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| Obtain Mark: | **Physics** | Time: 40 min |
| **Date**: Wednesday, August 7, 2024 | Total Mark: 54 |

1. `yBwU fvix e¯Zy GKB mv‡\_ Ici ‡\_‡K ‡djv n‡jv| c«\_gwU 122.5m Ici ‡\_‡K Ges wØZxqwU 200m Ici ‡\_‡K| c«\_g e¯Zy hLb f~wg‡Z ‡cŠu‡Q ZLb wØZxq e¯Zyi D”PZv I ‡eM ‡ei Ki| (07)
2. GKwU evm w¯’i Ae¯’v ‡\_‡K 2ms-2 mgZ¡i‡Y Pj‡Z ïi Kij| ‡`LvI ‡h, ‡e‡M ‡`Šov‡Z m¶g ‡Kvb evw³ evm ‡\_‡K 25m Gi ‡ewk wcQ‡b \_vK‡j evmwU ai‡Z cvi‡e bv| (07)
3. GKwU weovj Zvi m¤§y‡L 15m `‡i GKwU B`yi‡K ‡`L‡Z ‡c‡q Zv‡K aivi Rb¨ 2m/sec² mgZ¡i‡Y ‡`Šov‡Z ïiy K‡i, B`yiwU 14m/scc mg‡e‡M Pj‡Z \_vK‡j ‡Kv\_vq I KLb weovj Bu`yiwU‡K ai‡Z cvi‡e? (07)
4. GKwU wµ‡KU ej 72km/h Avw`‡e‡M I 2m/scc2 g›`‡b 85m `~‡ii evDÛvix jvB‡bi w`‡K Pj‡Q| 2sec c‡i GKRb ‡L‡jvqvo evDÛvix ‡\_‡K 65m `~‡i \_vKv Ae¯’vq 15km/h MwZ‡Z ejwU‡K avIqv K‡i| ‡m KZ Z¡iY c«vß n‡j evDÛvix‡Z ‡cŠuQvq AvM gyn~‡Z ejwU‡K \_vgv‡Z cvi‡e? (07)
5. Zvbfxi 10kmh-1 PSZ Awdm ‡\_‡K Wy‡qU ‡cŠQvq Ges 12kmh-1 ‡e‡M PSZ Awd‡m wd‡i Av‡m| Zvi Mo ‡eM KZ? (07)
6. GKwU ‡evgviy wegvb 240 gvBj/N›Uv ‡e‡M Abyf~wgKfv‡e Pwjqv 1600 dyU DuPy nB‡Z GKwU ‡evgv ‡dwjqv w`j| evZv‡m evuav D‡c¶v Kwi‡j ‡evgvwU KLb Ges ‡Kv\_vq gvwU‡Z cwZZ n‡e? ‡evgv ‡dwjqv w`evi gyn~Z© nB‡Z 5 ‡m‡KÛ c‡i Dnvi ‡e‡Mi gvb KZ n‡e? (07)

Tick the correct answer (mwVK DË‡i wUK `vI|):

(1) 200m `xN© GKwU ‡U«b 36km/h MwZ‡Z P‡j 600m `xN© GKwU we«R AwZµg K‡i| we«RwU AwZµg Ki‡Z ‡U«bwUi KZ mgq jvM‡e|

(a) 80s (b) 100s (c) 120s (d) 140s

(2) 73kg f‡ii GKwU ev·‡K 543N Abyf~wgK e‡j ‡g‡Si Dci w`‡q Uvbv n‡”Q| ev·wU hLb P‡j ZLb ev· I ‡g‡Si ga©eZ©x Nl©Y mnM 0.53 ev‡·i Z¡iY KZ?

(a) 2.24ms2 (b) 0.224ms2 (c)4.84ms2 (d) 0.448ms2

(3) 25cm ‡dvKvm `~iZ¡ wewkó DËj ‡jÝ ‡\_‡K KZ `~‡i e¯¿ ¯’vcb Ki‡j ev¯Ze we‡¤^i AvKvi eÜyi AvKv‡ii cvuP¸Y n‡e?

( a) 30 cm (b) 5 cm (c) 10 cm (d) 25 cm

(4) GKRb wµ‡KUvi GKwU ej‡K m‡e©v”P 100m Abyf~wgK `yi‡Z¡ Qyuo‡Z cv‡i| GKB ej‡K wµ‡KUvi gvwU ‡\_‡K Dc‡ii w`‡K KZ D”PZvq Qyuo‡Z cvi‡e?

(a) 50m (c) 25m (c) 75m (d) 100m

(5) x=3t3+4t2+3t Øviv GKwU e¯Zyi miY wgUvi wb‡`©wkZ nq| 4s c‡i e¯ZywUi ‡eM KZ?

(a) 80m (c) 50m (c) 15m (d) 90m

(6) GKwU wjdU 1m/s² Z¡i‡b wb‡P bvg‡Q| wjd‡Ui g‡a¨ `vov‡bv GKRb e¨w³i fi 65kg n‡j wZwb KZ ej Abyfe Ki‡eb-

(a) 572N (c) 350N (c) 430N (d) 590N