [illegible] r d [illegible] d [illegible] r [illegible] f 'X' be r d [illegible] d [illegible] r [illegible] r [illegible] r [illegible]

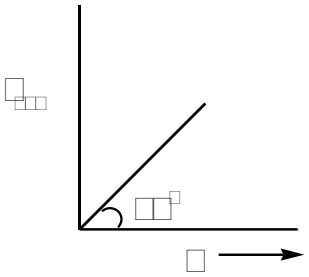
1) [illegible]

2) 22 [illegible]

3) [illegible]

4) 2 [illegible] 2 [illegible]

[illegible] □ [illegible] □ [illegible] [illegible] [illegible] [illegible]rd□r [illegible] r[illegible] [illegible]d r[illegible] [illegible]r □ [illegible] [illegible] [illegible] [illegible] □[illegible] [illegible] [illegible]r[illegible] [illegible] [illegible]r[illegible]



[illegible] [illegible]

□2□ [illegible]

[illegible] 2□2

[illegible] [illegible]

[illegible] □ [illegible] [illegible] □r□ [illegible] [illegible] [illegible]r□□ □□ □ r[illegible] □r□□ 2□ □[illegible] [illegible] [illegible] □[illegible] [illegible]T□□ [illegible] □r□r□ □□□ [illegible] [illegible] [illegible]d r[illegible] □[illegible] [illegible] [illegible] □r[illegible] □□ [illegible] [illegible] [illegible]d □□ 2□□□ is__ (assume that 'A' remains same □r □□□r[illegible]

[illegible] −□□□□□

□2□ □2□□□

[illegible] □2□□□□

[illegible] □□□□□

[illegible] □ [illegible] □□[illegible] [illegible] [illegible] [illegible] [illegible] □□□r□□ [illegible] [illegible] [illegible] □

[illegible] T□□ □□□rd[illegible] □□□ □□r □□2

□2□ I[illegible] □□□□ [illegible] [illegible]

[illegible] T□r□□dr[illegible]d□ □□[illegible] [illegible]d [illegible]r □r□ [illegible]r□d □□ [illegible] [illegible]r□□ [illegible] [illegible]rd [illegible]r

[illegible] I□ [illegible]rr[illegible] [illegible] [illegible]r□□ □□[illegible] [illegible]r□□ [illegible]r □r□ [illegible] [illegible]d □[illegible] [illegible] □□ [illegible] □r[illegible]r

[illegible] S[illegible] □□□I S[illegible] d[illegible] □□ □□□□r[illegible] [illegible] □ □□ [illegible] □□□ [illegible]d□ □[illegible] [illegible] □□□ □rd[illegible] □□□ □□r

S[illegible] □□□II□ I□ S[illegible] d[illegible] [illegible] □□□ □□r □□[illegible] □d [illegible]r□ □[illegible] □r□□ [illegible] [illegible] [illegible]

[illegible] S[illegible] □□□I □□d [illegible] □□□II □r□ r□□

□2□ S[illegible] □□□I □□r□□ [illegible] □□□II □□ [illegible]

[illegible] S[illegible] □□□I □□ [illegible] [illegible] [illegible] □□□II □□ T r□□

[illegible] S[illegible] □□□I □□d [illegible] □□□II □r□ [illegible]

□□2□ □ □□□ N□□ □r[illegible] □r□ [illegible]d □□ □□ [illegible] □□□r□ □□ □□d□□ □□□□r□ □□d□□ □□□□rd□ □r[illegible] □□ □r[illegible] □□□□r□T□□□ □□ d□□ □□

[illegible] I□ □□r□□ d□□□□□

□2□ S[illegible] d□□□□

[illegible] □ [illegible] d□□□□

[illegible] □ □□□d□□□□□□ d□□□□

□□□□ □ □ □□□□ □□□ □□□ [illegible] □□d □□ □d□□ [illegible] □□ [illegible] □□□d □□□ □ □□□r □ □□□ □□ □ [illegible] □□ □□ d□□□□□ □□2□□2□□□□

[illegible] 2□□ □□ □□

□2□ 2□□ □□ □□

[illegible] □□□ □□ □□

[illegible] □□□ □□ □□

□□□□ □ [illegible] [illegible] □□ □□□ □□d □□

[illegible] □ [illegible]

□2□ □ [illegible]

[illegible] □r[illegible]

[illegible] I□□− □ [illegible]

□□□□ M□□□□□ □□ □□dr□□□□□ □□□□

[illegible] α □$D(+)$ □ [illegible] □□□ □r□□□□□

□2□ α □$D(+)$ □□d $\beta-D(+)$ □ [illegible]

[illegible] □ □□□ $\alpha-D(+)$ □ [illegible]

[illegible] □ □□□ $\beta-D(+)$ □ [illegible]

□□□□ □ r□□□ [illegible] [illegible] □□□□ □□

[illegible] □ [illegible] □□□ d□□□□□□□ □□□□□ □ □r□□□□□□□ □□□

□2□ □ [illegible] □□T□□□ □□□ d□□□□□□□ □□□□□ □ □□ □□d dr□ □ □r□□□ □r□d□□□□□□

[illegible] □ [illegible] □□□ □□□rd□□□□ d□□□□□□□ □□□□□ □ □□□□□ □□□□□

[illegible] □ [illegible] □□□ d□□□□□□□ □□□□□ □□□d□□□ □□□ □□

□□□□ T□□□ □ □□□ □□□ □□□□□ □□□ r□□□□□ □□ □□□d □□ d□□□□□□□ □r□□□□□ □□ □r□□ □r□ □□□□□□□□□ □r□□□ □□ □ □□□□□□□□□

