

ΔΑΠΑΡΕΛΑΝΔΡΑ ΑΙΕΡΑΑΙΑΨΑΕΛΑ-1, 2022-23

νΑgΑUÀw : 9 «μΑiÀÄ : «eΑÕΕΛΑ CAPÀUÀ¼ÄÄ :
80 ,ÀªÄÄiÀÄ : 3UÀAmÉ

I. ΠΕ¼ÀVΕΛΑ ΨÆwAiÉÆAzÄÄ °ÉÃ½ΠΕUÉ ΕΑ®Äì
DAiÉÄìUÀ¼ÀΕÄÄß ΠΕÆqÀ´ÁVzÉ. CªÀÅUÀ¼À°è
,ÄjAiÀiAzÄÄzÀΕÄÄß Dj¹ ΠÆªÀiÁPÀëgÀUÀ¼ÉÆAçUÉ §gÉ¬Äj.
8x1 =8

1. CvÀåAvÀ νÀtÚVΕΛΑ ρÃjgÀÄªÀ UÁfΕΛΑ ΨÁvÉæAiÀÄ °ÉÆgÀ ªÉÄÄ´ÉäöÊ
ªÉÄÄ´É ΕΑªÄÄ ρÃjΕΛΑ °ÀρUÀ¼ÀΕÄÄß ΠÁtÄvÉÛÄªÉ. ΚΡΕ?

A. ´Á¶àÃΠÀgÀt B. vÀAΨÁUÄÄ«ΠΕ C. D«ÃΠÀgÀt D.
zÀæ«ÃΠÀgÀt.

2. ªÉÆ,ÄjρAzÀ ´ÉuÉÚAiÀÄΕÄÄß ΨÆvÉåÃQ,À®Ä §¼Ä,ÄÄªÀ νÀAvÀæ

A. ,ÉAnæΨsÀÆæĩ B. GvÀävÀΕΛΑ C. D«ÃΠÀgÀt D.
,ÉÆÄ,ÄÄ«ΠΕ

3. fÃªÀΠΕÆÄ±ÄzÀ ±ÄQÛ ΠΕÄAzÀæ

A. ªÉÄÊmÉÆÄΠÁAræAiÀiÁ B. UÁ°î,ÀAQÃtð C. ´ÉÊ,ÉÆÄ,ÉÆÄA D.
gÉÊ´´ÉÆÄ,ÉÆÄA

4. EªÀÅUÀ¼À°è AiÀiÁªÀÄzÄÄ ,ÁßAiÀÄÄ CAUÁA±ÄzÄÄ «zsªªÁV® è.

A. ΨÀmÉÖ,À»vÀ ,ÁßAiÀÄÄ, B. ΨÀmÉÖgÀ»vÀ ,ÁßAiÀÄÄ C. °ÀÈzÄAiÀÄ
,ÁßAiÀÄÄUÀ¼ÄÄ D. CrΨÉÆÄ,ĩ

5. zÉÄ±ÄzÄ D°ÁgÀ ,ÀªÄ,ÉåAiÀÄΕÄÄß ρÃV,À®Ä F
ΠΕ¼ÀVΕΛΑªÀÅUÀ¼À°è AiÀiÁªÀÄzÄÄ ,ÀÆΠÀÛªÁVzÉ.

