



(d) What are the major provisions of the recent Union Budget?

6. Answer all the questions. [3 × 10 = 30]

- (a) Payment Bank
- (b) Stand-up India
- (c) Hot Money
- (d) Nifty
- (e) Second Green Revolution
- (f) Mega Food Park
- (g) Green Field Project
- (h) CPI
- (i) DDUGKY
- (j) Ujjwala Yojana

7. Answer any TWO of the following. [15 × 2 = 30]

- (a) What are the major provisions of the Balram Yojana of Odisha govt.?
- (b) What is WODC? Write on its role for the development of the region.
- (c) Write the major highlights of the recent Odisha Budget.

8. Answer all the questions. [6 × 5 = 30]

- (a) What is Balastic Missile Defence System?
- (b) What is the difference between Falcon-9 and Falcon Heavy Rocket?
- (c) What is HAN (Hydroxyl Ammonium Nitrate) fuel developed by ISRO?
- (d) What is Shaurya Missile?
- (e) Write on Chandrayan-3.

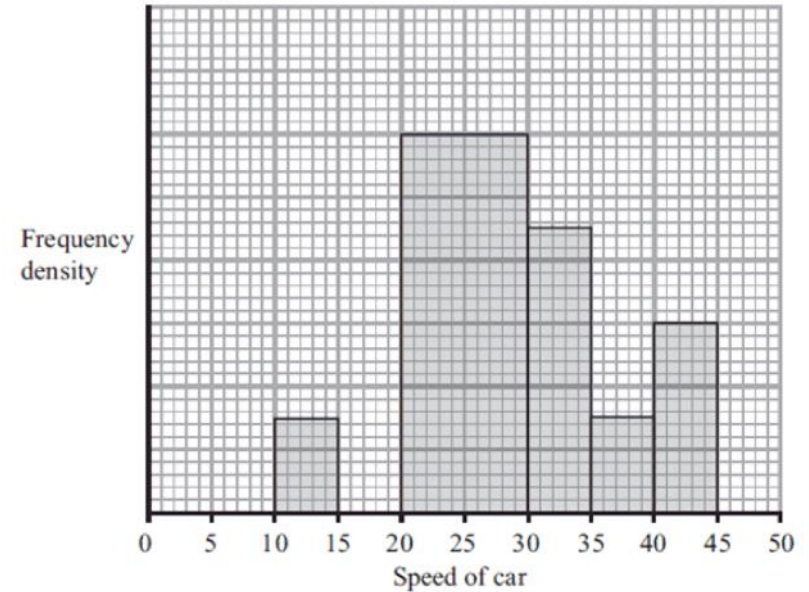
9. Answer all the questions [6 × 5 = 30]

- (a) What is Wi-Max? Describe its application.
- (b) What is VOLTE Technology used in communication?
- (c) What is Hyperloop Transport Technology?
- (d) What is LASER & its various applications?
- (e) What is “Block Chain Technology”?

10. Answer all the questions [6 × 5 = 30]

- (a) Explain the utilities of IOT (Internet of Things).
- (b) What is Data Analytics? Explain its potential application.
- (c) Explain the difference between Generation-1 and Generation-2 computer.
- (d) What are different Operating System used in Smart Phones?
- (e) Explain different Input and Output component of a Personal Computer.

11. A policeman records the speed of the traffic on a busy road with a 30 mph speed limit. He records the speeds of a sample of 450 cars. The histogram in figure represents the results.



- (a) Calculate the number of cars that were exceeding the speed limit by at least 5mph in the sample. [4]
- (b) Estimate the value of the mean speed of the cars in the sample. [3]
- (c) Estimate, to 1 decimal place, the value of the median speed of the cars in the sample. [2]
- (d) Comment on the shape of the distribution. Give a reason for your answer. [2]
- (e) State, with a reason, whether the estimate of the mean or the median is a better representation of the average speed of the traffic on the road. [2]