



DSSSB SEP 2018

| Participant ID: | |
|-------------------|----------------------------|
| Participant Name: | |
| Test Center Name: | |
| Test Date: | 27/09/2018 |
| Test Time: | 12:30 PM - 2:30 PM |
| Subject: | TGT NATURAL SCIENCE FEMALE |

| Q.1 | How would the pattern appear when the transparent sheet is folded at the dotted line: | Question ID : 16794316349 |
|-----|---|----------------------------------|
| | · △ · o △ o | |
| Ans | X 1. | |
| | ★ 2. ○ ♣ ○ | |
| | 3. | CHERS |
| | X4. 0 0 0 0 | dazyr |
| Q.2 | Spot the embedded figure given below from the options. | Question ID : 16794316346 |









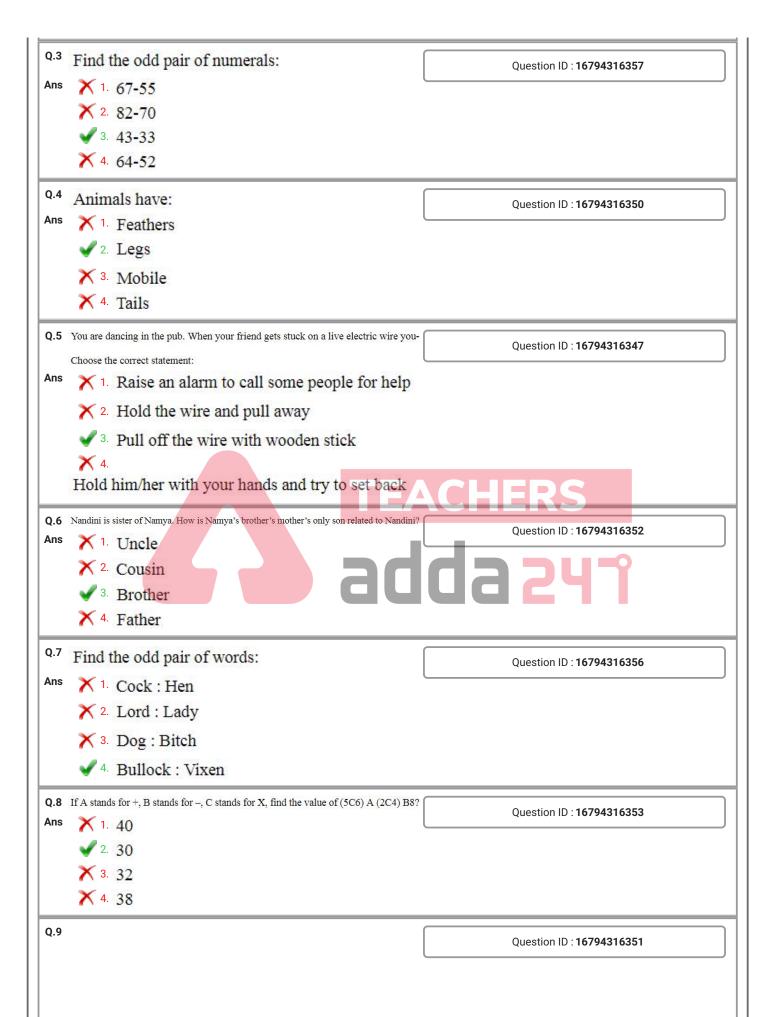


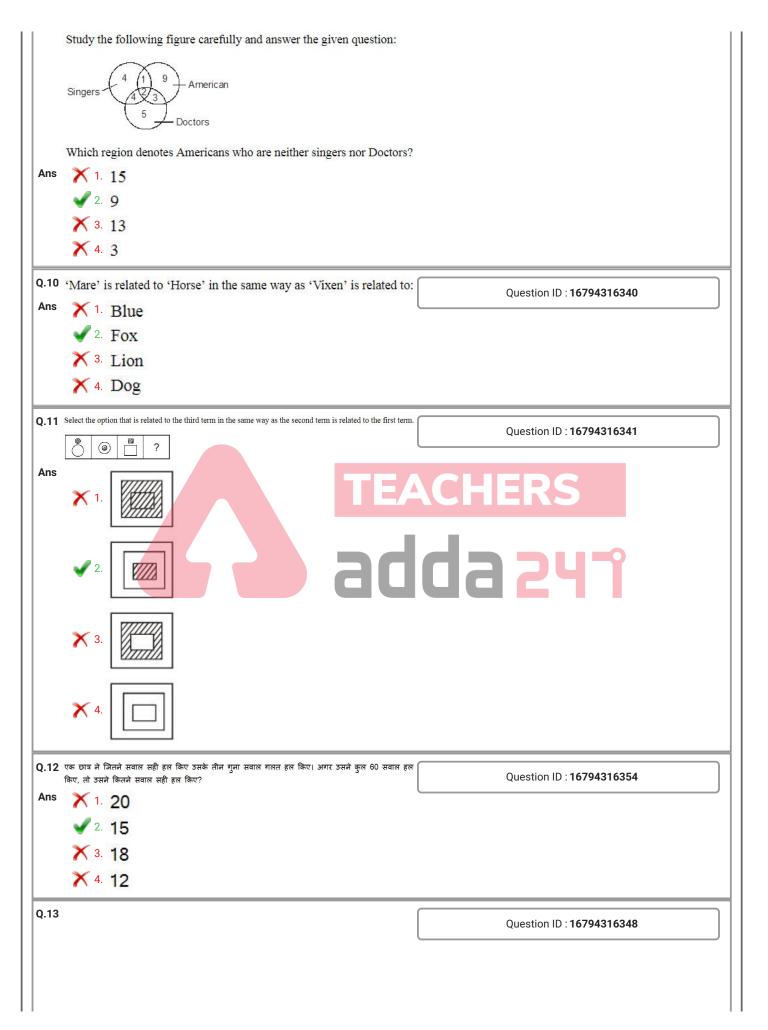




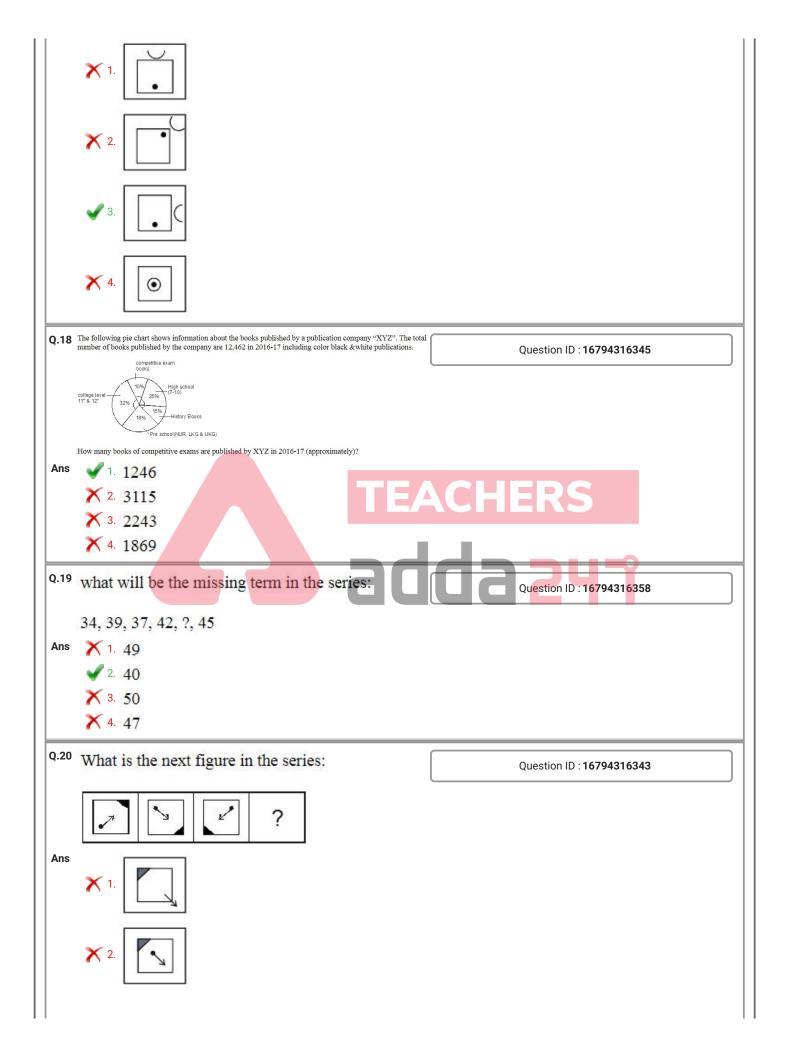


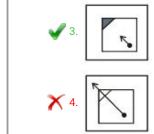






| | The following are the conditions for selecting list of a suitable candidates to be called for interview after the written test for the recruitment is conducted/ organized for management-level persons