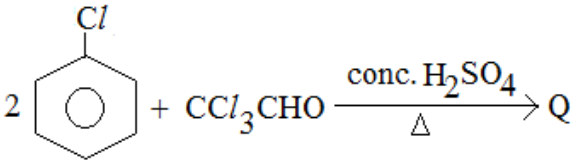
[illegible] HNO_3

□2□ Br_2 □□□□r

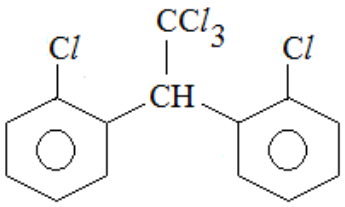
[illegible] Tollen's reagent

[illegible] □ [illegible] □□□dr□d□□□ r□d□□□

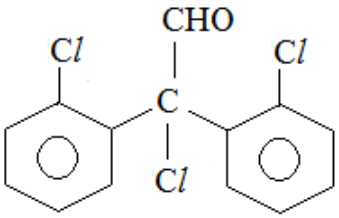
□□□□ T□□ □ □□r □r□d□□□□ □□□r□ □d □□ □□□ □□□□□□ □□□ r□□□□□□ □□



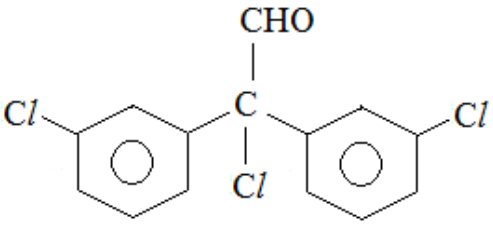
□□□



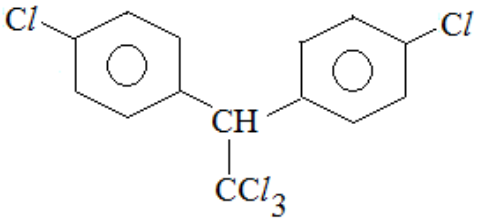
□2□



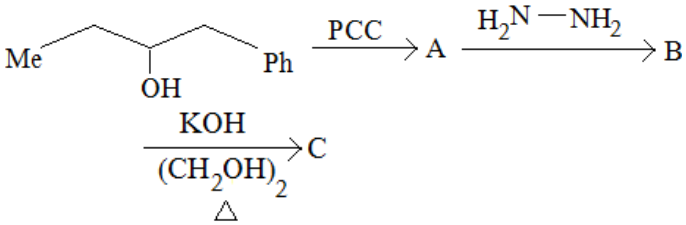
□□□



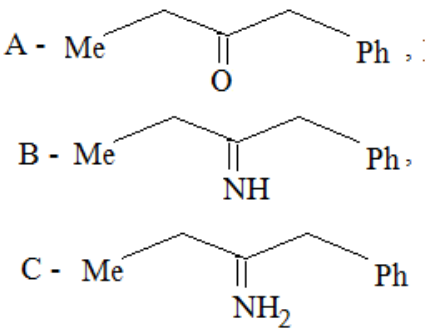
□□□



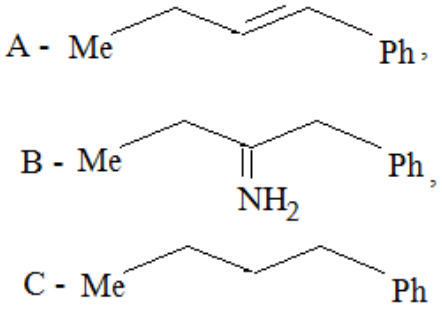
□□□□ T□□ □r□d□□□□ □ □□ □□ □□ □□□ □□□□□□ □□□ r□□□□□□□ □r□



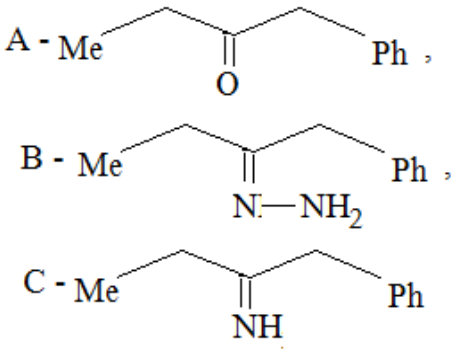
□□□



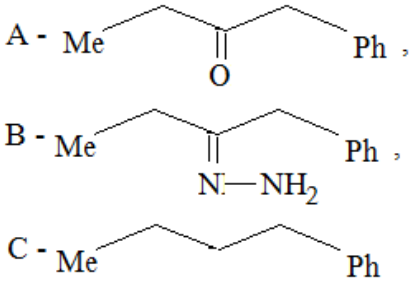
□2□



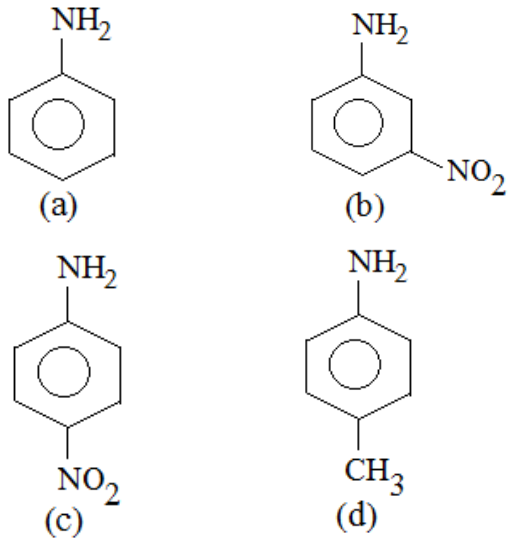
(□□



(□□



□□□□ □ □□□□ □□ □□□ □□□□□□ □□□ □□□□□□□□ □□rr□□□□□ r□□r□□□□□ □□□ □□□□□□□□□ □□ □□□ □□□□□□□□ □□□ □□□□d□□