A. D°ÁgÀ GvÁázÀΕÉ ªÄÄvÄÄÛ ,ÀAUÄæ°ÀuÉAiÀÄΕÄÄß
°ÉaÑ,ÄÄªÀÄzÄÄ

B. dΕÀjUÉ D°ÁgÀªÀÄ ,ÄÄ®´sªªÁV zÉÆgÉAiÀÄÄªÀAvÉ
ªÀiÁqÄÄªÀÄzÄÄ

C. D°ÁgÀ ΠΕÆAqÄÄΠΕÆ¼Äî®Ä dΕÀgÀ §½ °Àt«gÀ´´ÉÄΠÄÄ

D. ªÉÄÄ°ΕΛΑ J®èªÀÇ

6. ,ÀgÁ,Äj dª ΠÄAqÄÄ»rAiÀÄÄªÀ ,ÀÆvÀæ

A. v=t/s B. v=s/t C. s=v/t D. v=sxt

7. $E^a \Delta U \Delta \frac{1}{4} \Delta^\circ = A_i \Delta i \Delta^a \Delta \Delta z \Delta \Delta^\circ \acute{E} a \tilde{N} \acute{E} \Delta d q \Delta v \Delta \acute{e}^a \Delta \acute{E} \Delta \Delta \Delta \Delta^\circ \acute{E} \acute{E} \Delta \phi z \acute{E}$

A. $MAz \Delta \Delta g \Delta \S \hat{a} g \tilde{i} Z \acute{E} A q \Delta \Delta$ B. $MAz \Delta \Delta \text{``} \acute{E} \acute{E}^1 P \Delta \text{``} \tilde{i}$ C. $g \acute{E} \acute{E} \textcircled{A}$ D. $Lz \Delta \Delta g \Delta \acute{E} \not\Delta \neg \Delta \acute{E} \Delta t \hat{a}$

8. $\text{``} s \Delta \acute{E} U \Delta \Delta g \Delta \Delta v \Delta \acute{e}^a \acute{E} \tilde{A} U \acute{E} \acute{E} \tilde{A} v \Delta \Delta \mu \Delta \delta z \Delta \text{``} \acute{E} \text{``} \acute{E}$,

A. $g = 9.8 \text{ ms}^{-2}$ B. $g = 99.8 \text{ ms}^{-2}$ C. $g = 9.0 \text{ ms}^{-2}$ D. $g = 8.9 \text{ ms}^{-2}$

II. $P \acute{E} \frac{1}{4} \Delta v \acute{E} \Delta \not\Delta \pm \acute{E} \Delta U \Delta \frac{1}{2} U \acute{E} MAz \Delta \Delta \pm \Delta \S \acute{Y} Cx \Delta^a \Delta^a \acute{A} P \Delta \hat{a} z \Delta^\circ = Gv \Delta \hat{U} j^1$.
 $8 \times 1 = 8$

9. $\pm \Delta \Delta \mu \Delta \Delta^a \Delta \Delta A d \Delta U \Delta q \acute{E} \emptyset$ (dry ice) $JAz \Delta \Delta A_i \Delta i \Delta^a \Delta \Delta z \Delta \acute{E} \Delta \Delta \Delta$
 $P \Delta g \acute{E} A_i \Delta \Delta v \acute{E} \hat{U} \Delta^a \acute{E}$. ?

10. $P \Delta \Delta A q \Delta z \Delta^\circ = g \Delta \Delta^a \Delta \Delta \Delta \Delta \Delta^a \acute{E} \acute{C} A z \Delta \acute{E} \Delta \Delta \Delta U \acute{f} \acute{E} \Delta e \acute{A} g \tilde{i} \Delta z \Delta^a \Delta \Delta \Delta a \tilde{N} m \acute{A} \ddot{O} U \Delta, e \acute{A} g \tilde{i} \acute{E} \Delta M \frac{1}{4} \Delta \text{``} s \acute{A} U \Delta z \Delta U \acute{E} \acute{E} \tilde{A} q \acute{E} U \Delta \frac{1}{4} \Delta^\circ = \Delta \tilde{A} g \acute{A} \ll A_i \Delta \Delta \Delta P \Delta t \hat{A}^1 P \acute{E} \acute{E} \frac{1}{4} \Delta \hat{v} \Delta \hat{U} z \acute{E} . K P \acute{E} ?$

11. $C \textcircled{u} \Delta \Delta g \Delta u \acute{E} JAz \Delta g \acute{E} \tilde{A} \acute{E} \Delta \Delta ?$

12. $\text{``} CAU \acute{A} A \pm \Delta \Delta^a \Delta z \Delta P \acute{E} \tilde{i} \Delta g \Delta \acute{E} \not\Delta u \acute{E} P \acute{E} \acute{E} r$

13. $\ll \Delta \pm \Delta \not\Delta \text{``} \acute{E} \frac{1}{4} \acute{E} \not\Delta z \Delta \Delta w U \acute{E} MAz \Delta \Delta Gz \acute{A}^\circ \Delta g \Delta u \acute{E} P \acute{E} \acute{E} r$.

