

# ଧରିତ୍ରୀ

DHARITRI

ଭୁବନେଶ୍ୱର, ଶନିବାର, ଚିସେମର ୧୫/୨୦୧୮ (୨୦ ପୃଷ୍ଠା+ପିଲାଙ୍କ ଧରିତ୍ରୀ) Bhubaneswar, Saturday, December 15/ 2018 (Career & Appointment)

★★★★

୪୫ଣ ଭାଗ ୨୨ ସଂଖ୍ୟା

www.orissakhabar.com/www.dharitri.com | Printed at Bhubaneswar, Sambalpur, Angul and Rayagada

ମୂଲ୍ୟ ୨୫/-



ଆମର  
ଆମ  
ବିକାଶ

୩୮ (ଗ୍ରାନ୍ତପେରେନ୍ଦ୍ର, ଟେକ୍ନୋଲୋଜି, ଟିମ୍ ଓର୍କ୍‌ଷାର୍)

ଆମ ମୁଖ୍ୟମନ୍ତ୍ରୀଙ୍କ ଶାସନର ମନ୍ତ୍ର ଏବେ କେନ୍ଦ୍ରୀୟ ହୋଇଛି ଏକ ନୂଆ ଉପକ୍ରମରେ

## ଓଡ଼ିଆ PEETHA

PEOPLES EMPOWERMENT ENABLING  
TRANSPARENCY AND ACCOUNTABILITY

ଓଡ଼ିଶାବାସୀଙ୍କୁ ବିଭିନ୍ନ ଯୋଜନା ସମ୍ପର୍କରେ ସର୍ବତତ କରାଇବା ସହିତ  
ସେମାନଙ୍କ ହଳ ସେମାନଙ୍କ ନିକଟରେ ସିଧାପଲଶ ପହଞ୍ଚାଇବା ପାଇଁ ଆମ ପ୍ରିୟ  
ମୁଖ୍ୟମନ୍ତ୍ରୀ ଶ୍ରାୟକୁ ନବୀନ ପଣ୍ଡାନ୍ତକଙ୍କର ନୂଆ କାର୍ଯ୍ୟକ୍ରମ 'ପିଠା' ।

ରାଜ୍ୟର ସମସ୍ତ ଟାଇପ ଟି କୁକର ପ୍ରତ୍ୟେକ ପଞ୍ଚାୟତରେ ପ୍ରତି ମାସ ୧୫ ରୁ ୨୦  
ତାରିଖ ମଧ୍ୟରେ ପିଠା କ୍ୟାମ୍ର ଆୟୋଜନ କରାପାଇ ହିତାପିକାରୀମାନଙ୍କୁ  
ବିଭିନ୍ନ ଯୋଜନା ସପର୍କରେ ସର୍ବତତ ସହିତ ଲୋକାଭିମୁଖୀ ସେବାଗୁଡ଼ିକ  
ସିଧାପଲଶ ହିତାଧୂକାରୀଙ୍କୁ ପହଞ୍ଚାଇ ଦିଆଯିବ ।

- ମଧୁବାବୁ ପେନ୍ସନ୍ ଯୋଜନା
- ମୁଖ୍ୟମନ୍ତ୍ରୀ କଳାକାର ସହାୟତା ଯୋଜନା
- ବାର୍ଷିକ୍ ଭତ୍ତା
- ଆମ ଏଲ୍ଲାଟି
- ଖାଦ୍ୟ ସୁରକ୍ଷା
- ନିର୍ମାଣ ଶ୍ରମିକ ସହାୟତା ଯୋଜନା
- ମିଶନ୍ ଶକ୍ତି
- ବିକ୍ରୀ ସାସ୍ଥ୍ୟ କଲ୍ୟାଣ ଯୋଜନା
- ଗ୍ରାମୀଣ ବିଦ୍ୟୁତ୍ତିକରଣ ଯୋଜନା
- ବିକ୍ରୀ ପକ୍ଷାୟର ଯୋଜନା
- କଳିଙ୍ଗ ଶିକ୍ଷା ସାଥୀ
- ବିକ୍ରୀ ଯୁବ ସଶ୍ରମିକରଣ ଯୋଜନା
- ମେଧାବୃତ୍ତି







## ଜନ୍ମଦିନ ଶୁଭେଜ୍ଞା



ନାମ: .....  
ବୟସ: .....  
ଜନ୍ମ ତାରିଖ: .....