of a multi-national company. For providing accounting services and sales the candidate must (a) be holding a graduation in basic science with 65% or above or B.E degree with 55% and above marks (b) have passed the written test with 70% or above marks (c) the age must be in the group 25 to 30 yrs as on 1/4/18 (d) have experience in an accounting firms for three yrs and diploma in accounting with 60% or above marks (e) be presently drawing CTC of 61.akhs per annum and above In case the applicant who satisfies all other terms above except 1) at (a) above, then be referred as Junior Accountant 2) at (d) & (e) above then be referred as Trainee-Accountant Satisfying all the above with experience of 5 yrs then be referred as senior-Accountant Satisfying all the above criteria (a-e) with CA/ ICWA/ MBA (Finance) then be referred as manager (Accounts) Read all the above information and answer the following question: Radha Mohan has done her graduation in physics with 58% of marks. She has passed the written examination with 76% of marks. She is 27 yrs as on June 2018. She has the experience in the accounting company for four years with salary of 7 Lakhs per annum. She also has passed diploma in accounting with 61% of marks. She may be referred for the position of: 1. Manager-Accountant 2. Trainee-Accountant 3. Senior-Accountant 4. Junior-Accountant | |
|-------------|--|----------------------------------|
| Q.14 | Choose the odd figure in the series: | Question ID : 16794316342 |
| | 2. D 3. A 4. C What will be the missing term in the series: F, H, J, M, P, T, ? | Question ID : 16794316359 |
| | X 2. G | |
| | X 3. L | |
| | ★ 4. T | |
| Q.16 Ans | The ratio between the present ages of M and N is 5: 8. If N is 6 years older than M, what will be the ratio of the ages of M and N after 6 years? 1. 8: 15 | Question ID : 16794316355 |
| | × 2. 16: 24 | |
| | × 3. 17 : 8 | |
| | √ 4. 8:11 | |
| Q.17 | What will be the next figure in the series: | Question ID : 16794316344 |
| Ans | ? | |