14. $K P \Delta g \Delta \acute{E} \not\Delta Z \Delta \textcircled{E} \acute{E} JAz \Delta g \acute{E} \tilde{A} \acute{E} \Delta \Delta ?$

15. $Z \Delta \textcircled{E} \acute{E} A_i \Delta \Delta^a \Delta \Delta \acute{E} g \Delta \acute{E} \tilde{A} \Delta A_i \Delta \Delta^a \Delta \Delta^a \Delta \acute{E} \Delta \Delta \Delta \Delta g \Delta \acute{E} \tilde{i}^1$.

16. $\Delta \acute{e} v \Delta A v \Delta \not\Delta \not\Delta v \Delta \acute{E} \Delta JAz \Delta g \acute{E} \tilde{A} \acute{E} \Delta \Delta ?$

III. $P \acute{E} \frac{1}{4} \Delta v \acute{E} \Delta \not\Delta \pm \acute{E} \Delta U \Delta \frac{1}{2} U \acute{E} Jg \Delta q \Delta \Delta^a \acute{A} P \Delta \hat{a} U \Delta \frac{1}{4} \Delta^\circ = Gv \Delta \hat{U} j^1$.
 $8 \times 2 = 16$

17. $F P \acute{E} \frac{1}{4} \Delta v \acute{E} \Delta \ll \tilde{A} P \Delta \acute{e} u \acute{E} U \Delta \frac{1}{2} U \acute{E} P \acute{A} g \Delta t P \acute{E} \acute{E} r$. a. $\Delta^a \Delta \Delta A_i \Delta \Delta P \Delta \frac{1}{4} \acute{E} z \Delta A v \acute{E} \acute{E} \Delta \hat{a} \not\Delta s \Delta \hat{U}^\circ \acute{E} \tilde{i} U \Delta \frac{1}{2} U \acute{E} U \Delta \frac{1}{4} \Delta \Delta \Delta \pm \acute{E} \hat{e} \tilde{A} \mu \Delta^a \acute{A} v \Delta^a \Delta i \Delta A_i \Delta \Delta^a \Delta U \Delta \Delta v \Delta \hat{U}^a \acute{E}$.

18. $\text{``} \acute{E} \acute{E} \tilde{A}^\circ \Delta U \Delta \frac{1}{4} \Delta A_i \Delta i \Delta^a \Delta \Delta z \Delta z \Delta g \Delta \acute{E} \acute{E} \Delta \textcircled{A} \tilde{i} U \Delta \Delta t U \Delta \frac{1}{4} \Delta \acute{E} \Delta \Delta \Delta \S g \acute{E} \neg \Delta j$. ?

19. $C \ll \tilde{A} \tilde{A} \text{``} \Delta^a \Delta \Delta v \Delta \acute{E} \Delta \Delta D^\circ \acute{A} g \Delta^a \Delta \acute{E} \Delta \Delta \Delta^\circ \acute{E} \tilde{A} U \acute{E} \not\Delta q \acute{E} A_i \Delta \Delta v \Delta \hat{U} z \acute{E} ?$

20. $\not\Delta \tilde{E} \tilde{A} g \Delta P \acute{E} \acute{E}^a \Delta \Delta \Delta \Delta \Delta CAU \acute{A} A \pm \Delta z \Delta av \Delta \not\Delta \S g \acute{E} z \Delta \Delta C \Delta v \Delta g \Delta P \acute{E} \acute{E} \tilde{A}^2 A_i \Delta \Delta C^a \acute{A} P \Delta \pm \Delta U \Delta \frac{1}{4} \Delta \acute{E} \Delta \Delta \Delta U \Delta \Delta w \delta^1$.