ପର୍ଯ୍ୟବେକ୍ଷଣ ଏବଂ କର୍ମଚାରୀ କରି ସମ୍ପୂର୍ଣ୍ଣ ମାଗନ୍ଦାରେ ଜନ୍ମଦିନ ଶୁଭେଜ୍ଞା କରାଯାଇଛି। ପର୍ଯ୍ୟବେକ୍ଷଣ ସହିତ ମୁହଁନାଟି ପ୍ରକାଶନ ତାରିଖ ୧ ଦିନ  
ପୁରୁଷ ଜନ୍ମଦିନ ଶୁଭେଜ୍ଞା, ଧରିତ୍ରୀ, ବି-୨୭, ରମ୍ପଲାଟ ଶିଳ୍ପାଳ୍ଲେ, ଭୁବନେଶ୍ୱର-୧୦ ଠିକଣାରେ ପହଞ୍ଚାଯାଇଥାଏସ୍ୟକ୍।

## classified



## SALE

Maruti swift-2011, Captiva-2010, Skoda, Pajero-2009, Passat- 2012, Teanna-2014. 7381091234, 9861194627. D-65303

Hyundai Xccnd Taxi car June 2017 for sale. Contact: 824953255. D-64762



## SALE

Penguin homes Pvt. Ltd. land required for housing project in Bhubaneswar/ Cuttack. Contact: 9937254467, 7008107711. D-65235

Litigation free plots near Xavier University/ Birla School BDA Zone, Bhubaneswar. Sqft.- 250/-, 160/-, 9937746907, 9337259012. D-64382

ଭୁବନେଶ୍ୱର AIIMS Hospital, DOON International School ନିକଟରେ gharabari boundary patta plot. 7978274744. D-64758

Urgently sale residential plot Dhauli Square @ 600/- 950/-, 9348012510. D-65304

ଭୁବନେଶ୍ୱର ଜଣାଗେୟ NH-5 କିମ୍ବା ଦୂରବାରେ 1200 sqft.

1,80,000/-, ପ୍ରତାନିଗରୀ ଧାରୁଲେଇପୀଟୀ କିମ୍ବା ଦୂରବାରେ

1200 କିମ୍ବା 2,60,000/- (outright). 9938177361, 9776934361. D-64395

Booking gharabari plots

near Tankapani road

Sai Temple sqft. 1100/-

Installment and out rate available. 7735738102. D-10009

ସୁନ୍ଦରପଦା କୁହା ମୌଜା Hi-Tec

plaza ପାଖରେ ଘରବାଟି କୁହା

ବିକ୍ରିହେବ। 9439364818, 9337766961. D-10013

**3BHK ready to move premium duplex at DHPL Sahoo Residency near Mancheswar Railway Station. Contact: 9937059891, 9 3 4 8 2 5 3 4 6 3 , 8908292617.** D-10031

KIIT University କରାନାଥ

ମନ୍ଦିର ପାଖରେ

ଆଜିମୁଦ୍ରା କୁହା କିମ୍ବା

8917333281. D-65305

3BHK available for rent at Damayanti Apartment at Nayapalli. Mob:

7789837712. D-9978

1000, 750, 700, 650, 450 sqft. available for office purpose at Centrally located Unit-9. Mob:

7789837712. D-9976

1800 sqft. 3BHK flat (4nos.) for rent (hostel/ residence) Studio Chhak, Bhubaneswar. 7008683634, 9348302543. D-65249