□□□ □□ □□ □□ □□ d

□2□ d □ □□ □□ □□ □

□□□ □□ □□ d □ □

□□□ d □ □□ □□ □□ □

□□□□ □ □□□□ □r□d□□□□□□□ □□□□□□□ □□□ r□□□□□□□□□ □□□□□

□□ □□□□ □□r□□□□□ □□□ □□□□□

□□□ □ □□□□□ □□ □r□□ □□ □d□d□□r□d□□□□□

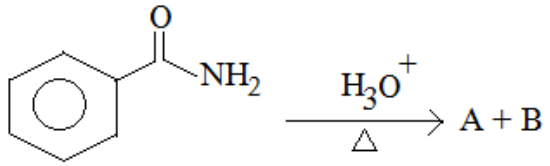
□2□ □ □□r□□□□□□□□□□□ □d□ □□□□□□□□□□□

□□□ □□d□□□□□□ □□□□□r□□□□ □□□ $LiAlH_4$

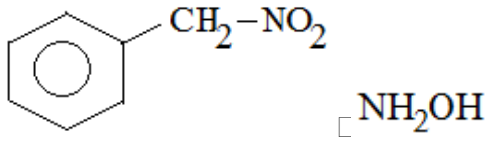
□□□ □□d□□□□□□ □□□□□□□□□□□d□□□ □□□

$LiAlH_4$

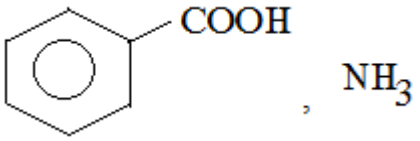
□□2□ Id□□□□□□□ □ □□d □ □□ □□□ □□□□□□ □□□ r□□□□□□□□



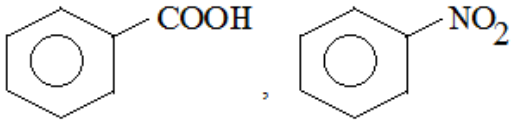
□□□



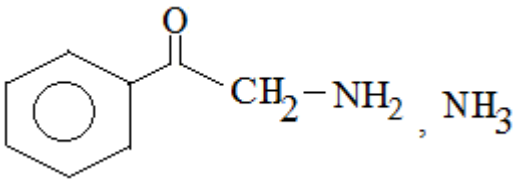
□2□



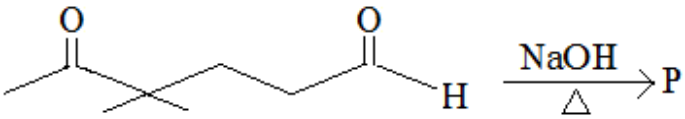
□□□



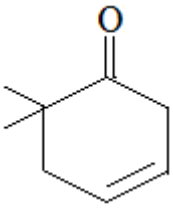
□□□



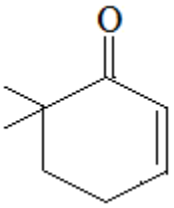
□□□□ What is the possible product ‘P’ in the □□□□□□□ □□□ r□□□□□□□□



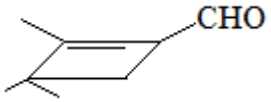
□□□



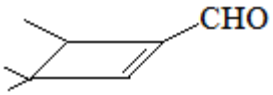
□□□



□2□



□□□

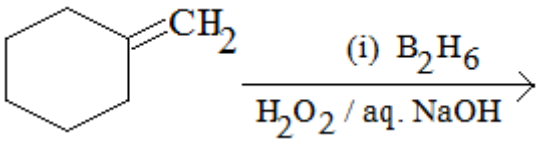


□□□

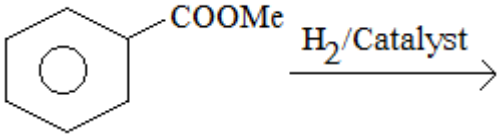
□□□□ □r□□ □□□ □□□□□□□ □□□ □d□□□□□□ □□□ r□□□□□□□□□ □□□□□

□□□□ □□□□□□□□□□□□□ □r□d□□□□

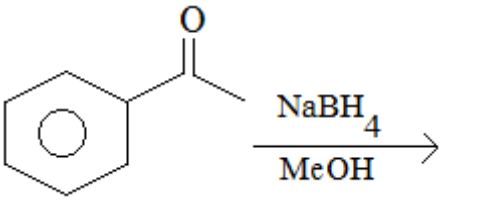
□



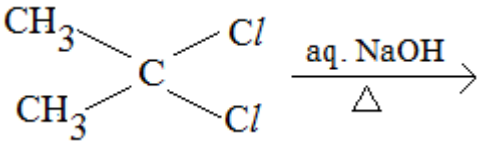
□



□



□



d□

□□□ □□□□□□d

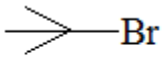
□2□ □□□□d □□□□

□□□ □□□□□ □□□□

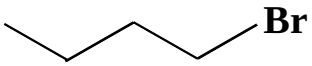
□□□ □□□□d □□□□

□□□□ □rr□□□□ □□□ □□□□□□□ □□□ □r□□ □d□□□ □□□ □rd□r □□

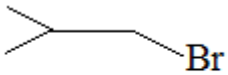
r□□□□□□□□□ □□ □□d□r□□□□□ SN^1 r□□□□□□□□



(i)