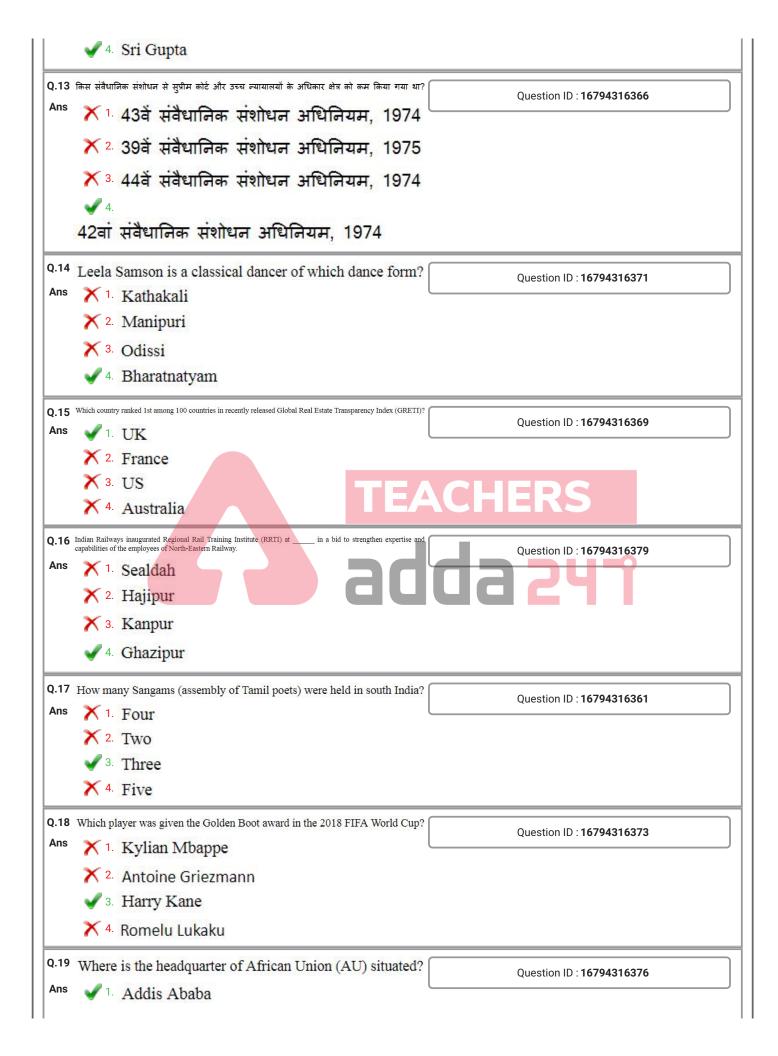




4. Merrut

Section: General Awareness Q.1 Where is the capital city of Belarus located? Question ID: 16794316363 Ans X 1. Bucharest √ 2. Minsk X 3. Lisbon X 4. Baku Q.2 According to updated World Bank figures on GDP of countries for 2017, India has become world's _____ biggest economy. Question ID: 16794316368 Ans X 1. Tenth × 2. Eighth X 3. Seventh 4. Sixth Q.3 What is the study of new born called? Question ID: 16794316375 Ans X 1. Kalology X 2. Cytology √ 3. Neonatology X 4. Gynecology Q.4 वर्गीकरण मैच में तीसरे स्थान पर, अजेंटीना ने सुल्तान अज़लान शाह कप 2018 के 27वें संस्करण में 3-2 गोल करके Question ID: 16794316374 Ans 🗙 1. इंग्लैंड 🗙 2. इंडिया √ 3. मलेशिया X 4 दक्षिण कोरिया On 10th May Sepoy Mutiny broke out at: Question ID: 16794316362 Ans X 1. Barrackpore X 2. Kanpur X 3. Jhansi

| Q.6 | The 5th President of India was | Question ID : 16794316367 |
|------|---|----------------------------------|
| Ans | ★ 1. Shri Neelam Sanjeeva Reddy | |
| | × 2. Giani Zail Singh | |
| | ✓ 3. Dr. Fakhruddin Ali Ahmed | |
| | × 4. Shri V.V. Giri | |
| 0.7 | 'Tawa Project' is an irrigation project of which state? | |
| Ans | 1. Odisha | Question ID : 16794316364 |
| | × 2. Telangana | |
| | POST AND | |
| | ✓ 3. Madhya Pradesh | |
| | × 4. Rajasthan | |
| Q.8 | Who among the following is a famous 'Dhrupad' singer of India? | Question ID : 16794316372 |
| Ans | ★ 1. Ustad Ghulam Mustafa Khan | |
| | × 2. Ustad Mazhar Ali Khan | |
| | ✓ 3. Ustad Rahim Fahimuddin Dagar | |
| | X 4. Ustad Bade Ghulam Ali Khan | |
| Q.9 | Which of the following article provides that the State shall endeavour for the promotion of international peace and security? | Question ID : 16794316365 |
| Ans | ✓ 1. Article 51 | |
| | × 2. Article 47 | |
| | X 3. Article 50 | da 241 |
| | × 4. Article 45 | ud E 7 I |
| Q.10 | The of Kargil Vijay Diwas was celebrated across India on 26 July 2018. | Question ID : 16794316378 |
| Ans | ★ 1. 16th anniversary | |
| | × 2. 18th anniversary | |
| | ★ 3. 17th anniversary | |
| | √ 4. 19th anniversary | |
| 0.11 | Ministry of Earth Sciences has unveiled SAFAR (System of Air Quality and Weather Forecasting), the first of its kind | |
| Ans | and most advanced system in India in 1. Ahmedabad | Question ID : 16794316377 |
| | × 2. Mumbai | |
| | ✓ 3. Delhi | |
| | × 4. Pune | |
| 0.12 | Which of the following rulers established the Gupta dynasty? | |
| Ans | Ramgupta | Question ID : 16794316360 |
| | | |
| | × 2. Samudragupta | |
| | 🔀 3. Chandragupta I | |



