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# **OAVS TGT**

**Previous Year Paper  
20 May 2019 (MATH)**





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Participant ID	
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Test Center Name	iON Digital Zone iDZ 1 Patia
Test Date	20/05/2019
Test Time	2:30 PM - 5:50 PM
Subject	TGT Maths

Section : Language Proficiency Test

Q.1 Identify the error in the sentence given below.

The child was so sick that she cannot walk to the clinic.

- Ans
- ☒ 1. The child was so sick
  - ☒ 2. To the clinic.
  - ☒ 3. No error.
  - ☒ 4. That she cannot walk

Question ID : 16794325587

Status : Answered

Chosen Option : 4

Q.2 Identify the error in the sentence given below.

Einstein was 16, two years younger then his fellow applicants.

- Ans
- ☒ 1. Einstein was 16,
  - ☒ 2. Two years younger
  - ☒ 3. No improvement.
  - ☒ 4. Then his fellow applicants.

Question ID : 16794325602

Status : Answered

Chosen Option : 1

Q.3 Change the voice:

I had read a book.

- Ans
- ☒ 1. A book has been read by me
  - ☒ 2. A book is read by me
  - ☒ 3. A book was read by me
  - ☒ 4. A book had been read by me

Question ID : 16794325593

Status : **Answered**  
Chosen Option : 1

Q.4 A person who is 100 years or more is known as:

- Ans
- ☒ 1. Septuagenarian
  - ☒ 2. Valetudinarian
  - ☒ 3. Denarian
  - ☒ 4. Centenarian

Question ID : 16794325592  
Status : **Answered**  
Chosen Option : 4

Q.5 Change the following sentence into reported speech.

"I shall go for a walk tomorrow," Jenny said.

- Ans
- ☒ 1. Jenny said that she would go for a walk on the following day.
  - ☒ 2. Jenny said that she should go for a walk tomorrow.
  - ☒ 3. Jenny said that she will go for a walk tomorrow.
  - ☒ 4. Jenny said that she will go for a walk on the following day.

Question ID : 16794325586  
Status : **Answered**  
Chosen Option : 4

Q.6 Identify a correctly spelled word:

- Ans
- ☒ 1. Exaggerasion
  - ☒ 2. Implication
  - ☒ 3. Extension
  - ☒ 4. Mystification

Question ID : 16794325594  
Status : **Answered**  
Chosen Option : 2

Q.7 Spot the error:

Gandhiji's elder brother always wear a golden bangle on his arm.

- Ans
- ☒ 1. Gandhiji's elder brother
  - ☒ 2. On his arm.
  - ☒ 3. Always wear
  - ☒ 4. A golden bangle on his arm.

Question ID : 16794325599

Status : **Answered**  
Chosen Option : 4

Q.8 Change the following sentence into Quoted speech.

I said to him, "She was baking a chocolate pie".

- Ans
- ☒ 1. I told him that she has been baking a chocolate pie.
  - ☒ 2. I told him that she had been baking a chocolate pie.
  - ☒ 3. I told him that she is baking a chocolate pie.
  - ☒ 4. I told him that she was baking a chocolate pie.

Question ID : 16794325591  
Status : **Answered**  
Chosen Option : 4

Q.9 Fill in the blanks with the appropriate words.

He sat \_\_\_\_\_ and saw that he was \_\_\_\_\_ the foot of a vast precipice.

- Ans
- ☒ 1. on, at
  - ☒ 2. up, at
  - ☒ 3. under, on
  - ☒ 4. on, in

Question ID : 16794325601  
Status : **Answered**  
Chosen Option : 3

Q.10 Fill in the blank with the appropriate word.

\_\_\_\_\_ mail that I received yesterday was from my friend.

- Ans
- ☒ 1. The
  - ☒ 2. A
  - ☒ 3. No article
  - ☒ 4. An

Question ID : 16794325597  
Status : **Answered**  
Chosen Option : 2

Q.11 Choose an appropriate meaning of this idiom.

A hot potato

- Ans
- ☒ 1. Something that is easy to understand or do.
  - ☒ 2. Possible obstacle in your path.
  - ☒ 3. A sensitive or a controversial issue that is difficult to handle
  - ☒ 4. Avoiding the main topic

Question ID : 16794325596  
Status : Answered  
Chosen Option : 3

Q.1  
2 What does the phrasal verb “run across” mean?

- Ans
- ☒ 1. To try to catch somebody
  - ☒ 2. To meet somebody by chance
  - ☒ 3. To attack somebody
  - ☒ 4. To experience difficulties

Question ID : 16794325585  
Status : Answered  
Chosen Option : 2

Q.1  
3 Antonym of: Handicap

- Ans
- ☒ 1. Advantage
  - ☒ 2. Aid
  - ☒ 3. Injury
  - ☒ 4. Disability

Question ID : 16794325600  
Status : Answered  
Chosen Option : 1

Q.1  
4 Identify the misspelt word:

- Ans
- ☒ 1. Defenselessness
  - ☒ 2. Exuberant
  - ☒ 3. Hyacinth
  - ☒ 4. Platyhelminthes

Question ID : 16794325583  
Status : Answered  
Chosen Option : 2

Q.1  
5 Rearrange the shuffled sentence into a meaningful one.  
Autobiography bears the appropriate Nelson Mandela's title The Long walk to Freedom.

- Ans
- ☒ 1.  
Nelson Mandela's autobiography the appropriate title bears The Long Walk to Freedom.
  - ☒ 2.  
Nelson Mandela's autobiography bears the appropriate title The Long Walk to Freedom.
  - ☒ 3.  
The title appropriate Long Walk to Freedom bears Nelson Mandela's autobiography.
  - ☒ 4.  
The appropriate title The Long Walk to Freedom bears Nelson Mandela's autobiography



Question ID : 16794325590  
Status : Answered  
Chosen Option : 2

Q.1  
6 Synonym of: Criticism

- Ans
- ☐ 1. Estimation
  - ☐ 2. Guess
  - ☒ 3. Opinion
  - ☐ 4. Praise

Question ID : 16794325598  
Status : Answered  
Chosen Option : 1

Q.1  
7 Change the voice of the following sentence:  
The beggar was laughed at by the boys.

- Ans
- ☐ 1. The boys can laugh at beggar.
  - ☐ 2. The boys laugh at the beggar.
  - ☐ 3. The boys has laughed at the beggar.
  - ☒ 4. The boys laughed at the beggar.

Question ID : 16794325588  
Status : Answered  
Chosen Option : 4

Q.1  
8 Meaning of : Hold up

- Ans
- ☐ 1. To prevent
  - ☒ 2. To delay
  - ☐ 3. To keep a promise
  - ☐ 4. To approve

Question ID : 16794325595  
Status : Answered  
Chosen Option : 3

Q.1  
9 Fill in the blank with the appropriate word.  
A host, of golden daffodils;  
Beside the lake, beneath the trees,  
Fluttering and dancing \_\_\_\_\_ the breeze.

- Ans
- ☐ 1. Into
  - ☒ 2. In
  - ☐ 3. Through
  - ☐ 4. To

Question ID : 16794325589  
Status : Answered  
Chosen Option : 3

Q.2  
0 A young person who behaves in an extremely noisy and violent manner in public.

- Ans
- ☒ 1. Extempore
  - ☒ 2. Garrulous
  - ☒ 3. Hooligan
  - ☒ 4. Ubiquitous

Question ID : 16794325584  
Status : Answered  
Chosen Option : 1

Q.2  
1 ଆପଣ ନିଶ୍ଚୟ ଆସିବେ ରେଖାଙ୍କିତ ପଦଟି କେଉଁ ପ୍ରକାର ସର୍ବନାମ ।

- Ans
- ☒ 1. ନିର୍ଦ୍ଦେଶାମୂଳକ
  - ☒ 2. କୌଣସିଟି ନୁହେଁ
  - ☒ 3. ନିର୍ଣ୍ଣାୟକ
  - ☒ 4. ପୁରୁଷବାଚକ

Question ID : 16794325608  
Status : Answered  
Chosen Option : 3

Q.2  
2 'ବାଜି' ଶବ୍ଦର ଅର୍ଥଲେଖ ।

- Ans
- ☒ 1. ହସ୍ତୀ
  - ☒ 2. ସିଂହ
  - ☒ 3. ଘୋଡ଼ା
  - ☒ 4. ବାଘ

Question ID : 16794325613  
Status : Answered  
Chosen Option : 1

Q.2  
3 'ଅମୃତର ସତ୍ତା' - କେଉଁ ଧର୍ମୀ ସୃଷ୍ଟି ?

- Ans
- ☒ 1. ସହରୀ
  - ☒ 2. ବିଜ୍ଞାନ
  - ☒ 3. ଆଦିବାସୀ
  - ☒ 4. ପୁରାଣ

Question ID : 16794325617  
Status : Answered



Chosen Option : 3

Q.2  
4 ମୂଳର ବିପରୀତ ଶବ୍ଦଟି ଲେଖ ।

- Ans
- ☒ 1. ଅନ୍ଧ
  - ☒ 2. ବାତାଳ
  - ☒ 3. ଅମୃତ
  - ☒ 4. ବସୁର

Question ID : 16794325607

Status : Answered

Chosen Option : 2

Q.2  
5 ଭିନ୍ନ ଅର୍ଥବୋଧକ ଶବ୍ଦଟି ବାଛି ଲେଖ ?

- Ans
- ☒ 1. ଭାନୁ
  - ☒ 2. ତନୁ
  - ☒ 3. ଶରୀର
  - ☒ 4. ଦେହ

Question ID : 16794325622

Status : Answered

Chosen Option : 1

Q.2  
6 ଦାନ+ଭରା-ଦାତ୍ରୁ- ଏଠାରେ 'ଭରା' ପ୍ରତ୍ୟୟ କେଉଁ ଅର୍ଥରେ ବ୍ୟବହୃତ ?