□□□□



(iii)

CH_3Br

(iv)

□□□ □□ □□□□ □□□□ □□

□2□ □□ □ □□□ □□□□ □

□□□ □□ □□□ □□□□ □□

□□□ □□□ □□ □ □□□□ □

□□□□ $CH_{□} - Br + AgF \rightarrow H_{□}C - F + AgBr$ □

T□□□r□□□□□□ □□ □□□□d □□

□□□ S□□d□ □□□r r□□□□□□□

□2□ □ □□□□□□ □□□□ □□□□□□□□□□

□□□ □□□□□□□□□□□□ r□□□□□□□

□□□ S□□r□□r□□□□□□□

□□□□ □□□□□□□ $\xrightarrow{NaOH}$ □ $\xrightarrow[H^{□}]{CO_2}$ Q $\xrightarrow[H^{□}]{CH_{□}CO_{□}O}$ □ □

Here 'R' is

□□□ □□□□□□□□□□□

□2□ □□□□□□□□□□□

□□□ □□□□□□□□□□

□□□ □r□□□□□□□□□r

□□□□ □ $\xrightarrow{C_2H_{□}MgI}$ □ $\xrightarrow{H^{□} \; □H_2O}$

T□r□□□ □□alcohol. The compound 'A' in the □□□□□ □□□□□□□□□ □□r□□□□□□□ □□

□□□ □□□□□□□□

□2□ □□□□□□d□□□d□

□□□ 2□□□□□□□□□□

□□□ □r□□□□□□

□□□□ T□□ □□□□r□ □d□□□□ □□r□ □d □□ □□□□ □r T□□□ □□□ r□□□□□□□

□□□

□2□

□□□

□□□□ Id□□□□□□□ □□□□rr□□□□□□□□□ □□□□

□□□ □□□□r□□□r□ □□□□□d □□ □□□ □r□d□□□□□□ □□ □r□□□ r□r□□□r□□□□ – 22

□2□ U□d□r □□□ □□□□ □ □□ □□r□□□ r□□□□□r□□ □□□□□□□ □□ □□□d □□ □□r□ E□□□□□□□□□□r

□□□ □□□□□□□□□□□□r□□□r□□ □□□□d□□□r□ □□d□□□□ □□□r□□□□□□□ □□□r□□ I_2

□□□ □r□□□ – □2 □□ □□□□□□□□□□r□d □r□□ □□□r□□□□□r□□ □□□□□□□ □□ S□□r□□r□□□□□□□

□□□□ □□dr□□□□□ □□ □r□□□□□□ □□ □r□□□□□□□ □□ d□□□□□□ sulphuric acid gives 'x' and □□dr□□□r□□□□□ oxidation of propene gives 'y'. The correct □□□□□□□ □□□□□□□□□□□ □□d □□r□□

I □ □ □□d □□r□ □□□□□□□□□□□□□□□□□□□ □r□

II = Formation of 'x' involves Markonikov's rule and the formation of y' follows Antimarkonikov's rule.

III □ □ □□d □□r□ □□□□ □□□□□□□□□

I□ □ □□□□ □ □□d □ □□□□□□□□□□ □□□□ □ □□□□□□□□□□□□□□ □r□□□

□□□ □□□

□2□ I□II□III

□□□ I□III □□□□

□□□ I□II□I□

□□2□ $CH_{□}COOH$ □ $C_2H_{□}\overset{□□}{O}H$ □ $\xrightarrow{Conc\ H_{□}SO_{□}}$ □□□□□□□

□r□d□□□□□ T□□ □□rr□□□ □□□□ □□ □r□d□□□□ □□ □□□□ r□□□□□□□□ □□

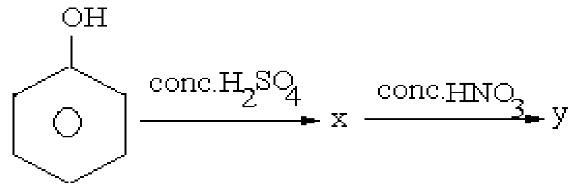
□□□ $CH_{□}CO\overset{□□}{O}C_2H_{□}$ □ H_2O

□2□ $CH_{□}C\overset{□□}{O}OC_2H_{□}$ □ H_2O

□□□ $CH_{□}COOC_2H_{□}$ □ $H_2\overset{□□}{O}$

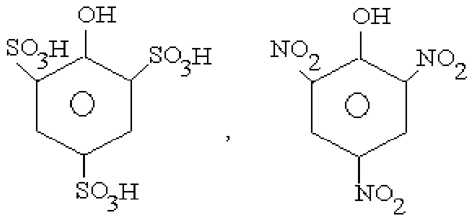
□□□ $CH_{□}CO\overset{□□}{O}C_2H_{□}$ □ $H_2\overset{□□}{O}$