3BHK available for rent at Damayanti Apartment at Nayapalli. Mob:

7789837712. D-9978

1575 sqft. single corner plot with boundary wall at Hitech Square, Rasulgarh- 22,05,000/- (Owner). 9938771877. D-64397

ସୁନ୍ଦରପଦା କଣ୍ଠୀ ମେନ୍ଦରୋଦରୁ

50 meter Lingaraj

Station କୁହା 7km. ଦୂରବାରେ

ଘରବାଟି କୁହା @800/- sqft.

near duplex and apartment

ମିଲ୍କାରୀ 18249821200,

9238896887. D-62143

**2/3 BHK ready to move flats for sale at DHPL Pride, Ghatikia near DAV Kalinga Nagar, starting at Rs.32 lakhs**

Contact: 9937059891, 9 3 4 8 2 5 3 4 6 3 , 8908292617.

D-10030

Fully furnished 2BHK flat 1600 sqft. with modular kitche near DPS

adjacent to Nakhara, Adaspur Highway. 9778822122. D-64553

ସୁନ୍ଦରପଦା Xavier

University backsideରେ

investment ପୁଣି ମିଲ୍କାରୀ

8338932027. D-64386

ମଧ୍ୟମାଳା

ପର୍ଯ୍ୟବେକ୍ଷଣ

ମଧ୍ୟମାଳା

ପର୍ଯ୍ୟବେକ୍ଷଣ

ଏଠାରେ 9 X 9

ମେଟ୍. ପର୍ଯ୍ୟବେକ୍ଷଣ

ଲାଗୁ

ମଧ୍ୟମାଳା

ପର୍ଯ୍ୟବେକ୍ଷଣ

Herbal full body massage by smart/ expert therapist. Contact: 8338067247. D-65231

Newly opening ayurvedic massage smart therapist, Shree herbal. 7750020754. D-65232

Pamper yourself this Mansoon professional massage. Contact Purple Orchid. 9776598888. D-65233

Herbal full body massage with refreshment by well trained therapist. 7381239385. D-65240

Experience full body massage with us by expert Enquiry: 06742597822, 7377048581. D-65246

Roshni ayurvedic massage club fully relaxed by smart lady, home service facility available. 9937637219. D-9991

Physiotherapy, full body massage by trained ladies/ gents therapist: 7008773793. D-65402

Newly open fully body massage at your doorstep. Only for ladies. Contact: 9583282424. D-61506

2300 sqft. office space available at Metro House, Vanivihar. Mob: 7789837712. D-9977

**Baramunda 1800 sft. first floor for office cum residence, transit house. Rent 20,000/- monthly- 9861119281.** D-64552

Desk rented: Shared office space available at Samantarapur, Bhubaneswar. Rent customised. 6309629747. D-10018

## LOST

ଅଗରବଟୀ ଭବେୟାର୍ + ଶ୍ରୀମିକି ବିଦ୍ୟାଳୟ କରୁଛି। Invest- 1,20,000, ଆମ୍-50-70,000/- ଭୁବନେଶ୍ୱର। 9776690559, 9937673117. D-65245

Want to make any project MSME, LSE any manufacturing processing unit. Consult- Mr. Samantary (FCA). 7008236035, 9937309695. D-10018

ପରାମା ବିନ୍ଦୁରୁ କରୁଛି ଏବଂ ପ୍ରକାଶିତ ପରାମା ବିନ୍ଦୁରୁ କରୁଛି।

ପ

# ଟିଲିକାରେ ବାଢ଼ ପୁଅଶଙ୍କା



Cox & Kings PRESENTS

CELEBRATING 260 YEARS  
Cox & Kings  
ESTD 1758  
[coxandkings.com](http://coxandkings.com)