21. ±ÉÃRgÀuÁ ,ÀªÄÄiÄÄzÀ°è zsÁ£ÀåUÀ¼À £ÀµÀÖPÉÌ
PÁgÀtªÁUÀ§°ÄÄzÀ CA±ÀUÀ¼ÄÄ AiÄiÁªÄªÄÄ?

22. MAzÄÄ ªÄ,ÄÄÛªÄÄ MAzÄÄ zÀÆgÀªÄ£ÄÄß PÀæ«Ä¹zÉ. EzÀPÉÌ
,ÉÆ£Éß ,ÁÜ£À ¢À®èì ,ÁzsÀªªÉ? ,ÁzsÀª J£ÄÄßªÄÄzÀzÀgÉ, MAzÄÄ
GzÀ°ÀgÀuÉAiÉÆAçUÉ, ¢ªÄÄä GvÀÛgÀªÄ£ÄÄß ,ÀªÄÄyð¹.

23. C,ÄAvÄÄ°vÀ ªÄÄvÄÄÛ ,ÄAvÄÄ°vÀ §®UÀ½gÄÄªÄ
ªÄÄvÄª,ÄUÀ¼É£ÄÄ?

24. MAzÄÄ ªÉÃ¼É ZÄAzÀæ, ¨sÀÆ«ÄAiÄÄ£ÄÄß DPÀ¶ð¹zÉÝÄ DzÀgÉ,
¨sÀÆ«ÄAiÄÄÄ ZÄAzÀæ£À PÀqÉUÉ ZÀ°,ÄÄªÄÄç®èªÉÃPÉ?

IV.PÉ¼ÀV£À ¢Àæ±ÉßUÀ½UÉ GvÀÛj¹. 9x3 =27

25.zÀæªÄzÀ ¹ÜwUÀ¼À°è£À UÄÄtUÀ¼À ªÄÄvÄª,ÄUÀ¼À£ÄÄß
PÉÆÃµÀÖPÄzÀ°è §gÉ¬Äj

26.PÀ°®zÀ ®PÄëtUÀ¼À£ÄÄß ¢ÀnÖªÄiÁr.

27. ¢ÉÆæPÁªAiÉÆÃmĩ fÃªÀPÉÆÃ±ªªÄ AiÄÄÆPÁªAiÉÆÃmĩ
fÃªÀPÉÆÃ±ÀQìAvÀ °ÉÃUÉ ©ü£ÄßªÁVzÉ.

28.vÉAV£ÀPÁ¬ÄAiÄÄ ¹£èªAiÄÄÄ AiÄiÁªÀ CAUÁA±ÀçAz À
GAmÁVzÉ?¢sÉÆèªAiÄÄ£À WÀIPÀUÀ¼ÄÄ AiÄiÁªªªÄÄ?

29. ,Ä,ªÀUÀ¼ÄÄ ¢ÉÆÃµÀPÁA±ÀUÀ¼À£ÄÄß °ÉÃUÉ
¢ÀqÉAiÄÄÄvÀÛªÉ?

30.MAzÄÄ gÉÊ®Ä vÀ£Äß ¢±ÄÑ® ¹Üw¬ÄAzÀ °ÉÆgÀiÄ, 5
¢«ÄµÀUÀ¼À°è 72 Q.«ÄÄ./UÄA ªÉÃUÀªÄ£ÄÄß ¢ÀqÉAiÄÄÄvÀzÉ.
CzÀgÀ ªÉÃUÉÆÄvÀìµÀð KPÀgÀÆ¢zÀ°èzÉAiÉÄAzÄÄPÉÆAqÄÄ,

(i) CzÀgÀ ªÉÃUÉÆÄvÀìµÀðªÄ£ÄÄß PÄAqÄÄ»r¬Äj.