□□□

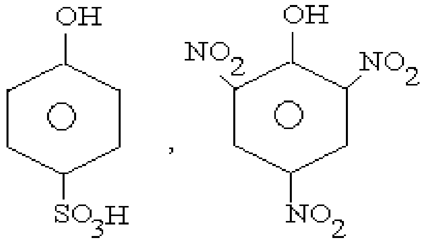


□ □□□□r□ □ □□d □□

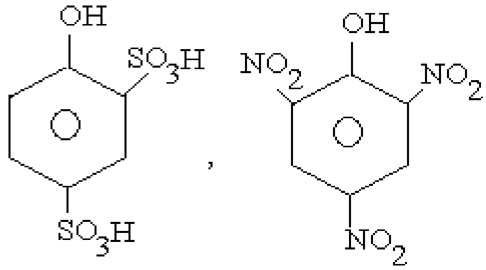
□□□



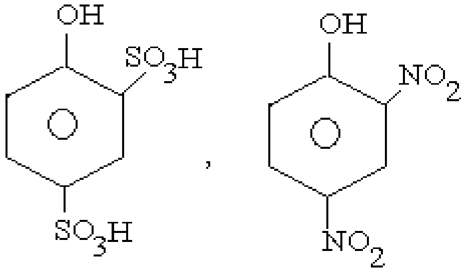
□2□



□□□



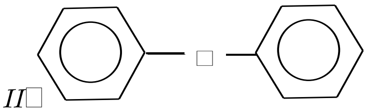
□□□



□□□□ Among the following which can't be □r□□r□d by williamson's synthesis?

I□□□□□□□□□□□□□□□□□

II□



III□□□□□□□□2□□

□□□ I□II

□2□ II□III

□□□ I□III

□□□ □□□III

□□□□ The incorrect statement's are

□□ I□ E□rd r□□□□□ □□□□□□ □□□□□r□d □□□ □□□□□d□□□d□

□□ I□ S□□□□□ r□□□□□ □□□□□ □□r□ □□□□□r□d □□□ □□□□□d□□□d□

□□ I□ □□□□r□ □□ – □□□□ r□□□□□ T□□□□□ □□□□□r□d □□□ □□□□□d□□□d□

□□ □□□□□d□□□d□ □□ □□r□ r□□□□□ □□□ □r□□□□□□□ □rd□□□□□□□□□□□ □dd□□□□

□□□ □□□ □□□

□2□ □□□ □□□

□□□ □□□ □□□

□□□ □□□ □□□

□□□□ □ □□□□ □r□d□□□ □□ □□□ □□r□ □d □□ □r□□□ □d□□ □□d□□□□□□ □□ □□□□r□ □□ □□□□□□ □d □r□□□□□

□□□ □□□– 2□□□□

□2□ □□□□2□□□□

□□□ 2□ □□□□–□□□2□□□□

□□□ 2□ □□□□□□□□□□□□□□

□□□□ Id□□□□□ □□□ □□rr□□□□□□□ □□□

□□□ N□r□□□□r□ □r□□□ □□□□□□□ □□ □□□□

□2□ □□□□□d□□□□□□□□□□r □□□ □□r□□r□ □□□ □□□r □□□ □r□ □□□□□□□d□□

□□□ I□ □□□ □r□□r□□□ □□ □□□□□d□□ □r□ □d□□□ □□ □□□□□ □□□□dr□d□ □□ □□□d□ □ □□□ □□□□ □□□□□□□□□□□ □□□□□

□□□ □□□□□ □□□□□□□d□□ □□ □□d□□□□ □□□ □□□ □r□d□□□□□□□□□□□□□□□□□□□□

□□□□ I□ □□□ □□□□□□□ □□r□□□□□□□

$$CH_{□}CH_2I \xrightarrow{NaCN} A \xrightarrow[partialhydrolysis]{OH^-} B \xrightarrow{Br_2NaOH} C□$$

T□□ □□□□r □r□d□□□□ □□

□□□ □□□□□2□□□N□□r

□2□ □□□□□2□□□N□r2

□□□ □□□□□2□□□□N□□

□□□ □□□□□2N□2

□□□□ □r□□□□□r□□□□ □□□□□□□□ □□□□□r□□□□□r□□d □□□ □□r□ □□□□□□□T□□ □□rr□□□rd□r □□□□□d □□□

□□□ □r□□□ □ □□□□ □□r□

□2□ □r□□□ □ □□□□ □□r□

□□□ □□r□□ □□□□□ □r□□

□□□ □ □□□ □ □□r□ □ r□□□

□□□□ □r□□□□ □□□ □□□□□□□□□ □r□d □□

I□ I□□r□□□□□□□

II□ E□□□□d□ □□□□□□□□□

III□ T□r□□r□ □□□□□□□□□

I□□ □□□□□□□□□ □□□

□□□ I□III □□□□

□2□ II□III□I□

□□□ I□III□I□

□□□ III□I□ □□□□

SRI CHAITANYA EDUCATIONAL INSTITUTIONS,INDIA

A.P,TELANGANA,KARNATAKA,TAMILNADU,MAHARASHTRA,DELHI,RANCHI

SR ELITE ***Date : 26.03.19***

NEET UNIT TEST – 2 KEY

BIOLOGY

1) **3**	2) **1**	3) **4**	4) **3**	5) **1**	6) **3**	7) **3**	8) **1**	9) **4**	10) **3**
11) **4**	12) **4**	13) **1**	14) **1**	15) **2**	16) **1**	17) **4**	18) **2**	19) **2**	20) **2**
21) **3**	22) **1**	23) **2**	24) **1**	25) **3**	26) **4**	27) **3**	28) **1**	29) **1**	30) **4**
31) **2**	32) **3**	33) **4**	34) **3**	35) **2**	36) **2**	37) **2**	38) **3**	39) **1**	40) **2**
41) **2**	42) **1**	43) **4**	44) **4**	45) **2**	46) **1**	47) **4**	48) **2**	49) **4**	50) **4**
51) **2**	52) **1**	53) **4**	54) **3**	55) **1**	56) **1**	57) **1**	58) **2**	59) **3**	60) **2**
61) **4**	62) **2**	63) **1**	64) **1**	65) **2**	66) **1**	67) **3**	68) **4**	69) **3**	70) **3**
71) **1**	72) **1**	73) **4**	74) **3**	75) **4**	76) **1**	77) **2**	78) **2**	79) **4**	80) **1**
81) **2**	82) **4**	83) **4**	84) **4**	85) **4**	86) **4**	87) **1**	88) **3**	89) **1**	90) **3**