16 ଡିସେମ୍ବର 2018

ପ୍ରସିଦ୍ଧ ଟୋମେଷ୍ଟିକ୍ ଓ  
ଲାଷ୍ଟରେନେଶ୍ନାଲ୍ ହଳିଡେଜ୍  
2019 ପାଇଁ

# Deal ଫର୍ମ୍ସ୍ୟୁ!

**VENUE:**  
Hotel Hindustan  
International, A-112,  
Shriya Talkies Street,  
Janpath, Bhubaneshwar

**TIME:**  
10 am to 6 pm

ଚାଲୁଛି  
ଗ୍ରାହେଲସ୍

GST  
ଫ୍ରୀ\*

ସାଉଜନ  
ଗ୍ରାହେଲସ୍

ଉତ୍ତାଶ  
ଫ୍ରୀ\*

ଗ୍ରାହେଲ୍  
ରିଷ୍ଟ୍  
ଭାଇଚରସ୍\*

ଫ୍ରୀ\*  
ବୂମ୍  
ଅପଗ୍ରେଡ୍

ହୋଟେଲ୍  
ନାଇର୍ମ୍ସ  
ଫ୍ରୀ\*

ଉତ୍କୁଷ  
ରିହାତି\*

[#CnKHaiNa](http://coxandkings.com)

ଏକ ହଳିଡେ ବୁକ୍ କରନ୍ତୁ ଏବଂ ଜିତିବାର ସୁଯୋଗ ପାଇଁ ଦାବିଦାର ହୁଆନ୍ତୁ

ସୁରୋପ, ସୁଖସ୍ଥା, ପାର ଇଷ୍ଟ  
ଓ ଲାଷ୍ଟିଆକୁ **ଫ୍ରୀ\*** ହଳିଡେଜ୍  
କପଳସଙ୍ଗ ନିମନ୍ତେ

**ଫ୍ରୀ\*** ବିଜନେସ କ୍ଲାସ  
ଅପଗ୍ରେଡ୍

**ଫ୍ରୀ\*** ଏଯର  
ଟିକେଟସ୍

**ସୁନିଶ୍ଚିତ**  
ଉପହାର ପ୍ରତ୍ୟେକ  
ବୁକିଂ ଉପରେ

## ବିଷେର ପ୍ରାଇଜ୍

1 ଭାଗ୍ୟବାନ୍ ବିଜେତାଙ୍କ ପାଇଁ  
– ଦ ମହିନ୍ମା ମେରେଜେ

**MARAZZO**

ସହଜ  
**EMI**  
ବିକ୍ରି  
ଉପଲବ୍ଧ

Please refer to the terms and conditions in the contest form. \*Conditions apply.

ଇଷ୍ଟିଆ ଓ ଉପମହାଦ୍ୱୀପ ଉପରେ  
ଆକର୍ଷଣୀୟ ଭିଲ୍ସ  
**₹9,199\*** ରୁ ଆରମ୍ଭ

ଆନ୍ତର୍ଜାତୀୟ ଏଯର  
ହଳିଡେଜ୍ ସହିତ  
**₹29,199\*** ରୁ ଆରମ୍ଭ

ଆନ୍ତର୍ଜାତୀୟ ଏସକର୍ଟେଡ୍  
ବୂମ୍ ରୂପ୍ସ  
**₹39,224\*** ରୁ ଆରମ୍ଭ

Preferred Airline Partner

10% Cashback  
Upto ₹8000 On Credit / DEBIT CARD  
AND EMI TRANSACTIONS.

**HDFC BANK**  
We understand your world

CALL COX & KINGS OUTLETS: BHUBANESHWAR – Subham Market Complex – Janpath: (0674) 2380821 / 2380822, 9583045689.

CALL COX & KINGS AGENTS: BHUBANESHWAR – K7 Holidays & Travels Pvt Ltd: 9583405465.