- Ans
- ☒ 1. ସଦୃଶ
  - ☒ 2. ସମନ୍ତ
  - ☒ 3. ଜାତ
  - ☒ 4. ଅଛି

Question ID : 16794325604

Status : Answered

Chosen Option : 4

Q.2  
7 ଶବ୍ଦଟିର ଠିକ୍ ରୂପଟିକୁ ଲେଖ ।

- Ans
- ☒ 1. ଅବସର୍ଣ୍ଣ
  - ☒ 2. ଅବଶନ
  - ☒ 3. ଅବଶର୍ଣ୍ଣ
  - ☒ 4. ଅବସନ୍ନ

Question ID : 16794325612

Status : Answered

Chosen Option : 4

Q.2  
8 ହାତେ ପାପି ଚାଖଣ୍ଡେ ଚାଲ । ରେଖାଙ୍କିତ ପଦଟିକି ପ୍ରକାର କ୍ରିୟା

- Ans ☒ 1. ସମନ୍ବିତକ
- ☒ 2. ଅସମାପିକା କ୍ରିୟା
- ☒ 3. ସମାପିକା କ୍ରିୟା
- ☒ 4. ନାମଧାରୁ କ୍ରିୟା

Question ID : 16794325609  
Status : Answered  
Chosen Option : 3

Q.2  
9 ଯେ ଖାଇବାକୁ ଇଚ୍ଛା କରେ - ଏକ ପଦରେ ପ୍ରକାଶ କର ।

- Ans ☒ 1. ବୁଭୁକ୍ଷୁ
- ☒ 2. ଖାଇବାବାଲା
- ☒ 3. ବୁଭୁକ୍ଷା
- ☒ 4. ଖାଦ୍ୟେଚ୍ଛୁ

Question ID : 16794325603  
Status : Answered  
Chosen Option : 1

Q.3  
0 ବାଚ୍ମ୍ୟ - ପ୍ରକୃତି ପ୍ରତ୍ୟୟ ଲେଖ ।

- Ans ☒ 1. ବାଚ୍ + ମୟ
- ☒ 2. ବାମ୍ + ମୟ
- ☒ 3. ବାନ୍ + ମୟ
- ☒ 4. ବାକ୍ + ମୟ

Question ID : 16794325605  
Status : Answered  
Chosen Option : 4

Q.3  
1 “ସାଧୁତା” କେଉଁ ବାଚକ ବିଶେଷ୍ୟ ପଦ ?

- Ans ☒ 1. କ୍ରିୟା
- ☒ 2. ନାମ
- ☒ 3. ଗୁଣ
- ☒ 4. ବସ୍ତୁ

Question ID : 16794325621  
Status : Answered  
Chosen Option : 3

Q.3  
2 ଚନ୍ଦ୍ର ଭାଗା କାବ୍ୟର ନାୟକ କିଏ ?

- Ans ☒ 1. ଚନ୍ଦ୍ର

☒ 2. ଯଯାତି

☒ 3. ସୁଯ୍ୟା

☒ 4. ଯମ

Question ID : 16794325615

Status : Answered

Chosen Option : 3

Q.3  
3 'ଅଳି'ର ପ୍ରତିଶବ୍ଦଟିକୁ ଲେଖ ।

Ans ☒ 1. ମାଛି

☒ 2. ଭ୍ରମର

☒ 3. ଝିଝିକା

☒ 4. ମଧୁମାକ୍ଷୀ

Question ID : 16794325620

Status : Answered

Chosen Option : 4

Q.3  
4 ମୃଣ୍ମୟ- ସନ୍ଧିବିଚ୍ଛେଦ କର ।

Ans ☒ 1. ମୃ + ଶ୍ମୟ

☒ 2. ମୃଣ୍ମ + ମୟ

☒ 3. ମୃତ୍ + ମୟ

☒ 4. ମୃନ୍ + ମୟ

Question ID : 16794325610

Status : Answered

Chosen Option : 3

Q.3  
5 ସୌନ୍ଦର୍ଯ୍ୟ ଏକ \_\_\_\_\_ ପଦ ।

Ans ☒ 1. ବିଶେଷ୍ୟ

☒ 2. ସର୍ବନାମ

☒ 3. ବିଶେଷଣ

☒ 4. କ୍ରିୟା ବିଶେଷଣ

Question ID : 16794325614

Status : Answered

Chosen Option : 1

Q.3  
6 ଶବ୍ଦଟିର ଠିକ୍ ରୂପଟିକୁ ଲେଖ ।

Ans ☒ 1. ଦାସରଥ

- ☒ 2. ଦାସରଥୀ  
☒ 3. ଦାଶରଥୀ  
☒ 4. ଦାଶରଥ

Question ID : 16794325606  
Status : Answered  
Chosen Option : 4

Q.3  
7 ଓଡ଼ିଆ ସାହିତ୍ୟରେ ପ୍ରଥମ କ୍ଷୁଦ୍ର ଗଳ୍ପ କେଉଁଟି ?

- Ans ☒ 1. ମୌନାମୌନୀ  
☒ 2. ରେବତୀ  
☒ 3. ଡାକମୁନସୀ  
☒ 4. ପେଟେଟେ ମେଢ଼ସିନ୍

Question ID : 16794325618  
Status : Answered  
Chosen Option : 2

Q.3  
8 ବାଆକୁବତା ଗୁଡ଼ିଚିର ଅର୍ଥ ଲେଖ ।

- Ans ☒ 1. ବାଆ ବହିବା  
☒ 2. ବାଆ ବେଳେ ବତା  
☒ 3. କ୍ଷୀଣ ଆଶ୍ରୟ  
☒ 4. ବତା ବାହିବା

Question ID : 16794325611  
Status : Answered  
Chosen Option : 3


Q.3  
9 ରାଧାନାଥଙ୍କ କେଉଁ କାବ୍ୟ ଏକ ଖଣ୍ଡ ବାକ୍ୟ ?

- Ans ☒ 1. ଚିଲିକା  
☒ 2. ଦରବାର  
☒ 3. ଭସା  
☒ 4. ଚନ୍ଦ୍ରଭାଗା

Question ID : 16794325616  
Status : Answered  
Chosen Option : 1

Q.4  
0 ମହାମଣ୍ଡଳ ଗୀତା ଗ୍ରନ୍ଥର ରଚୟିତା କିଏ ?





- Ans ☒ 1. ଯଶୋବନ୍ତ ଦାସ  
☒ 2. ଅବୁତାନନ୍ଦ ଦାସ  
☒ 3. ଅରକ୍ଷିତ ଦାସ

 4. ଜଗନ୍ନାଥ ଦାସ

Question ID : 16794325619  
Status : Answered  
Chosen Option : 4





Section : Current Affairs & Reasoning

Q.1 Which player created history and becomes 1<sup>st</sup> Indian to win BWF World Tour Finals tournament in 2018?

- Ans  1. Saina Nehwal  
 2. PV Sindhu  
 3. Ashwini Ponnappa  
 4. Jwala Gutta

Question ID : 16794325628  
Status : Answered  
Chosen Option : 2

Q.2 What is dimension of the new banknote of ₹ 100?

- Ans  1. 60 mm × 140 mm  
 2. 66 mm × 142 mm  
 3. 56 mm × 132 mm  
 4. 76 mm × 152 mm

Question ID : 16794325642  
Status : Answered  
Chosen Option : 2

Q.3 Which city hosted the AIBA Women's World Boxing Championships, 2018?

- Ans  1. New York  
 2. Beijing  
 3. New Delhi  
 4. Paris

Question ID : 16794325623  
Status : Answered  
Chosen Option : 2

Q.4 Who has been conferred the National Award for Best Actress, 2018?

- Ans  1. Alia Bhatt  
 2. Tabbu  
 3. Deepika Padukone  
 4. Sridevi

Question ID : 16794325629  
Status : Answered  
Chosen Option : 4

Q.5 Which of the following award is considered as the Noble Award of Asia?

- Ans
- ☒ 1. Indira Gandhi Award for International Justice and Harmony
  - ☒ 2. The Asian Awards
  - ☒ 3. The Ramon Magsaysay Award
  - ☒ 4. The Pulitzer Award

Question ID : 16794325632  
Status : Answered  
Chosen Option : 3

Q.6 Who is the chairman of the University Grants Commission as on February 2019?

- Ans
- ☒ 1. Sukhadeo Thorat
  - ☒ 2. Ved Prakash
  - ☒ 3. Arun S. Nigavekar
  - ☒ 4. D.P. Singh

Question ID : 16794325636  
Status : Answered  
Chosen Option : 4

Q.7 Which of the following country is a permanent member of the United Nations' Security Council?

- Ans
- ☒ 1. Canada
  - ☒ 2. United Kingdom
  - ☒ 3. Germany
  - ☒ 4. Brazil

Question ID : 16794325650  
Status : Answered  
Chosen Option : 4

Q.8 When the Prime Minister of India launched Make in India Yojna?

- Ans
- ☒ 1. 2017
  - ☒ 2. 2015
  - ☒ 3. 2013
  - ☒ 4. 2014

Question ID : 16794325646  
Status : Answered  
Chosen Option : 1

Q.9 In which year, India is/will going to celebrate the 150<sup>th</sup> birth anniversary of Mahatma Gandhi?



- Ans
- ☒ 1. 2017
  - ☒ 2. 2020
  - ☒ 3. 2019



 4. 2018

Question ID : 16794325638  
Status : Answered  
Chosen Option : 2

Q.1  
0 Which of the player has been conferred the Arjun Award, 2018 for contribution in Athletics?

- Ans  1. Seema Punia  
 2. Vinesh Phogat  
 3. Neeraj Chopra  
 4. P.V. Sindhu

Question ID : 16794325626  
Status : Answered  
Chosen Option : 2

Q.1  
1 Which of the following author won the Man Booker Prize, 2018?

- Ans  1. Anna Burns  
 2. Paul Beatty  
 3. George Saunders  
 4. Marlon James

Question ID : 16794325630  
Status : Answered  
Chosen Option : 3

Q.1  
2 Who has been awarded the Dada Saheb Phalke Award, 2018?

- Ans  1. Amitabh Bachchan  
 2. Vinod Khanna  
 3. Jeetendra  
 4. Shatrughan Sinha

Question ID : 16794325631  
Status : Answered  
Chosen Option : 2

Q.1  
3 Which of the following is the largest source of Electricity generation (utility sector) in India in FY 2017-18?

- Ans  1. Nuclear  
 2. Solar  
 3. Coal  
 4. Hydro

Question ID : 16794325639  
Status : Answered  
Chosen Option : 4

Q.1 India ranked as the \_\_\_\_\_ most innovative nation in the world by World Intellectual Property Organization in 2018.

- Ans
- ☐ 1. 65<sup>th</sup>
  - ☐ 2. 32<sup>nd</sup>
  - ☐ 3. 49<sup>th</sup>
  - ☒ 4. 57<sup>th</sup>

Question ID : 16794325640  
Status : Answered  
Chosen Option : 1

Q.1 Which of the following is responsible for administering Small Industries Development Fund and National Equity Fund?

- Ans
- ☐ 1. Finance Ministry
  - ☐ 2. NABARD
  - ☒ 3. SIDBI
  - ☐ 4. Axis Bank

Question ID : 16794325645  
Status : Answered  
Chosen Option : 3

Q.1 Which of the following country is going to host the ICC World Cup (Men) T20 in 2020?