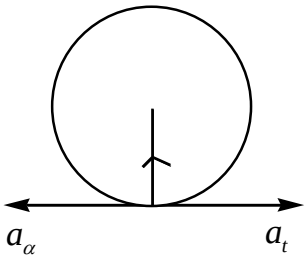
PHYSICS

91) **2**	92) **2**	93) **2**	94) **4**	95) **1**	96) **3**	97) **2**	98) **3**	99) **2**	100) **1**
101) **4**	102) **4**	103) **2**	104) **1**	105) **2**	106) **3**	107) **4**	108) **4**	109) **4**	110) **3**
111) **1**	112) **4**	113) **1**	114) **2**	115) **1**	116) **4**	117) **4**	118) **3**	119) **3**	120) **3**
121) **2**	122) **1**	123) **2**	124) **2**	125) **4**	126) **3**	127) **1**	128) **1**	129) **1**	130) **2**
131) **4**	132) **4**	133) **1**	134) **4**	135) **2**					

CHEMISTRY

136) **1**	137) **2**	138) **2**	139) **2**	140) **3**	141) **2**	142) **1**	143) **1**	144) **2**	145) **3**
146) **3**	147) **1**	148) **1**	149) **2**	150) **4**	151) **2**	152) **3**	153) **1**	154) **1**	155) **3**
156) **3**	157) **1**	158) **4**	159) **4**	160) **2**	161) **4**	162) **2**	163) **2**	164) **3**	165) **1**
166) **4**	167) **3**	168) **1**	169) **2**	170) **2**	171) **4**	172) **1**	173) **3**	174) **1**	175) **3**
176) **4**	177) **2**	178) **4**	179) **3**	180) **3**					

SOLUTIONS
PHYSICS



□□□

$a_{cm} = r\propto \Rightarrow a_{horizontal} = \square$

$\Rightarrow a_{net} = a_{cp}$

□2□ $\left(I_o + I_d\right)\omega = \left(\frac{I_o}{m} + I_d\right)2\omega$

$I_d = l_\square\left(\square - \frac{2}{m}\right)$

□□□ $PE_{lost} = KE_{gained}$

$mg\,2R = \frac{\square}{2}\left(2mR^2\right)w^2$

$w = \sqrt{\frac{2g}{R}}$

□□□ $K = \beta s$

$\frac{\square}{2}mv^2 = \beta s$

$\frac{\square}{2}m\,2v\frac{dv}{dt} = \beta\left(\frac{dS}{dt}\right)$

$a_T = \frac{\beta}{m} \Rightarrow r_\alpha = \frac{\beta}{m}$

□□□ $V = r\omega \Rightarrow \omega = \frac{v}{r}$

$KE = \frac{\square}{2}I\omega^2 = \frac{\square}{2}\frac{mr^2}{2}\left(\frac{v^2}{r^2}\right) = \frac{\square}{\square}mv^2$

□□□ $mg \times \square\square = \square g \times 2\square \Rightarrow m = \frac{\square\times 2\square}{\square\square} = \square kg$

□□□ $\square = a\,\square\square\theta - - -\,\square\square$

$\pi = aw\ \square\square\theta$

$\Rightarrow \square = a\,\square\square\theta - - -\,\square 2\square$

$a^2\,\square\square\theta + a^2\,\square\square\theta = 2 \Rightarrow a = \sqrt{2}$

□□□ □□□□□□□□□

□□□ $\frac{\square}{2}kA^2 = \left(\square\square\square - \square\square\square\right)J$

$\frac{\square}{2}\times k\left(2\times\square^{-2}\right)^2 = \square\square\square$

$K = \frac{\square\times\square^{-2}}{2\times\square^{-\square}} = \square\square Nm^{-\square}$

□□□□ $K = \frac{\square\times\square\square}{\square\times\square^{-2}} = 2\square\square Nm^{-\square}$

$a_{\square\square} = Aw^2 = A\left(\sqrt{\frac{K}{m}}\right)^2 = \square\square\left(\frac{\square\square\square}{\square}\right) = \square\square$

□□□□ $S\square\square d\ \square\square\square\square\ \square\square\square\ \square\square\ \square\square\square\ \square\square\square\ \square\square\square\square\square\square\square\ \square\ \square r\square$

$\square\square\square\square\square r\square\square\square\square\ \square\square\square r\square\ \frac{\pi}{\square}t = \frac{\pi}{\square} \Rightarrow t = \frac{2}{\square}s$

□□2□ $Slope = \frac{\Delta\theta}{Q} = \frac{\square}{ms}$

$\frac{H_{solid}}{H_{liquid}} = \frac{\square\square\square\square\square}{\square\square\square\square\square}$

□□□□ $\square\square\square\square\square\square\square\square\square\square\square\square V \propto T \Rightarrow T_a = 2T_b$

$\square\square\square\square\square\square\square\square\square\square\square\square\square d = \sqrt{\frac{\gamma RT}{M}}$

$\Rightarrow \frac{C_a}{C_b} = \sqrt{\frac{T_a}{T_b}} = \sqrt{\frac{2}{\square}}$

$C_a = \sqrt{2}\ C_b$

□□□□ $C_V = \frac{f}{2}R = f\ cal\ \square gmole - K$

$C_P = \left(\frac{f}{2} + \square\right)R = \left(f + 2\right)cal\ \square mol - K$