[www.trends.djio.com](http://www.trends.djio.com)



# ୧୨୦୦ ଦୂର୍ଲ୍ପତି କୁଦମ୍ବ ଧାରଣା









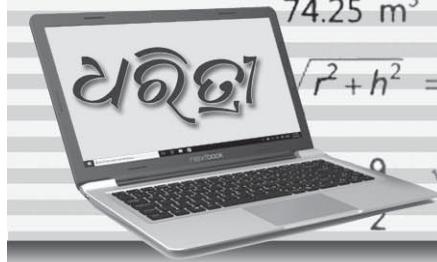












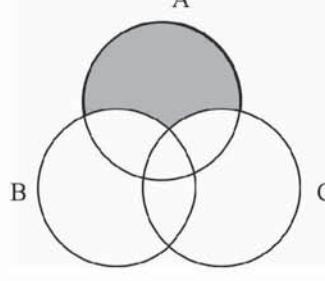
# Exam Mate



Mock Test Paper for Std X, XII CBSE Board, IIT - JEE Main &amp; Advanced.

FOR ANSWERS VISIT : [www.dharitri.com](http://www.dharitri.com)

1. The shaded region in the figure is:



- (A)  $A \cap (B \cup C)$     (B)  $A \cup (B \cap C)$   
 (C)  $A \cap (B - C)$     (D)  $A - (B \cup C)$

2. If
- $\alpha, \beta$
- are the roots of equation
- $u^2 - 2u + 2 = 0$
- and if
- $\cot \theta = x + 1$

then  $\left[ \frac{(x+\alpha)^n - (x+\beta)^n}{(\alpha-\beta)} \right]$  is equal to

- (A)  $\frac{\sin n\theta}{\sin^n \theta}$     (B)  $\frac{\cos n\theta}{\cos^n \theta}$   
 (C)  $\frac{\sin n\theta}{\cos^n \theta}$     (D)  $\frac{\cos n\theta}{\sin^n \theta}$

3. If
- $\alpha$
- and
- $\beta$
- are roots of equation
- $x^2 - 7x - 1 = 0$
- then the value of
- $\frac{(\alpha^{10} - \beta^{10}) - (\alpha^8 - \beta^8)}{\alpha^{(\alpha+\beta+2)} - \beta^{(\alpha+\beta+2)}}$
- is equal to

- (A) 1    (B) 0  
 (C) 7    (D) 1/7

4. For a matrix
- $A = \begin{bmatrix} 1 & 2r-1 \\ 0 & 1 \end{bmatrix}$
- , the value of

 $\prod_{t=1}^{50} \begin{bmatrix} 1 & 2r-1 \\ 0 & 1 \end{bmatrix}$  is equal to

- (A)  $\begin{bmatrix} 1 & 100 \\ 0 & 1 \end{bmatrix}$     (B)  $\begin{bmatrix} 1 & 4950 \\ 0 & 1 \end{bmatrix}$   
 (C)  $\begin{bmatrix} 1 & 5050 \\ 0 & 1 \end{bmatrix}$     (D)  $\begin{bmatrix} 1 & 2500 \\ 0 & 1 \end{bmatrix}$

5. The value of the determinant

$$\begin{vmatrix} x & x+a & x+2a \\ x+1 & x+2a & x+4a \\ x+2 & x+3a & x+6a \end{vmatrix}$$
 is
 

- (A) 0    (B)  $a^3 - x^3$   
 (C)  $x^3 - a^3$     (D)  $(x-a)^3$

6. In how many ways we can select of 6 persons from 6 boys and 3 girls if atleast two Boys and at least two girls must be three in the committee?