- Ans
- ☐ 1. South Africa
  - ☐ 2. England
  - ☒ 3. Australia
  - ☐ 4. India

Question ID : 16794325625  
Status : Answered  
Chosen Option : 2

Q.1 Who is the National Security Adviser as on March 2019?

- Ans
- ☐ 1. Bipin Rawat
  - ☐ 2. Pankaj Saran
  - ☒ 3. Ajit Doval
  - ☐ 4. B.S. Dhanoa

Question ID : 16794325637  
Status : Answered  
Chosen Option : 1

Q.1 Which foreign citizen has been conferred the Padam Bhushan, 2019?

- Ans
- ☐ 1. Gita Mehta

- ☒ 2. Subhash Kak
- ☒ 3. Pravin Gordhan
- ☒ 4. Kadar Khan

Question ID : 16794325633  
Status : Answered  
Chosen Option : 1

Q.1 9 Which of the following is not a benefit under the Pradhan Mantri Jan-Dhan Yojana?

- Ans ☒ 1. Accidental insurance cover of ₹ 5.00 lac
- ☒ 2. Interest on deposit
  - ☒ 3. No minimum balance required
  - ☒ 4. Easy Transfer of money across India

Question ID : 16794325641  
Status : Answered  
Chosen Option : 3

Q.2 0 The Sahitya Akademi Awards are given \_\_\_\_\_ languages in 2018?

- Ans ☒ 1. 21
- ☒ 2. 22
  - ☒ 3. 23
  - ☒ 4. 24

Question ID : 16794325634  
Status : Answered  
Chosen Option : 2

Q.2 1 In 2018, The Central Government of India has invoked \_\_\_\_\_ of the RBI Act for the first time in history of RBI.

- Ans ☒ 1. Section 4
- ☒ 2. Section 9
  - ☒ 3. Section 5
  - ☒ 4. Section 7

Question ID : 16794325643  
Status : Answered  
Chosen Option : 3

Q.2 2 Who has been named UNICEF's youngest-ever Goodwill Ambassador in 2018?

- Ans ☒ 1. Millie Bobby Brown
- ☒ 2. Priyanka Chopra
  - ☒ 3. Meryl Streep
  - ☒ 4. Sally Hawkins

Question ID : 16794325647  
Status : Answered  
Chosen Option : 2

Q.2 Which country is the largest supplier of crude oil to India in the April-October 2018 period?

3

- Ans
- ☒ 1. Iran
  - ☐ 2. Iraq
  - ☒ 3. Saudi Arabia
  - ☒ 4. UAE

Question ID : 16794325651  
Status : Answered  
Chosen Option : 3

Q.2 Who has unanimously chosen as the next president of the World Bank on April 5, 2019?

4

- Ans
- ☒ 1. Will Plaster
  - ☒ 2. Phillip G. Kiko
  - ☒ 3. Daniel J. Stordel
  - ☐ 4. David Malpass

Question ID : 16794325648  
Status : Answered  
Chosen Option : 3

Q.2 Which athlete created history in 2018 after becoming the first Indian to win a gold medal in the track event of a world championships?

5

- Ans
- ☐ 1. Hima Das
  - ☒ 2. P.T. Usha
  - ☒ 3. Sudha Singh
  - ☒ 4. Tintu Lukka

Question ID : 16794325627  
Status : Answered  
Chosen Option : 1

Q.2 The Crisil Ratings Agency forecasts the India's GDP growth rate is likely to \_\_\_\_\_ in 2019-20.

6

- Ans
- ☒ 1. 7.5 per cent
  - ☐ 2. 7.3 per cent
  - ☒ 3. 8.1 per cent
  - ☒ 4. 6.5 per cent

Question ID : 16794325644  
Status : Answered  
Chosen Option : 2

Q.2

7 Which one out of the followings is appointed as the Governor of Bihar in 2018?

- Ans
- ☒ 1. Kaptan Singh Solanki
  - ☒ 2. Lalji Tandon
  - ☒ 3. N.N. Vohra
  - ☒ 4. Ganga Prasad

Question ID : 16794325635  
Status : Answered  
Chosen Option : 3

Q.2 Recently a strategic agreement COMCASA, (Communications Compatibility and Security Agreement) has been signed  
8 between \_\_\_\_\_ in 2018.

- Ans
- ☒ 1. India and France
  - ☒ 2. India and Israel
  - ☒ 3. India and USA
  - ☒ 4. India and Russia

Question ID : 16794325652  
Status : Answered  
Chosen Option : 2

Q.2 Which one out of the following teams won the Women's Hockey World Cup, 2018?  
9

- Ans
- ☒ 1. Germany
  - ☒ 2. Ireland
  - ☒ 3. Netherland
  - ☒ 4. Australia

Question ID : 16794325624  
Status : Answered  
Chosen Option : 4

Q.3 Which countries have been visited by the President of India in March-April 2019?  
0

- Ans
- ☒ 1. Egypt and Sudan
  - ☒ 2. England and France
  - ☒ 3. Croatia, Bolivia and Chile
  - ☒ 4. USA and Canada

Question ID : 16794325649  
Status : Answered  
Chosen Option : 3

Q.3 Harjeet is fifteenth from the left end of a row of 26 boys and Darshan is fifteenth from the right end in the same row.  
1 How many boys are there between them in the row?

- Ans
- ☒ 1. 5
  - ☒ 2. 4

- ✓ 3. 2  
✗ 4. 3

Question ID : 16794325657  
Status : Answered  
Chosen Option : 3

Q.3 What could be the next term in the following series  
S, A, I, Q, Y, G, ?

- Ans ✗ 1. L  
✗ 2. K  
✗ 3. R  
✓ 4. O

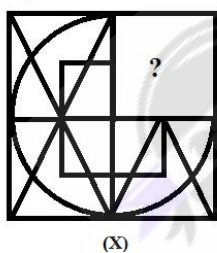
Question ID : 16794325654  
Status : Answered  
Chosen Option : 4

Q.3 The number of girls in a class is double that of number of boys in a class. Which one of the following number cannot  
3 represent the total number students in the class?

- Ans ✓ 1. 37  
✗ 2. 42  
✗ 3. 36  
✗ 4. 48

Question ID : 16794325672  
Status : Answered  
Chosen Option : 1

Q.3 Select a figure from amongst the four alternatives which when placed in the blank space of figure (X) would complete  
4 the pattern:



Ans

- ✗ 1.
- ✗ 2.



✗ 3.



✓ 4.



Question ID : 16794325677

Status : Answered

Chosen Option : 4

Q.3 In a certain code, RECIPE is written as FDMJOD. And SUGAR as TWLNF, how is PEACE written in that code?

5

Ans ✓ 1. ODNMD

✗ 2. OGCUT

✗ 3. DGCKL

✗ 4. NMCUT

Question ID : 16794325662

Status : Answered

Chosen Option : 1

Q.3 What could be the next term in the following series

6

LQD, KSC, JUB, IWA, ?

Ans ✗ 1. PUM

✗ 2. ZKG

✓ 3. HYZ

✗ 4. YCF

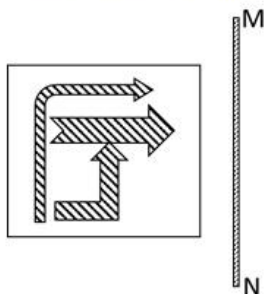
Question ID : 16794325655

Status : Answered

Chosen Option : 3

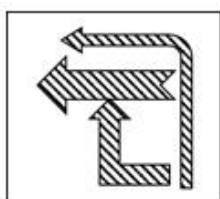
Q.3 Identify the mirror image for the following figure where MN represents the mirror:

7

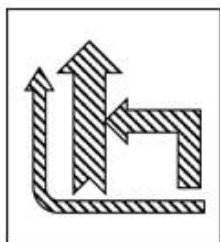


Ans

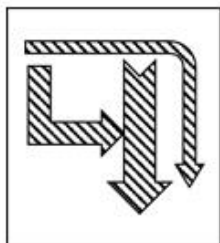
✗ 1.



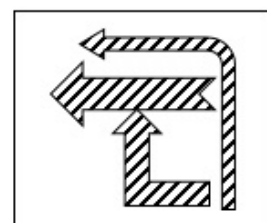
✗ 2.



✗ 3.



✓ 4.



Question ID : 16794325678

Status : Answered

Chosen Option : 4

Q.3 Read the following information carefully and answer the given question.

8

In Police officer's selection exams, six candidates were shortlisted according to their scores

The scores of the candidates are given as below:

- Kapil's score is higher than Laxman.
- Manish's score is less than Kapil.
- Nagesh's score is higher than Omar but lesser than Laxman.
- Pavan's score is higher than Kapil.

Then according to the scores secured who among them got least score?

Ans

✗ 1. Kapil

✗ 2. Pavan

✓ 3. Omar

✗ 4. Laxman

Question ID : 16794325661

Status : Answered

Chosen Option : 2

Q.3 Varun is facing South East. He turns  $90^\circ$  in the clockwise direction and then another  $135^\circ$  in the same direction and

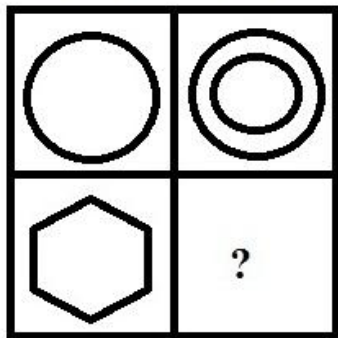
9

then  $225^\circ$  in the anti-clockwise direction. Which direction is he facing now?

- Ans
- ☒ 1. North East
  - ☒ 2. South
  - ☒ 3. West
  - ☒ 4. South East

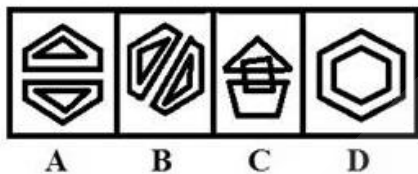
Question ID : 16794325658  
Status : Answered  
Chosen Option : 4

Q.4 Which of the answer figures completes the following given figure matrix?



(X)

Answer figures set:



- Ans
- ☒ 1. C
  - ☒ 2. B
  - ☒ 3. D
  - ☒ 4. A

Question ID : 16794325680  
Status : Answered  
Chosen Option : 4

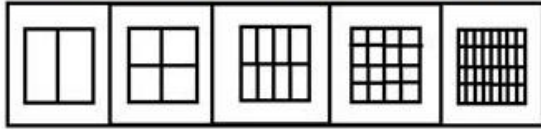
Q.4 There are Six stores adjacent to each other in a shopping complex viz., Pharmacy, Toy store, Vegetable shop, Novelty Store, Pathology Lab and Grocery store, the arrangement of the stores are as given below:  
Pharmacy is to the left of Pathology Lab, Toy store is to the left of Vegetable store and to the right of Pathology Lab, Grocery Store is to the right of Vegetable store, Novelty store is located between Vegetable store and Grocery store.  
What would be the Left most store in the shopping complex?