□□□□ $TP^{\square - \gamma/\gamma} = cons\ \square\square t$

$TP^{-2/\square} = T_2\left(\frac{P}{\square 2}\right)^{-2/\square}$

$T_\square = T_2\,\square 2^{2/\square} \Rightarrow T_2 = T_\square/\square$

$\square\square d\ C = \sqrt{\frac{\gamma RT}{M}}$

□□□□ $dW_{AB} = dW_{CD} = \square$

$dW_{BC} = nRdT_\square\ and\ dW_{DA} = nRdT_2$

$dW_{net} = \square\times\square\square\square\left(\square\square\square - \square\square\square\right)J = \square\square kJ$

□□□□ $\eta = \square - \frac{T_2}{T_\square} \Rightarrow \frac{\square}{2} = -\frac{2\square\square}{T_\square}$

$T_\square = \square\square\square K$

$\frac{\square\square}{\square\square\square} = \square - \frac{2\square\square}{T_\square} = \square\square\square K$

$\Delta T_\square = \square\square\square K$

□□□□ □□□□□□□□□□□

□□□□ $R = R_\square + R_2$

$\frac{\square x}{K_{eff}A} = \frac{x}{KA} + \frac{\square x}{2KA}$

$$K_{ef} = \frac{\square}{\square}K$$

$$\left(\frac{dQ}{dt}\right) = \frac{\square}{\square}K\frac{A\left(T_2 - T_\square\right)}{\square x}$$

□□□□ $$\frac{T_\square}{T_2} = \left(\frac{A_\square}{A_2}\right)^{\square/\square} = \frac{\square}{2}$$

$$\lambda_m \propto \frac{\square}{T} \Rightarrow \frac{\lambda_\square}{\lambda_2} = \frac{2}{\square}$$

□□□□ $$n_\square + n_2 = n_\square^\square + n_2^\square$$

$$\frac{2P_\square V_\square}{RT_\square} = \frac{PV_\square}{R}\left(\frac{\square}{T_\square} + \frac{\square}{2T_\square}\right)$$

$$P = \frac{\square P_\square}{\square} \Rightarrow n_2^\square = \frac{PV_\square}{2RT_\square} = \frac{2P_\square V_\square}{\square RT_\square}$$

□□2□ $$T_\square = 2\pi\sqrt{\frac{I}{MB_e}}\ and\ T_2 = 2\pi\sqrt{\frac{I}{MB_V}}$$

$$\frac{T_\square}{T_2} = \sqrt{\square\square\square\delta}$$

□□□□ □ □□□ □□□□□□□□ $\Rightarrow \chi$ □□□□ □□□□□ $d-$□□

□□□□ $$I = \chi H\ \square H \propto B\ and\ \chi \propto \frac{\square}{T} \Rightarrow I \propto \frac{B}{T}$$

□□□□ □□□□□□□□□□□

□□□□ □□□□□□□□□□□

□□□□ $$V_2 > V_\square \Rightarrow KE_2 > KE_\square$$

$$E_{ph} = KE_{\square\square} + \phi \Rightarrow \lambda_\square > \lambda_2$$

□□□□ $$KE_{\square\square} = E - \phi$$

$$\square\square\square = E - \phi$$

$$\square\square\square - \square 2E - \phi$$

$$\square 2\left(\square\square\square + \phi\right) = \square\square\square + \phi$$

$$\square 2\phi = \left(\square\square\square - \square\square\square\right)eV$$

$$\phi = \square\square\square eV$$

□□□□ $$\lambda_{Na} > \lambda_{blue}$$

□2□□ $$\lambda = 2\pi rn$$

$$= 2\times\square\square\square\times\square\square 2\square n^2A^\square \approx \square\square\square nA^\square$$

□2□□ $$L = \frac{nh}{2\pi} \Rightarrow n = 2$$

$$\therefore K = -\left(TE\right) = \square\square eV$$

□22□ $$E_n = \frac{-Z^2e^\square m}{\square\varepsilon_o^2 n^2h^2} \Rightarrow E_n \propto m$$

$$r_n = \frac{n^2h^2\varepsilon_\square}{Ze^2\pi m} \Rightarrow r_n \propto \frac{\square}{m}$$

□2□□ $$r_{n+\square} - r_n = r_{n-\square}$$

$$\left(n+\square\right)^2 - n^2 = \left(n-\square\right)^2 \Rightarrow n = \square$$

□2□□ $$K = \frac{\square\square\square\square}{n^2}eV \Rightarrow R = \square\square\square 2\square n^2A^\square$$

□□□□□□□□□□□

□2□□ $$N = n_\square e^{-\lambda t}$$

$$\frac{N_A}{N_B} = \left(\frac{\square}{2}\right)\frac{e^{-\lambda_A t}}{e^{-\lambda_B t}} \Rightarrow \frac{\square}{2e} = \frac{\square}{2}e^{-\lambda_B \mathbf{t}} \Rightarrow t = \frac{\square}{\lambda_B}$$

□2□□ $$\frac{Q}{KE_\alpha} = \left(\square + \frac{m}{M-m}\right) \Rightarrow Q = \left(\frac{M}{M-m}\right)\frac{P^2}{2m}$$

□2□□ $$P = \frac{nE}{t}$$

□2□□ $$\square - \square\times\square\square^{-\square}R_L - \square = \square \Rightarrow R_L = \square\square^\square\Omega$$