- (A) 45    (B) 55  
 (C) 65    (D) 75

7. Let
- $f(n) = \sum_{r=1}^n \binom{n}{r}^2$
- then the value of
- $f(5)$
- is equal to

- (A) 1000    (B) 1250  
 (C) 1750    (D) 2500

8. If
- $b_r = 1 - a_r$
- ,
- $na = \sum_{r=1}^n a_r$
- ,
- $nb = \sum_{r=1}^n b_r$
- ,

then  $\sum_{r=1}^n a_r b_r + \sum_{r=1}^n (a_r - a)^2 = \dots$ 

- (A) ab    (B) -nab  
 (C)  $(n+1)ab$     (D) nab

## MOCK TEST PAPER # 1 IITJEE (Main) (MATHEMATICS)

Time : 1 hour

Maximum Marks: 120

## GENERAL INSTRUCTIONS

For each question you will be given 4 Marks if you have darkened only the bubble corresponding to the correct answer and zero mark if no bubble is darkened. In all other cases, minus one (-1) Marks (NEGATIVE MARKING) will be given.

9. If  $1 + \sum_{r=0}^{18} \{r(r+2) + 1\} r! = k!$  then  $k$  is not divisible by:  
 (A) 4    (B) 5  
 (C) 6    (D) 10
10. Let  $f: R \rightarrow (0, \infty)$  be a real valued function satisfying  $\int_0^x u f(x-u) du = e^{2x} - 2x - 1$ , then the value of  $\lim_{x \rightarrow 0} \frac{f(x)-4}{x} =$   
 (A) 4    (B) 6  
 (C) 8    (D) 10
11. Number of points where function  $f(x) = \max(|\tan x|, \cos|x|)$  is non differentiable in the interval  $(-\pi, \pi)$  is  
 (A) 4    (B) 6  
 (C) 3    (D) 2
12. Let  $f(x) = x^3 + ax^2 + bx + 5\sin^2 x$  be an increasing function in the set of real numbers R. Then a and b satisfy the condition:  
 (A)  $a^2 - 3b - 15 \geq 0$   
 (B)  $a^2 - 3b + 15 \geq 0$   
 (C)  $a^2 + 3b - 15 \leq 0$   
 (D)  $a > 0, b > 0$
13. If  $f\left(x + \frac{y}{8}, x - \frac{y}{8}\right) = xy$  then  $f(m, n) + f(n, m) = 0$   
 (A) only when  $m = n$   
 (B) only when  $m \neq n$   
 (C) only when  $m = -n$   
 (D) for all m and n
14.  $\int \frac{dx}{x(\log x)(\log \log x) \dots \left(\frac{\log \log \dots x}{8 \text{ times}}\right)}$  is equal to  
 (A)  $\left(\frac{\log \log \dots x}{8 \text{ times}}\right) + c$   
 (B)  $\left(\frac{\log \log \dots x}{7 \text{ times}}\right) + c$   
 (C)  $\left(\frac{\log \log \dots x}{9 \text{ times}}\right) + c$   
 (D)  $\left(\frac{x \log \log \dots x}{9 \text{ times}}\right) + c$
15.  $\int_0^{\sqrt{2}} [x^2] dx$  is equal to: (where [ ] represent greatest integer function).  
 (A)  $2 - \sqrt{2}$     (B)  $2 + \sqrt{2}$   
 (C)  $\sqrt{2} - 1$     (D)  $\sqrt{2} - 2$
16. For non-zero vectors  
 $\vec{a} \cdot \vec{b} \cdot \vec{c} \left( \vec{a} \times \vec{b} \right) \cdot \vec{c} = |\vec{a}| |\vec{b}| |\vec{c}|$  holds if and only if:  
 (A)  $\vec{a} \cdot \vec{b} = 0, \vec{b} \cdot \vec{c} = 0$   
 (B)  $\vec{c} \cdot \vec{a} = 0, \vec{a} \cdot \vec{b} = 0$   
 (C)  $\vec{a} \cdot \vec{c} = 0, \vec{b} \cdot \vec{c} = 0$   
 (D)  $\vec{a} \cdot \vec{b} = \vec{b} \cdot \vec{c} = \vec{c} \cdot \vec{a} = 0$
17. The distance of the point  $(1, -2, 3)$  from the plane  $x - y + z - 5 = 0$ , measured parallel to the line  $\frac{x}{2} = \frac{y}{3} = \frac{z-1}{-6}$  is equal to  
 (A) 1 unit    (B) 2 units  
 (C) 3 units    (D)  $\sqrt{3}$  units
18. Intersection point of the line  
 $\frac{x-1}{2} = \frac{y-2}{3} = \frac{z-3}{4}$  and  $\frac{x-4}{5} = \frac{y-1}{2} = \frac{z}{1}$   
 (A)  $(1, 1, 1)$     (B)  $(-1, -1, -1)$   
 (C)  $(1, 0, 1)$     (D)  $(-1, -1, 1)$