- Ans
- ☒ 1. Toy Store
  - ☒ 2. Pharmacy
  - ☒ 3. Grocery Store
  - ☒ 4. Vegetable Store

Question ID : 16794325660  
Status : Answered  
Chosen Option : 2

Q.4 Identify the rule that the following figure series follows from the options:

2



Ans ☒ 1.

Each sub part of the figure is divided in to two equal halves in each level

☒ 2. Number of circles increasing more and more

☒ 3. Number of lines decreasing

☒ 4.

Number of shaded parts inside the square increasing and number of lines outside are increasing in same number

Question ID : 16794325676

Status : Answered

Chosen Option : 1

Q.4 Three words given below have something common among themselves. Out of given four alternatives choose the most appropriate description about these words.

3

Diamond: Emerald: Garnet

Ans ☒ 1. They are names of the graphs used for data analysis

☒ 2. They are the names of animals

☒ 3. They are the names of precious stones

☒ 4. They are the metals used in armaments

Question ID : 16794325665

Status : Answered

Chosen Option : 3

Q.4 Identify the analogues word to replace '?' as per the relation of first pair of words?

4

Cardiology: Heart :: Nephrology: ?

Ans ☒ 1. Kidney

☒ 2. Liver

☒ 3. Viruses

☒ 4. Nerves

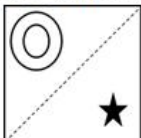
Question ID : 16794325666

Status : Answered

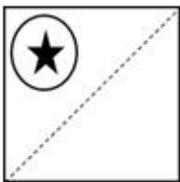
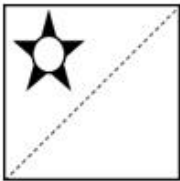
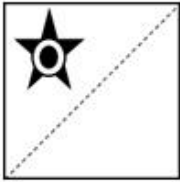
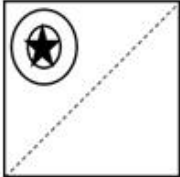
Chosen Option : 1

Q.4 How the pattern would appear when the transparent sheet is folded at the dotted line?

5



Ans

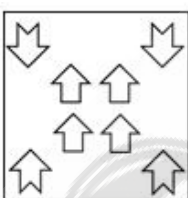
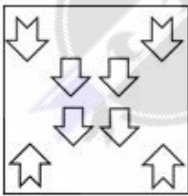
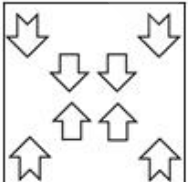
- ✗ 1. 
- ✗ 2. 
- ✗ 3. 
- ✓ 4. 

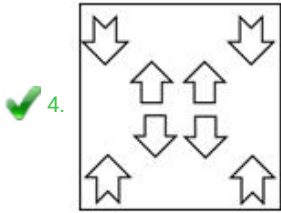
Question ID : 16794325681  
Status : Answered  
Chosen Option : 1

Q.4 If the paper is folded and cut as per the shape given below, what would be the result look like after unfolding the paper?



Ans

- ✗ 1. 
- ✗ 2. 
- ✗ 3. 



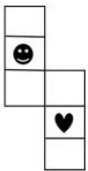
Question ID : 16794325675  
Status : Answered  
Chosen Option : 3

Q.4  
7 What could be the missing term in the following series  
6, 5, 51, ?, 501, 500, 5001

- Ans
- ✗ 1. 510
  - ✗ 2. 55
  - ✗ 3. 511
  - ✓ 4. 50

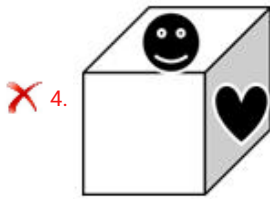
Question ID : 16794325653  
Status : Answered  
Chosen Option : 4

Q.4  
8 A paper as shown in the figure is folded into the form of a cube then which of the options could represent visible faces of the cube formed?



- Ans
- ✗ 1.
  - ✓ 2.
  - ✗ 3.





Question ID : 16794325674  
Status : Answered  
Chosen Option : 2

Q.4 Sindhu moved a distance of 60 m towards West. She then turned to the left and walking for about 45 m, then turned left again and walked 50 m. Finally she turned to her right at an angle of 90 degrees and was walking. In which direction she was moving finally?

- Ans
- ✗ 1. West
  - ✓ 2. South
  - ✗ 3. North
  - ✗ 4. East

Question ID : 16794325659  
Status : Answered  
Chosen Option : 2

Q.5 Which of the two conclusions can be concluded on the basis of given statements?

Statement:

All benches are chairs. No chair is a rack.

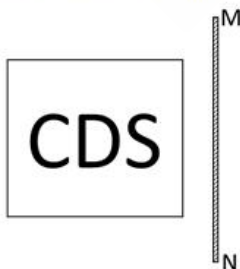
Conclusions:

- 1. No Bench is a rack
- 2. All chairs are Benches

- Ans
- ✗ 1. neither (1) nor (2) follows
  - ✗ 2. Both (1) & (2) follow
  - ✓ 3. Only conclusion (1) follow
  - ✗ 4. Only conclusion (2) follows

Question ID : 16794325668  
Status : Answered  
Chosen Option : 1

Q.5 Identify the mirror image for the following figure where MN represents the mirror:



Ans

✗ 1.



✓ 2.



✗ 3.



✗ 4.



Question ID : 16794325679

Status : Answered

Chosen Option : 2

Q.5 Find out which of the figures can be formed from the pieces given in figure X

2



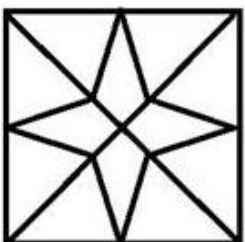
(X)

Ans

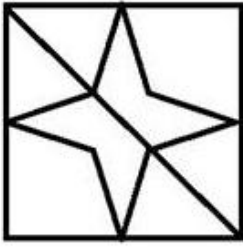
✗ 1.



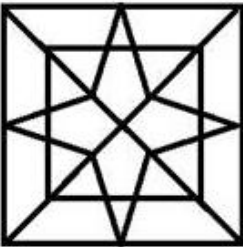
✗ 2.



✓ 3.



✗ 4.



Question ID : 16794325673

Status : Answered

Chosen Option : 3

Q.5 Which of the two conclusions can be concluded on the basis of given statements?

3

Statement:

1. Some chains are rings.
2. All the braces are rings.

Conclusions:

1. Some rings are braces.
2. Some ring are chains.

- Ans
- ✗ 1. Only conclusion (1) follow
  - ✗ 2. Neither (1) nor (2) follows
  - ✓ 3. Both (1) & (2) follow
  - ✗ 4. Only conclusion (2) follows

Question ID : 16794325669

Status : Answered

Chosen Option : 3

Q.5 In a certain coding system If BRAKE is written as DJZQA and COAL as KZNB, then how will HOUSE be written in that code?

4

- Ans
- ✗ 1. RTCMA
  - ✗ 2. AGLVT
  - ✓ 3. DRTNG
  - ✗ 4. GCMTK

Question ID : 16794325664

Status : Answered

Chosen Option : 3

Q.5 A farmer had 16 Sheep and 12 Hen. All but 7 Sheep and all but 7 Hen dead in cyclone. What would be the total number of legs of the remaining Sheep and Hen which are alive?

5

Ans

- ✓ 1. 42  
✗ 2. 46  
✗ 3. 36  
✗ 4. 40

Question ID : 16794325671  
Status : Answered  
Chosen Option : 2

Q.5 Read the statements and identify the logically correct conclusion from the given information.

6

Statement:

All the students in 'AAA' sections are sharp.

Vinayak is not sharp

Conclusions:

1. Vinayak does not belong to 'AAA' section
2. Vinayak is intelligent

- Ans
- ✗ 1. Neither (1) nor (2) follows  
✗ 2. Only conclusion (2) follows  
✓ 3. Only conclusion (1) follows  
✗ 4. Both (1) & (2) follow

Question ID : 16794325670  
Status : Answered  
Chosen Option : 3

Q.5 Akhila is twelfth from the right end in a row of 50 girls. What is his position from the left end?

7

- Ans
- ✓ 1. 39<sup>th</sup>  
✗ 2. 37<sup>th</sup>  
✗ 3. 38<sup>th</sup>  
✗ 4. 35<sup>th</sup>

Question ID : 16794325656  
Status : Answered  
Chosen Option : 1

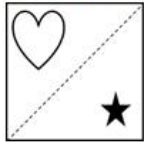
Q.5 Choose the word which is least like others in the group

8

- Ans
- ✗ 1. Needle  
✗ 2. Spade  
✓ 3. Rifle  
✗ 4. Scalpel

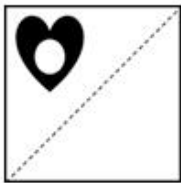
Question ID : 16794325667  
Status : Answered  
Chosen Option : 1

Q.5 How the pattern would appear when the transparent sheet is folded at the dotted line?

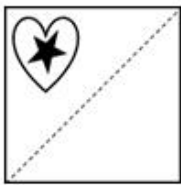


Ans

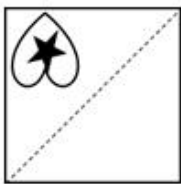
✗ 1.



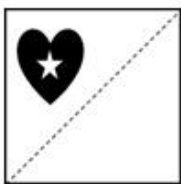
✓ 2.



✗ 3.



✗ 4.



Question ID : 16794325682  
Status : Answered  
Chosen Option : 3

Q.6 In a certain coding system if B = 2, BEE = 12 and BAN = 17, Then what would be the code for the word RIDE = ?

- Ans
- ✗ 1. 24
  - ✗ 2. 40
  - ✗ 3. 20
  - ✓ 4. 36

Question ID : 16794325663  
Status : Answered  
Chosen Option : 4

Section : Subject Content & Methodology

Q.1 In which subject the number of students appeared in Examination A and B is equal?

