

MAHARASHTRA STATE BOARD OF SKILL DEVELOPMENT EXAMINATION, MUMBAI

Examination—July, 2020

CERTIFICATE COURSE IN DIESEL MECHANIC

[~~१००~~—3 iEE°E]

(BEHÉ MBE—100)

TEQHEE ENEC°EHEE, °EE°E +hb÷bM (EE+°3)

MBE

1. (+) EEE°E VEEHE EEE (EENE°E) (EE) :-

5

- (1) ½°E EE °EE÷EE÷½°E.
- (2) EEE°E MKS (E°EE°E BE°E +½°E
- (3) 1 °EE°E = <EE
- (4) 110°C = °F
- (5) °EE°E = ×
- (6) EEE°E SE°E EE°E = ×

(E) SEHE°E EEE°E (EENE°E) (EE) :-

5

- (1) EEE°E°E°E EE°E EE°E EE°E ½°E EE°E.
- (2) °EE°E (E°EE°E+EE°E°E EE°E EE°E°E EE°E°E.
- (3) पा-याचा गोठणबिंदु - ३९°C +½°E
- (4) °EE°E ½°E EE°E°E°E EE°E EE°E EE°E EE°E.
- (5) SE°E EE°E°E EE°E ½°E EE°E°E°E EE°E EE°E°E EE°E EE°E°E +°EE°E
- (6) MEE EE°E°E EE°E EE°E EE°E°E EE°E°E EE°E°E.

(E) EE°E°E°E EE°E (EENE°E) (EE) :-

5

- (1) F.P.S. (2) C.H.U.
- (3) C.P. (4) D.P.
- (5) C.G.S. (6) S.I.

(b) EE°E°E VEE°E EE°E :-

5

' + ' MEE°E

' EE°E MEE°E

- (1) EE°E°E (+) EE°E EE°E
- (2) EE°E°E (E) EE°E°E°E
- (3) EE°E (E) BE°E EE°E°E
- (4) °EE°E (b) EE°E°E
- (5) EE°E°E (<) EE°E.

2. EE°E°E EE°E (EENE°E) (EE) :-

16

(+) EE°E EE°E EE°E EE°E.

- (1) EE°E°E°E (2) <EE°E°E EE°E°E (3) EE°E EE°E°E
- (4) EE°E EE°E°E (5) +bV°E EE°E°E EE°E°E

(E) EE°E°E EE°E EE°E.

(E) EE°E°E EE°E EE°E.

(b) °EE°E EE°E EE°E EE°E EE°E.

[EE°E] EE°E

3. Solve question (any *two*) :— 16
- (a) Distinguish between work and energy.
- (b) Elaborate triangle and its types.
- (c) Solve,—
- $$32x + 33y = 31$$
- $$33x + 32y = 34$$
- (d) Describe Newton's law of motion.
4. Solve question (any *two*) :— 16
- (a) Solve using log.
- $$\frac{24.87 \times 2.625}{14.59}$$
- (b) Prove.—
- $$\tan (A + B) = \frac{\tan A + \tan B}{1 + \tan A \cdot \tan B}$$
- (c) Solve using log,—
- $$\frac{44.32 \times 12.7^2 \times \sqrt{18}}{0.345 \times 289.4}$$
- (d) Solve.—
- $$2 + \frac{1}{3 + \frac{4}{2 + \frac{1}{2}}}$$
5. Write short notes on (any *four*) :— 16
- (a) Coefficient of friction
- (b) Couples
- (c) Hook's law
- (d) Calorific value of fuel
- (e) Annealing
6. Solve question (any *two*) :— 16
- (a) A casting contains 35% Zinc, 45% Aluminium and 20% Tin. Find the weight of each metal if the casting is of 15 kg.
- (b) Distinguish between Mechanical Advantage and mechanical efficiency.
- (c) Write any five instruments and their uses in engineering drawing.
- (d) What is friction? Write laws of friction.
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