19. Three athletes A, B and C particular in a race. Both A and B have the same probability of winning the race and each is twice as likely to win as C. The probability that B or C wins the race is: (There is not tie and one must wins)  
 (A) 2/3    (B) 3/5  
 (C) 3/4    (D) 13/25
20. The area of region  
 $\{(x, y) : x^2 + y^2 \leq 1 \leq x + y\}$  is:  
 (A)  $\frac{\pi^2}{5}$  sq. units    (B)  $\frac{\pi^2}{2}$  sq. units  
 (C)  $\frac{\pi^2}{4}$  sq. unit    (D)  $\left(\frac{\pi}{4} - \frac{1}{2}\right)$  sq. unit
21. The solution of the differential equation  
 $\frac{dy}{dx} + \frac{2yx}{1+x^2} = \frac{1}{(1+x^2)^2}$  is:  
 (A)  $y(1+x^2) = c + \tan^{-1} x$   
 (B)  $\frac{y}{(1+x^2)} = c + \tan^{-1} x$   
 (C)  $y \log(1+x^2) = c + \tan^{-1} x$   
 (D)  $y(1+x^2) = c + \tan^{-1} x$
22. The gradient of common chord of the circles  $x^2 + y^2 - 3x - 4y + 5 = 0$  and  $3x^2 + 3y^2 - 7x + 8y + 11 = 0$  is  
 (A)  $\frac{1}{3}$     (B)  $-\frac{1}{10}$   
 (C)  $-\frac{1}{2}$     (D)  $-\frac{2}{3}$
23. A ray of light passing through at point  $(1, 2)$  is reflected on the x-axis is point P and passes through the point  $(5, 3)$ . Then the abscissa of the point P is:  
 (A) -3    (B)  $\frac{13}{3}$   
 (C)  $\frac{13}{5}$     (D)  $\frac{13}{4}$
24. The radius of the circle passing through the foci of the ellipse  $\frac{x^2}{16} + \frac{y^2}{9} = 1$ , and having its centre at  $(0, 3)$  is  
 (A) 4    (B) 3  
 (C)  $\sqrt{12}$     (D)  $\frac{7}{2}$
25. The ends of a line segment are P(1, 3) and Q(1, 1), R is a point on the line segment PQ such that  $PR : QR = 1 : \lambda$ . If R is an interior point of the parabola  $y^2 = 4x$ , then complete values of  $\lambda$  is given by:  
 (A)  $\lambda \in (0, 1)$     (B)  $\lambda \in \left(-\frac{3}{5}, 1\right)$   
 (C)  $\lambda \in \left(\frac{1}{2}, \frac{3}{5}\right)$     (D)  $\lambda \in \left(-\frac{3}{5}, 1\right)$
26. If  $x \in \left(-\frac{\pi}{2}, \frac{\pi}{2}\right)$ , then the value of  
 $\tan^{-1}\left(\frac{\tan x}{4}\right) + \tan^{-1}\left(\frac{3 \sin 2x}{5 + 3 \cos 2x}\right)$  is  
 (A)  $\frac{x}{2}$     (B)  $2x$   
 (C)  $3x$     (D)  $x$
27. The number of integral values of m, for which the x-coordinate of the point of intersection of the lines  $3x + 4y = 9$  and  $y = mx + 1$  is also an integer is  
 (A) 2    (B) 0  
 (C) 4    (D) 1
28. Mean of 100 items is 49. It was discovered that three item which should have been 60, 70, 80 were wrongly read as 40, 20, 50 respectively. The correct mean is:  
 (A) 48    (B) 82  
 (C) 50    (D) 80
29. If  $\sin \theta = -\frac{4}{5}$  and  $\theta$  lies in the third quadrant, then  $\cos \frac{\theta}{2}$  is equal to:  
 (A)  $\frac{1}{\sqrt{5}}$     (B)  $-\frac{1}{\sqrt{5}}$   
 (C)  $\frac{\sqrt{2}}{5}$     (D)  $-\frac{\sqrt{2}}{5}$
30. Consider:  
 Statement-1:  $(p \wedge \sim q) \wedge (\sim p \wedge q)$  is a fallacy.  
 Statement-2:  $(p \rightarrow q) \leftrightarrow (\sim q \rightarrow \sim p)$  is a tautology.  
 (A) Statement 1 is true, statement 2 is true,  
 statement 2 is not a correct explanation for statement 1  
 (B) Statement 1 is true, Statement 2 is false.  
 (C) Statement 1 is false, statement 2 is true.  
 (D) Statement 1 is true, statement 2 is true,  
 statement 2 is a correct explanation for statement 1.