- Ans
- ✗ 1. Mathematics in B and English in A
  - ✗ 2. Mathematics in A and English in B
  - ✓ 3. History in A and Psychology in B
  - ✗ 4. Psychology in A and History in B

Question ID : 16794325768  
Status : Answered  
Chosen Option : 1

Q.2 Let  $\phi(n)$  denotes the Euler totient function, then the value of  $\phi(15)$  is equal to:

- Ans
- ☒ 1. 4
  - ☒ 2. 8
  - ☒ 3. 2
  - ☒ 4. 12

Question ID : 16794325695  
Status : Answered  
Chosen Option : 3

Q.3 The three vertices of a parallelogram taken in order are  $(-1,0)$ ,  $(3,1)$  and  $(2,2)$  respectively. The coordinate of fourth vertex is:

- Ans
- ☒ 1.  $(1,2)$
  - ☒ 2.  $(-1,2)$
  - ☒ 3.  $(-2,-1)$
  - ☒ 4.  $(-2,1)$

Question ID : 16794325745  
Status : Answered  
Chosen Option : 4

Q.4 The parameter of a square is equal to the perimeter of a rectangle of length 15 cm and breadth 10 cm. The circumference of a semicircle whose diameter is equal to the side of the square is equal to: ( $\pi = 3.143$ )

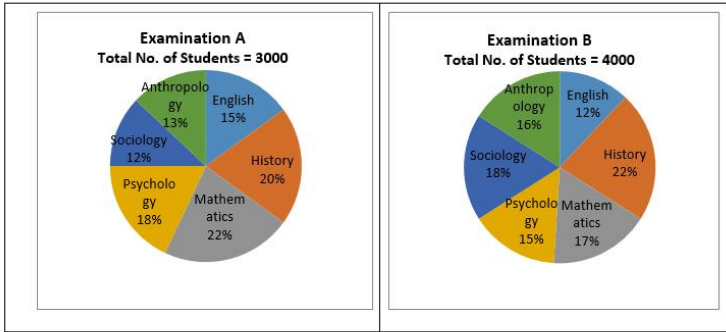
- Ans
- ☒ 1. 20.858 cm
  - ☒ 2. 18.858 cm
  - ☒ 3. 19.858 cm
  - ☒ 4. 16.858 cm

Question ID : 16794325750  
Status : Answered  
Chosen Option : 3

Q.5



The following pie-charts show the percentage-wise distribution of students appeared for six different subjects for two A and B. Study the charts and answer the questions 102 to 104:

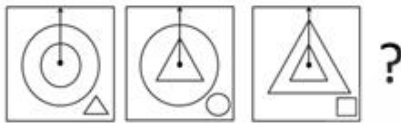


The number of students in English in both the examination is approximately what percentage of the number of students in Mathematics in both the examination?

- Ans
- 1. 70%
  - 2. 68%
  - 3. 69%
  - 4. 67%

Question ID : 16794325766  
Status : Answered  
Chosen Option : 4

Q.6 What is the next pattern in the given sequence?



- Ans
- 1.
  - 2.
  - 3.
  - 4.

Question ID : 16794325780  
Status : Answered  
Chosen Option : 3

Q.7 If in a class, 40% of the student study math and science and 60% of the student study math, then the probability of a student studying science given that he/she is already studying math is:

- Ans
- 1. 0.55
  - 2. 0.63

☒ 3. 0.47

☒ 4. 0.67

Question ID : 16794325769

Status : Answered

Chosen Option : 3

Q.8 The sum of two digit number and the number formed by interchanging the digits is 132, if 12 is added to the number then the new number becomes 5 times the sum of the digits. The number is:

Ans ☒ 1. 64

☒ 2. 46

☒ 3. 84

☒ 4. 48

Question ID : 16794325707

Status : Answered

Chosen Option : 4

Q.9 Arithmetic mean is 15 and all sum of observations is 315 then number of observations are:

Ans ☒ 1. 21

☒ 2. 19

☒ 3. 23

☒ 4. 15

Question ID : 16794325764

Status : Answered

Chosen Option : 1

Q.10 The number of real roots of  $2\sin x = 2^x + 2^{-x}$  is:

Ans ☒ 1. 1

☒ 2. 2

☒ 3. 3

☒ 4. 0

Question ID : 16794325726

Status : Answered

Chosen Option : 4

Q.11 The product of a non-zero rational number and an irrational number is a/an:

Ans ☒ 1. Rational number

☒ 2. Irrational number

☒ 3. Natural number

☒ 4. zero

Question ID : 16794325684

Status : Answered

Chosen Option : 2

Q.1  
2 If  $Y = -10X$  and  $X = -0.1Y$ , then correlation coefficient  $r$  is equal to:

- Ans
- ☒ 1. 0
  - ☒ 2. 0.2
  - ☒ 3. 0.5
  - ☒ 4. -1

Question ID : 16794325774

Status : Answered

Chosen Option : 4

Q.1  
3 The solution  $(x, y)$  of the simultaneous equations  $px + qy + r = 0$ ,  $lx + my + n = 0$ , is given by:

- Ans
- ☒ 1.  $\frac{x}{pm - lq} = \frac{y}{pr - nl} = \frac{1}{pq - ml}$
  - ☒ 2.  $\frac{x}{mp - ql} = \frac{y}{pn - lr} = \frac{1}{qn - mr}$
  - ☒ 3.  $\frac{x}{nq - rm} = \frac{y}{pn - lr} = \frac{1}{pm - ql}$
  - ☒ 4.  $\frac{x}{nq - rm} = \frac{y}{lr - pn} = \frac{1}{pm - ql}$

Question ID : 16794325708

Status : Answered

Chosen Option : 4

Q.1  
4 The square matrix  $A$  is called orthogonal if:

- Ans
- ☒ 1.  $A = A^{-1}$
  - ☒ 2.  $A = A^2$
  - ☒ 3.  $AA^{-1} = I$
  - ☒ 4.  $A' = A^{-1}$

Question ID : 16794325697

Status : Answered

Chosen Option : 3

Q.1  
5 If the sum of  $p$  terms of an A.P. is equal to the sum of  $q$  terms ( $p \neq q$ ), then the sum of  $(p+q)$  terms is:

- Ans
- ☒ 1. 0
  - ☒ 2. -1
  - ☒ 3. 1
  - ☒ 4. 2

Question ID : 16794325714

Status : Answered

Chosen Option : 3

Q.1 The following table shows the number of seats reserved in different classes in a train on five different days. The capacity of each class is given in the bracket. Study the table and answer the questions 99 to 101:

Day	2 <sup>nd</sup> Class Non-AC (900)	1 <sup>st</sup> Class Non-AC (500)	AC III Tier (500)	AC II Tier (250)	AC 1 <sup>st</sup> Class (150)
Monday	750	410	390	240	145
Tuesday	820	400	450	230	120
Wednesday	730	360	480	220	130
Thursday	640	480	490	190	122
Friday	700	490	495	210	140

How many seats remained vacant on Monday, Tuesday and Friday in all the classes?

- Ans ☒ 1. 930  
☒ 2. 910  
☒ 3. 935  
☒ 4. 920

Question ID : 16794325765  
Status : Answered  
Chosen Option : 2

Q.1 For a certain type of mobiles, the length of time between charges of the battery is normally distributed with a mean of 50 hours and a standard deviation of 15 hours. A person owns one of these mobiles and wants to know the probability that the length of time will be between 50 and 70 hours is: (Given  $\phi(1.33) = 0.9082$ ,  $\phi(0) = 0.5$ )

- Ans ☒ 1. 0.4082  
☒ 2. -0.5  
☒ 3. -0.4082  
☒ 4. 0.5

Question ID : 16794325777  
Status : Not Attempted and Marked For Review  
Chosen Option : --

Q.1 The domain of  $f(x) = 2\sin(\sqrt{1-x^2}) - e^x + 2^{-x}$  is:

- Ans ☒ 1.  $x > 1$   
☒ 2.  $\mathbb{R}$   
☒ 3.  $\mathbb{R} - \{0\}$   
☒ 4.  $-1 \leq x \leq 1$

Question ID : 16794325722  
Status : Answered  
Chosen Option : 3

Q.1 If X is a binomial variate with  $p = 1/5$ , for the experiment of 50 trials, then the standard deviation is equal to:

- Ans ☒ 1. 2  
☒ 2. 3

✓ 3.  $2\sqrt{2}$

✗ 4.  $3\sqrt{2}$

Question ID : 16794325776

Status : Answered

Chosen Option : 3

Q.2 How many plane can be made to pass through three distinct non-collinear points?

Ans ✓ 1. 1

✗ 2. 2

✗ 3. 3

✗ 4. Infinite

Question ID : 16794325727

Status : Answered

Chosen Option : 1

Q.2 The value of a if 17<sup>th</sup> and 18<sup>th</sup> terms in the expansion of  $(2+a)^{50}$  are equal is:

Ans ✗ 1. 2

✓ 2. 1

✗ 3. -1

✗ 4. 0

Question ID : 16794325721

Status : Answered

Chosen Option : 2

Q.2 What will be total cost (in ₹) of polishing curved surface of a wooden cylinder at rate of ₹ 25 per sq.m, if it has 30 cm diameter and 7 m height?

Ans ✗ 1. 200

✗ 2. 185

✓ 3. 165

✗ 4. 175

Question ID : 16794325752

Status : Answered

Chosen Option : 3

Q.2 If  $a \neq 0$  or  $b \neq 0$ , then gcd(a, b) exists and satisfying from the following condition:

Ans ✗ 1.  $0 > \text{gcd}(a, b) < \min\{|a|, |b|\}$

✗ 2.  $\text{gcd}(a, b) < 0$

✗ 3.  $0 > \text{gcd}(a, b) > \min\{|a|, |b|\}$

✓ 4.  $0 < \text{gcd}(a, b) < \min\{|a|, |b|\}$

Question ID : 16794325693

Status : **Answered**  
Chosen Option : 4

Q.2 From a point P on a level ground, the angle of elevation of the top tower is  $30^\circ$ . If the tower is 170 m high, the distance  
4 of point P from the foot of the tower is: (use  $\sqrt{3}=1.73$ )

- Ans
- ☒ 1. 274.1m
  - ☒ 2. 284.1m
  - ☒ 3. 294.1m
  - ☒ 4. 175m

Question ID : 16794325757  
Status : **Answered**  
Chosen Option : 3

Q.2 In a triangle ABC if  $\angle A = 45^\circ$ ,  $\angle B = 70^\circ$ . Then the ratio of shortest and largest side is:  
5

- Ans
- ☒ 1. BC : AC
  - ☒ 2. AC : BC
  - ☒ 3. AB : BC
  - ☒ 4. BC : AB

Question ID : 16794325729  
Status : **Answered**  
Chosen Option : 1

Q.2 In a town there are 4 crossroads with traffic lights. Each traffic light opens or closes the traffic with the same probability  
6 of 0.5, then the probability of a car crossing all the crossroads (4) without stopping is:

- Ans
- ☒ 1. 0.05
  - ☒ 2. 0.0625
  - ☒ 3. 0.025
  - ☒ 4. 0.0125

Question ID : 16794325771  
Status : **Answered**  
Chosen Option : 1

Q.2  
7 The value of  $\int_0^\pi \sin^7 x dx = ?$

- Ans
- ☒ 1.  $\frac{32}{35}$
  - ☒ 2.  $\frac{32\pi}{35}$
  - ☒ 3.  $\frac{38\pi}{35}$
  - ☒ 4. 0