□2□□ □□□□□□□□□□□

□□□□ $$I_2 = \frac{2}{\square\square} = \square 2mA$$

$$I = \frac{\square}{\square\square} = \square\square mA$$

$$I_\square = I - I_2 = \square\square mA$$

□□□□ $$I_\square = \square I_2 = \frac{\square V}{2K\Omega}$$

□□2□ $$P = P_\square + P_2$$

$$P = P_\square - P_2 \Rightarrow \frac{h}{\lambda} = \frac{h}{\lambda_\square} - \frac{h}{\lambda_2}$$

□□□□ $$\lambda_{particle} = \frac{hV}{2E}\ \square\lambda_{ph} = \frac{hc}{E}$$

$$\frac{\lambda_{particle}}{\lambda_{ph}} = \frac{V}{2C}\times\frac{E_{ph}}{E_{particle}} = \frac{\square}{2\times\square\square}\times\frac{\square\square\square}{\square}$$

□□□□ □□□□ □□□□□ □□□□□□□□□ □ □□□□□□□□ □ □□□□□ dr□□□□ d □□r□□□ □□□ □□□□□□□□□□r

□□□□ □□□□□□□□□□□

CHEMISTRY

□□□□ □□r □□□ r□□□□□□□□□ □□□□□□□□ $\rightleftharpoons$ □□□ □□□□□ □□$_2$□□□□□ □ □$_{\square\square 2}$

□ □□□□□ □□□$_{\square\square}$□ □ □□□$_{\square\square}$□ □ $\frac{\Delta\square^\square}{2\square\square\square\square}$ □ $\frac{\square}{\mathcal{T}}$ □□□$_{\square\square}$ □$_{\square\square 2}$ □ □□□$_{\square\square}$□ □ $\frac{\Delta\square^\square}{2\square\square\square\square}$ □ $\frac{\square}{\mathcal{T}}$

$\mathcal{T}$□□ r□□□□□□□□ □□□ □□d□□□□ r□ □□□□□□□ r□□ r□□□□□□$_{\square\square}$ □$_{\square\square 2}$ □ □□□□□□□□□□ r□□ d□□ r□□□□□ □ □□□ □□□ r□□□□ □□ □□□

□□□□□□ □□ $\left(\frac{\square}{\mathcal{T}}\right)$ □

[illegible] $_2$ in 0.1MNaF be ‘x’M, then

[illegible] ^{2} [illegible] $\mathcal{M}$ [illegible] 2 [illegible] $\mathcal{M}$

[illegible] ^{2} [illegible] ^{2} [illegible]

[illegible] 2 [illegible] ^{2} [illegible] ^{2} [illegible]

[illegible] r [illegible] ^{2} [illegible] d [illegible] r [illegible] d [illegible]

[illegible]

[illegible] $_2 \rightleftharpoons$ [illegible] I T↑ [illegible] d [illegible] ↑ [illegible] d [illegible] ↓

[illegible]

$\therefore$ [illegible]

[illegible] $\Rightarrow$ [illegible] d [illegible] r [illegible] r [illegible] r [illegible] r [illegible] r [illegible] r [illegible] $\Rightarrow$ [illegible] Δ [illegible]

[illegible] $S = \frac{\square W}{M}\, mol\, litre$ $\quad K_{sp} of\ Ca_{\square}(PO_{\square})_2 = \square S^{\square} = \square\left(\frac{\square W}{M}\right)^{\square} = \square\left(\frac{W}{M}\right)^{\square}$ [illegible] r [illegible]

[illegible] 2 [illegible] HCCOH + KOH → HCOOK + H_2 [illegible]

[illegible] r r [illegible] r [illegible] r [illegible]

[illegible]

$[S\ \square] / [\square d]$ [illegible]

[illegible] $-$ [illegible] 2 [illegible]

[illegible]

[illegible] ^{2} r [illegible] Δ [illegible] 2

$$\square_{\square} = \square_{\square}(\square\mathcal{T})^{\Delta\square} = \square_{\square}(\square\mathcal{T})^{-2} = \frac{\square_{\square}}{(\square\mathcal{T})^2} \qquad \therefore \square_{\square} < \square_{\square}$$

[illegible] Δ [illegible] 2 [illegible] $\mathcal{T}$ [illegible]

[illegible] $_2$ [illegible] $_2$ [illegible] $2\times\square^{-\square} = \frac{\square\times\square^{-\square}}{\square} \times \square_2\square_2$ [illegible] $\therefore \square_2\square_2 = \square\mathcal{M}$

[illegible]

[illegible] I [illegible] r [illegible] rd [illegible] r r [illegible] 2 [illegible] 2 [illegible] 2

$$\frac{\mathcal{E}_{\square}^{\square}}{\mathcal{T}_{\square}} = \frac{\mathcal{E}_{\square}}{\mathcal{T}_2} = \frac{\square}{\square} = \frac{2\square}{\mathcal{T}_2} \qquad \therefore \mathcal{T}_2 = \square = \square 2\square^{\square}\square$$

[illegible] $\mathcal{T}$ rd [illegible] r rr [illegible] r [illegible] r [illegible] r [illegible] r rr [illegible]

[illegible] I S [illegible] d [illegible] r [illegible] d [illegible] r [illegible] r [illegible]

[illegible] 2 [illegible]

[illegible] d [illegible] $\mathcal{M}$ [illegible] $\mathcal{N}$

[illegible] $\mathcal{N}$ [illegible] r [illegible] r [illegible] H_2NCH_2COOH

[illegible]

[illegible] d [illegible] d [illegible] r d [illegible] d [illegible]

[illegible] $HNO_{\square}$ [illegible] d [illegible] CH_2-OH to COOH