For Answers visit: [www.dharitri.com](http://www.dharitri.com)











**BUMPER  
SALE UP TO  
50%  
OFF\***

\* Conditions Apply

■ Angul: 8917495313 ■ Bhadrak: 9051700056 ■ Bhubaneswar: 7991093719 ■ Brahmapur: 9658936660  
 ■ Cuttack: 8117828566 ■ Jajpur: 9051900076 ■ Puri: 7894424495 ■ Sambalpur: 9937457700

7 States | 65 Stores

Follow us on:

**MARUTI SUZUKI ARENA**

**BEST TIME to buy**

**Bigest offers of the year.  
Hurry, buy before price hike.**

Maruti Suzuki to increase vehicle prices upto ₹20,000\*

Car prices are set to go up in New Year with market leader Maruti Suzuki announcing that it was working on increase price across its range of vehicles due to higher commodity costs and adverse foreign exchange movement.

Citing higher cost, the manufacturer of the Alto and Swift cars said in a note to stock exchanges.

It has become imperative for the company to absorb some of the impact of the additional cost to consumers through price increase across various models from January 2019.

**DZIRE** SAVE UP TO ₹55,000\*

**SWIFT** SAVE UP TO ₹45,000\*

**AUTO GEAR SHIFT**

**DZIRE SWIFT**



E-BOOK TODAY AT [WWW.MARUTISUZUKI.COM](http://WWW.MARUTISUZUKI.COM) OR VISIT YOUR NEAREST MARUTI SUZUKI DEALERSHIP. FOR INSTITUTIONAL SALES/ BULK DEAL / DGS & D / GEM ENQUIRIES, PLEASE EMAIL AT [ADINATH.RAY@MARUTI.CO.IN](mailto:ADINATH.RAY@MARUTI.CO.IN)

**ODYSSEY MOTORS**

- SAMBALPUR: 9439018805 • BOLANGIR: 9438068327
- BARGARH: 8895094616 • NUAPADA: 8895094633
- SONEPUR: 9437421356 • JHARSUGUDA: 9439892153 • BOUDH: 8594908009

**ORBIT MOTORS**

- ROURKELA: 9040404444, 9040404333
- SUNDARGARH: 9437049161
- DEOGARH: 9437492369

**LEGEND CARS**

- JEYPORE: 7894335551
- BHAWANIPATNA: 7894442910

**SKY AUTOMOBILES**

- BERHAMPUR: 7381261000