Question ID : 16794325738  
Status : Answered  
Chosen Option : 4

Q.2  
8 If  $\lambda$  is an eigen value of a non-singular matrix A then the eigen value of  $A^{-1}$  is:

- Ans
- ☒ 1.  $-\lambda$
  - ☒ 2.  $\Delta$
  - ☒ 3.  $-1/\lambda$
  - ☒ 4.  $1/\lambda$

Question ID : 16794325698  
Status : Answered  
Chosen Option : 4

Q.2  
9 The value of k for which the equation has equal roots  $(k-12)x^2+2(k-12)x+2=0$  is:

- Ans
- ☒ 1.  $k = 14$
  - ☒ 2.  $k = -12$
  - ☒ 3.  $k = -14$
  - ☒ 4.  $k = 13$

Question ID : 16794325712  
Status : Answered  
Chosen Option : 3

Q.3  
0 If  $3a + 2b + 6c = 0$ , the family of straight lines  $ax + by + c = 0$  passes through a fixed point whose coordinates are given by:

- Ans
- ☒ 1.  $(2, 3)$
  - ☒ 2.  $\left(\frac{1}{3}, \frac{1}{2}\right)$
  - ☒ 3.  $\left(\frac{1}{2}, \frac{1}{3}\right)$
  - ☒ 4.  $(3, 2)$

Question ID : 16794325739  
Status : Answered  
Chosen Option : 4

Q.3  
1 The area of triangle formed by the vertices A(3,2), B(11,8) and C(8,12) is:

- Ans
- ☒ 1. 25 sq units
  - ☒ 2. 21 sq units
  - ☒ 3. 24 sq units
  - ☒ 4. 20 sq units

Question ID : 16794325746

Status : **Answered**  
Chosen Option : 1

Q.3  
2 The value of  $\int_0^{\pi/2} \frac{x}{\sin x + \cos x} dx = ?$

- Ans
- ☒ 1.  $\frac{\pi}{2\sqrt{2}} \log |\sqrt{2} - 1|$
  - ☒ 2.  $\frac{\pi}{2\sqrt{2}} \log |\sqrt{2} + 2|$
  - ☒ 3. 0
  - ☒ 4.  $\frac{\pi}{2\sqrt{2}} \log |\sqrt{2} + 1|$

Question ID : 16794325737  
Status : **Answered**  
Chosen Option : 4

Q.3  
3 If the  $r^{\text{th}}$ ,  $(r+1)^{\text{th}}$  and  $(r+2)^{\text{th}}$  terms in the expansion of  $(1+x)^{14}$  are in A.P., then the value of  $r$  is given by:

- Ans
- ☒ 1. 7
  - ☒ 2. 8
  - ☒ 3. 9
  - ☒ 4. 10

Question ID : 16794325742  
Status : **Answered**  
Chosen Option : 2

Q.3  
4 "The clue is hidden in this statement", read the note handed to A by B, who hid the stolen treasure in one of the ten pebbles. Which pebble is it?

- Ans
- ☒ 1. XI
  - ☒ 2. IX
  - ☒ 3. I
  - ☒ 4. X

Question ID : 16794325781  
Status : **Answered**  
Chosen Option : 4

Q.3  
5 The number 0.99999..... is expressed in the form  $\frac{p}{q}$ , where  $p$  and  $q$  are integers and  $q \neq 0$  is equal to:

- Ans
- ☒ 1.  $\frac{9}{10}$
  - ☒ 2.  $\frac{99}{100}$
  - ☒ 3. 1

☒ 4.  $\frac{9999}{10000}$

Question ID : 16794325683  
Status : Answered  
Chosen Option : 3

Q.3 If in each examination, the ratio of number of girl to number of boys in each subject is 3:2, what is the ratio of the  
6 number of girls in Mathematics in A to number of boys in Psychology in B?

- Ans ☒ 1. 20:33  
☒ 2. 33:10  
☒ 3. 33:20  
☒ 4. 10:33

Question ID : 16794325767  
Status : Answered  
Chosen Option : 3

Q.3 The value of  $\left[ \frac{\sin^2 19^\circ + \sin^2 71^\circ}{\cos^2 24^\circ + \cos^2 66^\circ} + \sin^2 71^\circ + \cos 71^\circ \sin 19^\circ \right]$  is:  
7

- Ans ☒ 1. 1  
☒ 2. -1  
☒ 3. 0  
☒ 4. 2

Question ID : 16794325758  
Status : Answered  
Chosen Option : 4

Q.3 The values of a and b so that  $x^4 + x^3 + 8x^2 + ax + b$  is divisible by  $x^2 + 1$  is equal to:  
8

- Ans ☒ 1. a=1; b=-7  
☒ 2. a=-1; b=7  
☒ 3. a=-1; b=-7  
☒ 4. a=1; b=7

Question ID : 16794325703  
Status : Answered  
Chosen Option : 2

Q.3 The equation  $\sqrt{x+1} - \sqrt{x-1} = \sqrt{4x-1}$  has:  
9

- Ans ☒ 1. one solution  
☒ 2. two solutions  
☒ 3. more than two solutions  
☒ 4. no solution

Question ID : 16794325710

Status : **Answered**  
Chosen Option : 1

Q.4  
0 The value of  $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2}$  is equal to:

- Ans
- ☒ 1. 1
  - ☒ 2. 3
  - ☒ 3. 2
  - ☒ 4. 5

Question ID : 16794325685  
Status : **Answered**  
Chosen Option : 1

Q.4  
1 If sum of squares of zeros of the quadratic polynomial  $f(x) = x^2 - 8x + k$  is 40, then the value of k is:

- Ans
- ☒ 1. 10
  - ☒ 2. 8
  - ☒ 3. 12
  - ☒ 4. 14

Question ID : 16794325702  
Status : **Answered**  
Chosen Option : 2

Q.4  
2 If  $3x + 2y + z = 0$ ,  $x + 4y + z = 0$ ,  $2x + y + 4z = 0$ , be a system of equations then:

- Ans
- ☒ 1. system is inconsistent
  - ☒ 2. it can be reduced to a single equation thus solution does not exist
  - ☒ 3. it has only trivial solution
  - ☒ 4. Determinant of the coefficient matrix is zero

Question ID : 16794325699  
Status : **Answered**  
Chosen Option : 2

Q.4  
3 If  $\sin^4 a - \cos^4 a = 1/3$  then what is the value of  $1 - 2\cos^2 a$ ?

- Ans
- ☒ 1. -1/3
  - ☒ 2. 1
  - ☒ 3. 0
  - ☒ 4. 1/3

Question ID : 16794325759  
Status : **Answered**  
Chosen Option : 4

Q.4  
4

The values of p and q for which the following system of equations has infinite number of solutions

$2x + 3y = 7$ ;  $(p + q)x + (2p - q)y = 21$  is equal to:

- Ans
- ✓ 1.  $p = 5, q = 1$
  - ✗ 2.  $p = 5, q = -1$
  - ✗ 3.  $p = -5, q = -1$
  - ✗ 4.  $p = -5, q = 1$

Question ID : 16794325706  
Status : Answered  
Chosen Option : 2

Q.4 The mean and variance of 8 observations are 6 and 8 respectively. If some of these observations are 3, 5, 6, 8, 9, 10 then the remaining two observations are:

- Ans
- ✓ 1. 1, 6
  - ✗ 2. 2, 4
  - ✗ 3. 1, 5
  - ✗ 4. 3, 1

Question ID : 16794325770  
Status : Answered  
Chosen Option : 3

Q.4 The perimeter of a triangle field is 450m and the sides are in the ratio 13:12:5, the area of triangle is:

- Ans
- ✓ 1.  $6750\text{m}^2$
  - ✗ 2.  $6000\text{m}^2$
  - ✗ 3.  $6250\text{m}^2$
  - ✗ 4.  $6500\text{m}^2$

Question ID : 16794325747  
Status : Answered  
Chosen Option : 1

Q.4 For every natural number n, which of the following is satisfied:

- Ans
- ✓ 1.  $n < 2^n$
  - ✗ 2.  $n = 2^n$
  - ✗ 3.  $n > 2^n$
  - ✗ 4.  $n \geq 2^n$

Question ID : 16794325691  
Status : Answered  
Chosen Option : 1

Q.4 In  $\triangle ABC$ ,  $\angle A = 35^\circ$ ,  $\angle B = 45^\circ$ ,  $\angle C = 100^\circ$ . The angles of the triangle formed by joining the mid-points of the sides of this triangle are:

Ans

✗ 1.  $60^\circ, 60^\circ, 60^\circ$

✓ 2.  $35^\circ, 45^\circ, 100^\circ$

✗ 3.  $45^\circ, 45^\circ, 90^\circ$

✗ 4.  $30^\circ, 45^\circ, 105^\circ$

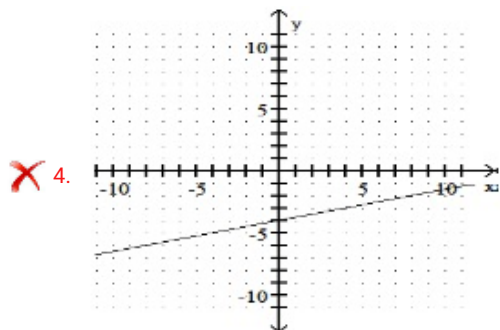
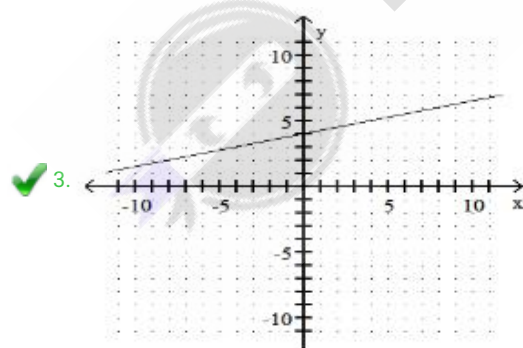
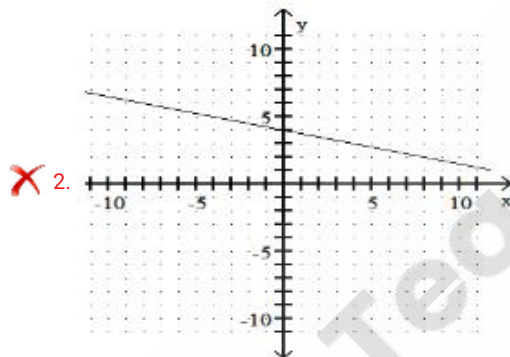
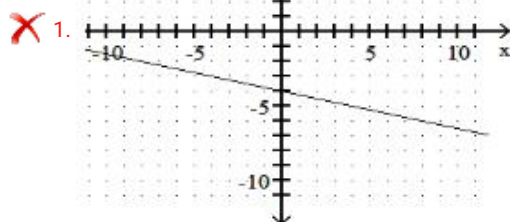
Question ID : 16794325732