31. §®zÀ CAvÀgÁ¶ÖçÄAiÄÄ ªÄÄÆ®ªÄiÁ£À AiÄiÁªÄÄzÄÄ? §,ĩ£À
bÁªÀtÄAiÄÄ ªÉÄÄ¬É EqÄÄªÀ ®UÉÃèiUÀ½UÉ zÁgÀªÄ£ÄÄß
©VAiÄÄªªÄÄzÄÄ ,ÄÆPÀÛ JAzÄÄ KPÉ °ÉÃ¼Ä¬ÁUÄÄvÀÛzÉ?

32. ZÄAzÀæ£À ªÉÄÄ°£À UÄÄgÄÄvÀé §®ªÄ, ¨sÀÆ«ÄAiÄÄ ªÉÄÄ°£À
UÄÄgÄÄvÀ é §®zÀ 1/6 zÀµÄÄÖ ±ÀQÛAiÄÄÄvÀªÁVgÄÄvÀÛzÉ.
£ÀÆáì£iUÀ¼À°è ZÄAzÀæ ªÄÄvÄÄÛ ¨sÀÆ«ÄAiÄÄ ªÉÄÄ¬É 10 k gÄ
EgÄªªªÄ,ÄÄÛªÉÇAzÀgÀ vÀÆPÀªÉµÄÄÖ?

33. eÉÆÃgÁV ªÄÄgÄzÀ mÉÆAUÉUÀ¼À£ÄÄß C®ÄUÁr¹zÀ PÉ®ªÄÄ
J¬ÉUÀ¼ÄÄ CzÀjAzÀ ¨É¢ÀðqÄÄvÀÛªÉ. KPÉ ? «ªj¹

V. $P \frac{1}{4} \Delta V \Delta \neq \Delta \pm \epsilon \beta U \frac{1}{2} U \epsilon$ $G v \Delta \hat{U} j^1$.

$4 \times 4 = 16$

34. $\Delta, \Delta \hat{a} f \tilde{A}^a P \epsilon \tilde{A} \pm \Delta z \Delta$ $av \Delta \hat{a}^a \Delta \epsilon \Delta \tilde{\beta} \S g \epsilon z \Delta \tilde{A} \text{ `` } s \Delta U \Delta U \Delta \frac{1}{4} \Delta \epsilon \Delta \tilde{\beta}$
 $U \Delta \tilde{w} \delta^1$.

35. $F P \frac{1}{4} \Delta V \Delta \Delta \Delta U \Delta \frac{1}{4} \Delta \epsilon \Delta \tilde{\beta} \text{ `` } \epsilon \tilde{A} \neq \Delta \delta r, \Delta \otimes \tilde{A} A i \Delta i \Delta^a \Delta \text{ `` } \epsilon \tilde{A} \neq \Delta \delta r, \Delta \tilde{A} \ll P \epsilon$
 $v \Delta Av \Delta \hat{a} U \Delta \frac{1}{4} \Delta \epsilon \Delta \tilde{\beta} \propto \tilde{A}^a \Delta \Delta C \Delta \epsilon \neg \tilde{A}, \Delta \tilde{A} \ll j?$

(1) $P \Delta j \Delta E A f \epsilon i v \epsilon \hat{E} \otimes z \Delta^o \epsilon g \Delta \tilde{A}^a \Delta \neg \epsilon \tilde{A} \tilde{A}^o \Delta z \Delta, \Delta t \hat{U} Z \Delta \epsilon g \Delta \tilde{A} U \Delta \frac{1}{4} \Delta \tilde{A}$

(2) $\hat{a} \epsilon \tilde{A}, \Delta j \propto \Delta z \Delta \text{ `` } \epsilon u \epsilon \hat{U}$

(3) $\propto \tilde{A} j \propto \Delta z \Delta J u \epsilon \hat{U}$

(4) $\hat{a} \Delta \tilde{A} g \Delta \frac{1}{2} \propto \Delta z \Delta P \Delta \otimes \hat{a} t z \Delta U \Delta \tilde{A} q \Delta \tilde{A}, \Delta \epsilon f U \Delta \frac{1}{4} \Delta \tilde{A}$

36. $F P \frac{1}{4} \Delta V \Delta \Delta^a \Delta \Delta U \Delta \frac{1}{4} \Delta^o \epsilon g \Delta \tilde{A}^a \Delta C A U \Delta \Delta \pm \Delta z \Delta \ll z s \Delta^a \Delta \epsilon \Delta \tilde{\beta}$
 $U \Delta \tilde{A} g \Delta \tilde{w}^1$.