Status : Answered

Chosen Option : 2

Q.4  
9 Graph of the line passing through point (0, 4) with slope of line as  $\frac{1}{4}$  is:

Ans





Question ID : 16794325705  
Status : Answered  
Chosen Option : 2

Q.5 The length of side of triangle are 5cm, 12 cm, 13 cm. The length of perpendicular from the opposite vertex to the side whose length is 13 cm is:

- Ans
- ☒ 1.  $\frac{50}{13}$  cm
  - ☒ 2.  $\frac{60}{13}$  cm
  - ☒ 3.  $\frac{40}{13}$  cm
  - ☒ 4.  $\frac{70}{13}$  cm

Question ID : 16794325748  
Status : Answered  
Chosen Option : 3

Q.5 The area of a pathway which is in the shape of a ring with outer circumference 416m and inner circumference 376 m is:

- Ans
- ☒ 1. 2450 m<sup>2</sup>
  - ☒ 2. 2550 m<sup>2</sup>
  - ☒ 3. 2500 m<sup>2</sup>
  - ☒ 4. 2520 m<sup>2</sup>

Question ID : 16794325754  
Status : Answered  
Chosen Option : 1

Q.5 If  $\alpha$  and  $\beta$  are the zeros of the quadratic polynomial  $f(x) = x^2 - px + q$ , then the value of  $\alpha^2 + \beta^2$  is:

- Ans
- ☒ 1.  $q^2 - 2p$
  - ☒ 2.  $q^2 + 2p$
  - ☒ 3.  $p^2 - 2q$
  - ☒ 4.  $p^2 + 2q$

Question ID : 16794325701  
Status : Answered  
Chosen Option : 3

Q.5 The value of the limit  $\lim_{x \rightarrow 0} \left( \frac{2^x - 1}{(1+x)^{\frac{1}{2}} - 1} \right)$  is equal to:

Ans

- ☒ 1.  $2 \log 2$   
☐ 2. 1  
☐ 3. 0  
☐ 4.  $-2 \log 2$

Question ID : 16794325741  
Status : Answered  
Chosen Option : 3

Q.5 If a statistics professor tells his class: "All those who got 100 on the statistics test got 20 on the mathematics test, and all those that got 100 on the mathematics test got 20 on the statistics test", he is saying that the correlation between the statistics test and the mathematics test is:

- Ans ☐ 1. 0  
☐ 2. 0.5  
☒ 3. Negative  
☐ 4. Positive

Question ID : 16794325775  
Status : Answered  
Chosen Option : 4

Q.5 If  $y = 8 + 10 \cos 2x$  then which of the following is satisfied:

- Ans ☐ 1.  $-1 \leq y \leq 4$   
☐ 2.  $-1 \leq y \leq 1$   
☐ 3.  $0 < y < 1$   
☒ 4.  $-2 \leq y \leq 18$

Question ID : 16794325716  
Status : Answered  
Chosen Option : 4

Q.5 In  $\Delta ABC$ , D, E, F are the mid points of side BC, CA and AB respectively. If  $\text{ar}(\Delta ABC) = 16\text{cm}^2$  then  $\text{ar}(\text{trapezium FBCE})$  is equal to:

- Ans ☐ 1.  $16\text{cm}^2$   
☒ 2.  $12\text{cm}^2$   
☐ 3.  $4\text{cm}^2$   
☐ 4.  $8\text{cm}^2$

Question ID : 16794325733  
Status : Answered  
Chosen Option : 2

Q.5 If  ${}^n P_5 = 20 {}^n P_3$  then the value of n is given by:

- Ans ☐ 1. 4  
☐ 2. 2

- ✓ 3. 8  
✗ 4. 6

Question ID : 16794325717  
Status : Answered  
Chosen Option : 3

Q.5 If the angle A of a triangle ABC is given by the equation  $3\cos A + 2 = 0$ ,  $\sin A$  and  $\tan A$  are the roots of the equation:  
8

- Ans ✗ 1.  $6x^2 - 5\sqrt{5}x + 5 = 0$   
✓ 2.  $6x^2 + \sqrt{5}x - 5 = 0$   
✗ 3.  $6x^2 - \sqrt{5}x + 5 = 0$   
✗ 4.  $6x^2 + 5\sqrt{5}x - 5 = 0$

Question ID : 16794325740  
Status : Answered  
Chosen Option : 3

Q.5 If every sides of a triangle is doubled then increase in the area of the triangle is:  
9

- Ans ✓ 1. 300%  
✗ 2. 100%  
✗ 3. 400%  
✗ 4. 200%

Question ID : 16794325749  
Status : Answered  
Chosen Option : 3

Q.6 A chord PQ of a circle of radius 14 cm makes an angle of 30 degrees at the centre, the area of the major segment:  
0

- Ans ✓ 1.  $613.67 \text{ cm}^2$   
✗ 2.  $623.76 \text{ cm}^2$   
✗ 3.  $600 \text{ cm}^2$   
✗ 4.  $633.67 \text{ cm}^2$

Question ID : 16794325753  
Status : Answered  
Chosen Option : 2

Q.6 If the slope of the regression line is calculated to be 2.5 and the intercept 16 then the value of Y when X is 4 is:  
1

- Ans ✗ 1. 33  
✗ 2. 18  
✓ 3. 26  
✗ 4. 29

Question ID : 16794325773  
Status : Answered  
Chosen Option : 3

Q.6  
2 Solve:

$$x = \frac{1}{2 - \frac{1}{2 - \frac{1}{2-x}}}, x \neq 2$$

- Ans
- ✓ 1.  $x = 1, 1$
  - ✗ 2.  $x = 0, 1$
  - ✗ 3.  $x = -1, 1$
  - ✗ 4.  $x = -1, -1$

Question ID : 16794325711  
Status : Answered  
Chosen Option : 1

Q.6  
3 Two supplementary angles are in the ratio 2:3, the angles are:

- Ans
- ✗ 1.  $60^\circ, 120^\circ$
  - ✓ 2.  $72^\circ, 108^\circ$
  - ✗ 3.  $78^\circ, 102^\circ$
  - ✗ 4.  $52^\circ, 128^\circ$

Question ID : 16794325728  
Status : Answered  
Chosen Option : 2

Q.6  
4 How many number of six digits which can be formed from the digits 4,5,6,7,8,9 no digits being repeated are not divisible by 5?

- Ans
- ✗ 1. 780
  - ✓ 2. 600
  - ✗ 3. 690
  - ✗ 4. 540

Question ID : 16794325718  
Status : Answered  
Chosen Option : 1

Q.6  
5 If  $f(x) = 3e^{x^3}$  then  $f'(x) - 3x^2 f(x) + \left(\frac{1}{3}\right) f(0) - f'(0)$  is equal to:

- Ans
- ✗ 1.  $e^{-x^2}$
  - ✗ 2.  $e^{x^2}$
  - ✗ 3. 0
  - ✓ 4. 1

Question ID : 16794325724  
Status : Answered  
Chosen Option : 3

Q.6  
6 The value of k for the probability density function of a variate X is equal to:

X	0	1	2	3	4	5	6
P(X)	k	2k	4k	6k	7k	8k	11k

- Ans
- ☒ 1. 0
  - ☒ 2. 1
  - ☒ 3.  $\frac{1}{39}$
  - ☒ 4.  $\frac{1}{35}$

Question ID : 16794325772  
Status : Answered  
Chosen Option : 3

Q.6  
7 The organization of content in the text-book of mathematics should be:

- Ans
- ☒ 1. According to student
  - ☒ 2. According to curriculum
  - ☒ 3. According to teachers
  - ☒ 4. According to parents

Question ID : 16794325778  
Status : Answered  
Chosen Option : 2

Q.6  
8 If  $f(x) = 1 + \frac{1}{x}$ , then the value of  $f\left(f\left(\frac{1}{x}\right)\right)$  is:

- Ans
- ☒ 1.  $\frac{x}{x+1}$
  - ☒ 2.  $x$
  - ☒ 3.  $\frac{x+2}{x+1}$
  - ☒ 4.  $\frac{-x}{x-1}$

Question ID : 16794325723  
Status : Answered  
Chosen Option : 3

Q.6  
9 Achievement test are

- Ans
- ☒ 1. Test of maximum performance
  - ☒ 2. Test of performance

☒ 3. Test of minimum performance

☒ 4. Test of natural performance

Question ID : 16794325779

Status : Answered

Chosen Option : 2

Q.7  
0 The value of  $({}^{15}C_0^2 - {}^{15}C_1^2) + {}^{15}C_2^2 - \dots - {}^{15}C_{15}^2$  is:

Ans ☒ 1. 15

☒ 2. 1

☒ 3. -15

☒ 4. 0

Question ID : 16794325720

Status : Answered

Chosen Option : 4

Q.7  
1 The remainder when the square of any prime number is greater than 3 is divided by 6 is:

Ans ☒ 1. 4

☒ 2. 3

☒ 3. 2

☒ 4. 1

Question ID : 16794325689

Status : Answered

Chosen Option : 4

Q.7  
2 The number of diagonals which can be drawn in a plane figure of 16 sides is:

Ans ☒ 1. 190

☒ 2. 153

☒ 3. 170

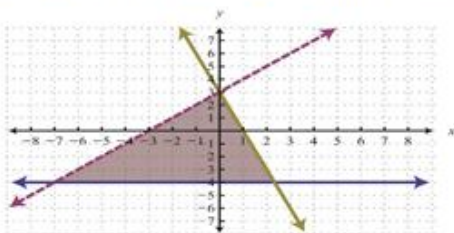
☒ 4. 104

Question ID : 16794325719

Status : Answered

Chosen Option : 4

Q.7  
3 The shaded region in the graph is shown by the inequalities:



Ans ☒ 1.  $y \geq -4$ ;  $y < x + 3$ ;  $y \leq -3x + 3$



☐ 2.  $y \geq -4; y < x+3; y \geq -3x+3$

☐ 3.  $y \leq -4; y < x+3; y \geq -3x+3$

☐ 4.  $y \leq -4; y < x+3; y \leq -3x+3$

Question ID : 16794325704

Status : Answered

Chosen Option : 2

Q.7  
4 If  $\frac{1}{b+c}, \frac{1}{a+c}, \frac{1}{b+a}$  are in A.P. then  $a^2, b^2, c^2$  are in:

Ans ☐ 1. HP

☒ 2. AP

☐ 3. GP

☐ 4. None of these

Question ID : 16794325715

Status : Answered

Chosen Option : 2

Q.7  
5 If mean is 11 and median is 13 then value of mode is:

Ans ☐ 1. 11

☐ 2. 13

☒ 3. 17

☐ 4. 15

Question ID : 16794325762

Status : Answered

Chosen Option : 3

Q.7  
6 If  $f(x) = x \tan^{-1} x$  then  $f'(1)$  is:

Ans ☒ 1.  $\frac{\pi+2}{4}$

☐ 2. 1

☐ 3.  $\frac{\pi}{8}$

☐ 4. 0

Question ID : 16794325736

Status : Answered

Chosen Option : 2

Q.7  
7 In two units of company, employees in unit one is 625 and monthly salary is ₹ 2730, employees in unit two are 725 and monthly salary is ₹ 2520 then combined approximate arithmetic mean (in ₹) is:

Ans ☒ 1. 2617

☐ 2. 2537

☐ 3. 2517

☐ 4. 2618

Question ID : 16794325761

Status : Answered

Chosen Option : 4

Q.7 The minute hand of a clock is 14cm long. The area swept by it between 8.30am and 8.40am is:

8

Ans ☐ 1.  $101.76\text{cm}^2$

☒ 2.  $102.67\text{cm}^2$

☐ 3.  $101.67\text{cm}^2$

☐ 4.  $102.76\text{cm}^2$

Question ID : 16794325756

Status : Answered

Chosen Option : 3

Q.7 If the point (x, y) is equidistant from the point (a + b, b - a) and (a - b, a + b), then which of the following holds:

9

Ans ☒ 1.  $bx = ay$

☐ 2.  $bx + ay = 0$

☐ 3.  $by + ax = 0$

☐ 4.  $by = ax$

Question ID : 16794325743

Status : Answered

Chosen Option : 2

Q.8

0

The system of congruence  $\begin{cases} x \equiv 1 \pmod{3} \\ x \equiv 4 \pmod{5} \\ x \equiv 6 \pmod{7} \end{cases}$  is equivalent to:

Ans ☐ 1.  $x \equiv 24 \pmod{105}$

☐ 2.  $x \equiv 12 \pmod{105}$

☒ 3.  $x \equiv 34 \pmod{105}$

☐ 4.  $x \equiv 32 \pmod{105}$

Question ID : 16794325694

Status : Answered

Chosen Option : 1

Q.8 If a gymnastics coach has 77 gymnasts, their heights are as follows (in cm): 172,

1

173, 164, 178, 168, 169, 173, 172, 173, 164, 178, 168, 169, 173, then the average deviation of this data is:

Ans ☐ 1. 2.43

☒ 2. 3.43

☒ 3. 2.73

☒ 4. 3.73

Question ID : 16794325763

Status : Answered

Chosen Option : 3

Q.8 The coordinates of point which trisects the line segment joining (1,-2) and (-3,4) are:

Ans

☒ 1.  $(-\frac{1}{3}, 0), (\frac{-5}{3}, 2)$

☒ 2.  $(\frac{1}{3}, 0), (\frac{5}{3}, 2)$

☒ 3.  $(\frac{1}{3}, 0), (\frac{-5}{3}, 2)$

☒ 4.  $(-\frac{1}{3}, 0), (\frac{5}{3}, 2)$

Question ID : 16794325744

Status : Answered

Chosen Option : 4

Q.8 If  $\frac{9^n 3^2 (3^{(-n/2)})^2 - 27^n}{3^a m 2^3} = \frac{1}{27}$ , then m and n is related by:

Ans

☒ 1.  $mn=1$

☒ 2.  $m-n=1$

☒ 3.  $m=n$

☒ 4.  $m+n=1$

Question ID : 16794325686

Status : Answered

Chosen Option : 2

Q.8 If the sum of n terms of an A.P. is 48, the first term is 20 and the common difference is -4, then the number of items is:

4

Ans

☒ 1. 12, 2

☒ 2. 3, 8

☒ 3. 6, 4

☒ 4. 15, 5

Question ID : 16794325713

Status : Answered

Chosen Option : 2

Q.8 If n is a positive integer and  $(n+1)(n+3)$  is odd, then  $(n+2)(n+4)$  must be a multiple of which one from the following:

5

Ans

☒ 1. 16

☒ 2. 3

☒ 3. 5

✓ 4. 8

Question ID : 16794325690  
Status : Answered  
Chosen Option : 1

Q.8  
6 If the HCF of 210 and 55 is expressed in the form  $210x + 55y$ , then the value of  $y$  is:

- Ans
- ✗ 1. -17
  - ✓ 2. -19
  - ✗ 3. 17
  - ✗ 4. 19

Question ID : 16794325687  
Status : Answered  
Chosen Option : 2

Q.8  
7 The product of the eigen values of the matrix is:

$$A = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 3 & -1 \\ 0 & -1 & 3 \end{bmatrix}$$

- Ans
- ✗ 1. 3
  - ✗ 2. -1
  - ✗ 3. 1
  - ✓ 4. 8

Question ID : 16794325700  
Status : Answered  
Chosen Option : 4

Q.8  
8 If  $6^n - 5n$  is divisible by 25 then it always leave the remainder:

- Ans
- ✗ 1. 0
  - ✓ 2. 1
  - ✗ 3. 3
  - ✗ 4. 2

Question ID : 16794325734  
Status : Answered  
Chosen Option : 1

Q.8  
9 A cube of side two meter length is cut into small cubes of side 20 cm each. How many such small cubes can be obtained?

- Ans
- ✗ 1. 100
  - ✗ 2. 1
  - ✗ 3. 10
  - ✓ 4. 1000

Question ID : 16794325751  
Status : Answered  
Chosen Option : 1

Q.9  
0 Which of the following is true?

- Ans ☒ 1.  $12^6 \bmod 7 \equiv 1$   
☒ 2.  $16^7 \bmod 8 \equiv 1$   
☒ 3.  $18^8 \bmod 9 \equiv 1$   
☒ 4.  $14^6 \bmod 7 \equiv 1$

Question ID : 16794325696  
Status : Answered  
Chosen Option : 3

Q.9  
1 How many minimum number of square tiles are needed to cover a rectangular floor of dimension 6.25 m and 6 m completely?

- Ans ☒ 1. 600  
☒ 2. 525  
☒ 3. 550  
☒ 4. 500

Question ID : 16794325755  
Status : Answered  
Chosen Option : 3

Q.9  
2 The value of  $\int_{-2}^2 f(x)dx$ , where  $f(x) = 1 + 2x, x \leq 0$ ;  $f(x) = 1 - 2x, x \geq 0$  is:

- Ans ☒ 1. -2  
☒ 2. 0  
☒ 3. 4  
☒ 4. -4

Question ID : 16794325725  
Status : Answered  
Chosen Option : 2

Q.9  
3 PA and PB are tangents to the circle with centre O, from a point P outside the circle and A and B are points on the circle. If angle APB =  $38.5^\circ$ , then angle OAB is equal to:

- Ans ☒ 1.  $50.25^\circ$   
☒ 2.  $38.5^\circ$   
☒ 3.  $19.25^\circ$   
☒ 4.  $25.5^\circ$

Question ID : 16794325730  
Status : Answered  
Chosen Option : 1

Q.9  
4 The points (0,-1), (-2,3), (6,7) and (8,3) are:

- Ans
- ☒ 1. Collinear points
  - ☒ 2. Vertices of a parallelogram which is not a square
  - ☒ 3. Vertices of a Trapezium but not a parallelogram
  - ☒ 4. Vertices of a parallelogram which is not a rectangle

Question ID : 16794325735  
Status : Answered  
Chosen Option : 4

Q.9  
5 If  $x = \frac{1}{\sin \theta} - \frac{\cos \theta}{\sin \theta}$  and  $y = \frac{1}{\sin \theta} + \frac{\cos \theta}{\sin \theta}$  then which of the following is true.

- Ans
- ☒ 1.  $xy = 1$
  - ☒ 2.  $x - y = 0$
  - ☒ 3.  $x - y = 1$
  - ☒ 4.  $x + y = 1$

Question ID : 16794325760  
Status : Answered  
Chosen Option : 1

Q.9  
6 If  $\alpha, \beta$  be the roots of the equation  $ax^2 - bx + b = 0$  then the value of  $\sqrt{\frac{\alpha}{\beta}} + \sqrt{\frac{\beta}{\alpha}}$  is equal to:

- Ans
- ☒ 1.  $\sqrt{\frac{b}{a}}$
  - ☒ 2. 0
  - ☒ 3. 1
  - ☒ 4.  $\sqrt{\frac{a}{b}}$

Question ID : 16794325709  
Status : Answered  
Chosen Option : 1

Q.9  
7 If  $n$  is a natural number then  $9^{2n} - 4^{2n}$  is always divisible by:

- Ans
- ☒ 1. Only 5
  - ☒ 2. Only 13
  - ☒ 3. Both 5 and 13
  - ☒ 4. Only 36

Question ID : 16794325688  
Status : Answered



Chosen Option : 3

Q.9  
8 If  $n$  is an integer, when  $(3n+3)^3$  is divided by 9 then remainder is equal to:

- Ans
- ☒ 1. 3
  - ☒ 2. 0
  - ☒ 3. 2
  - ☒ 4. 1

Question ID : 16794325692

Status : Answered

Chosen Option : 2

Q.9  
9 Let  $\Delta ABC \sim \Delta QPR$  and  $\frac{\text{ar}(\Delta ABC)}{\text{ar}(\Delta PQR)} = \frac{1}{16}$ . If  $AB = 12$  cm,  $BC = 6$  cm and  $AC = 9$  cm, then  $QP$  is equal to:

- Ans
- ☒ 1. 48 cm
  - ☒ 2. 32 cm
  - ☒ 3. 16 cm
  - ☒ 4. 8 cm

Question ID : 16794325731

Status : Answered

Chosen Option : 1

Q.1  
00 Two coconuts have spherical space inside their kernels, with the first having an inner diameter twice that of the other. The larger one is half filled with liquid, while the smaller is completely filled. Which of the following statements is correct?

- Ans
- ☒ 1.

The larger coconut contains 4 times the liquid in the smaller one.

☒ 2. The coconuts contain equal volumes of liquid.

☒ 3.

The smaller coconut contains twice the liquid in the larger one.

☒ 4.

The larger coconut contains twice the liquid in the smaller one.

Question ID : 16794325782

Status : Answered

Chosen Option : 3