1) $Z \Delta^a \Delta \tilde{\delta}$, 2) $\hat{a} \Delta \tilde{A} g \Delta z \Delta v \epsilon \tilde{A} U \Delta m \epsilon$, 3) $\hat{a} \Delta \tilde{A} \tilde{A} \frac{1}{4} \epsilon, ,$

4) $\epsilon \Delta \frac{1}{4} \Delta P \Delta \tilde{A} z \Delta \delta U \Delta \frac{1}{4} \Delta \tilde{A}$

37. $P \frac{1}{4} \Delta V \Delta \Delta, \Delta A z \Delta \text{ `` } s \Delta \delta U \Delta \frac{1}{4} \Delta^o \epsilon J g \Delta q \Delta \tilde{A} \hat{a} \Delta, \Delta \tilde{A} \hat{U} U \Delta \frac{1}{4} \Delta \epsilon \Delta q \Delta \tilde{A} \ll \epsilon \Delta$
 $\S \otimes^a \Delta \Delta K \epsilon \Delta U \Delta \tilde{v} \Delta \hat{U} z \epsilon?$

(i) $M A z \Delta \tilde{A} \hat{a} \Delta, \Delta \tilde{A} \hat{U} \ll \epsilon \Delta g \Delta^2 A i \Delta \tilde{A} \tilde{A} E \epsilon \tilde{A} \tilde{\beta} A z \Delta g \Delta J g \Delta q \Delta g \Delta \mu \Delta \tilde{O} z \Delta U \Delta,$

(ii) $J g \Delta q \Delta \tilde{A} \hat{a} \Delta, \Delta \tilde{A} \hat{U} U \Delta \frac{1}{4} \Delta \epsilon \Delta q \Delta \tilde{A} \ll \epsilon \Delta z \Delta \tilde{A} g \Delta^a \Delta \Delta J g \Delta q \Delta g \Delta \mu \Delta \tilde{A} \tilde{O}$
 $\hat{a} \Delta \tilde{v} \Delta \tilde{A} \hat{U} \hat{a} \Delta \tilde{A} \tilde{A} g \Delta g \Delta \mu \Delta \tilde{O} z \Delta U \Delta$

(iii) $J g \Delta q \Delta \tilde{A} \hat{a} \Delta, \Delta \tilde{A} \hat{U} U \Delta \frac{1}{4} \Delta g \Delta^2 U \Delta \frac{1}{4} \Delta \tilde{A} J g \Delta q \Delta g \Delta \mu \Delta \tilde{O} z \Delta U \Delta.$

VI. $P \frac{1}{4} \Delta V \Delta \Delta \neq \Delta \pm \epsilon \beta U \Delta \frac{1}{2} U \epsilon$ $G v \Delta \hat{U} j^1$. $5 \times 1 = 5$

38. (a) $z \Delta \hat{a}^a \Delta \hat{a} z \Delta \hat{a} \tilde{A} \tilde{A} \tilde{A} g \Delta \tilde{A} \hat{U} w U \Delta \frac{1}{4} \Delta C A v \Delta g i \neq \Delta j^a \Delta v \Delta \delta \epsilon \epsilon U \Delta \frac{1}{4} \Delta$
 $g \tilde{E} \tilde{A} s \Delta av \Delta \hat{a} \S g \epsilon \neg \tilde{A} j.$

(b) $F P \frac{1}{4} \Delta V \Delta \Delta v \Delta \neq \Delta U \Delta \frac{1}{4} \Delta^o \epsilon \propto \tilde{A} j \Delta \text{ `` } s \tilde{E} w P \Delta \hat{U} w A i \Delta \tilde{A} \epsilon \Delta \tilde{\beta} w \frac{1}{2}^1.$

a. 250C b. 00C c. 1000C