X 4. Harare Q.20 Kavadi is a folk dance associated with which state of India? Question ID: 16794316370 Ans X 1. Goa 2. Tamil Nadu X 3. Karnataka X 4. Kerala Section: Arithmetic Ability The value of $1 + \frac{1}{2 + \frac{1}{3 + \frac{5}{4}}}$ is equal to: Ouestion ID: 16794316381 Ans \times 1. $\frac{51}{23}$ **√** 2. $\frac{75}{52}$ **ACHERS** \times 3. $\frac{49}{21}$ \times 4. $\frac{77}{52}$ Q.2 एक त्रिभुज की भुजाएं 16 cm, 30 cm और 34 cm हैं। इसकी सबसे छोटे शीर्ष लम Question ID: 16794316391 दशमलव स्थान तक सही) Ans √ 1. 14.1 cm X 2. 16 cm X 3. 15.4 cm X 4. 14.6 cm Q.3 A person takes a loan at simple interest of 4% per annum for first year with an increase of 0.5 in each subsequent years. If he paid ₹ 5,309 as interest after 4 years, how much loan did he take? Question ID: 16794316389 Ans X 1. ₹ 18,700 √ 2. ₹ 18,300 X 3. ₹ 18,400 X 4. ₹ 18,600 Q.4 A trader marks his goods 50% above cost price. He sells 40% of his stock at 10% discount, 30% of stock at 20% discount and remaining stock at 30% discount on marked price. What is his overall profit percent? Question ID: 16794316388 Ans X 1. 23.5% X 2. 25.5% X 3. 18.5% 4. 21.5%

² CairoNairobi

Q.5 18 वस्तुएं बेचकर एक दुकानदार 2 वस्तुओं का बिक्री मूल्य खो देता है। उसका हानि प्रतिशत क्या है? Question ID: 16794316387 1. 10% Ans $\times 2. \frac{100}{9}\%$ \times 3. $\frac{100}{11}\%$ \times 4. $\frac{109}{11}$ % **Q.6** एक घनाब के आयामों का योग 30 cm है और इसका विकर्ण $2\sqrt{77}$ cm है। घनाब का कुल सतह क्षेत्रफल क्या है? Ouestion ID: 16794316392 Ans √ 1. 592 cm² X 2. 588 cm² X 3. 596 cm² X 4. 576 cm² Q.7 तांबे और जिंक की मिश्र धात् में वजन द्वारा 80% जिंक है। यदि इस मिश्र धात् के 350 ग्राम में 50 ग्राम तांबा Question ID: 16794316385 मिलाया जाता है, तो नई मिश्र धात् में तांबे का प्रतिशत क्या होता है? Ans X 1. 25% X 2. 40% **EACHERS** √ 3. 30%. X 4. 32% Q.8 If a:b=2:5, b:c=7:8, then 5a:3b:7c is equal to: Question ID: 16794316384 Ans X 1. 5:3:7 × 2.3:6:14 X 3. 4:6:15 4. 2:3:8 Q.9 In an examination 260 students appeared. Of these, 68% passed in mathematics, 72% passed in science and 20% failed in both subjects. How many students passed in both subjects? Question ID: 16794316386 **1.** 156 Ans X 2. 148 X 3. 132 X 4. 104 Q.10 The difference between compound interest and simple interest for 2 years on ₹ 4,200 is ₹ 34.02. The rate of interest per annum is: Question ID: 16794316390 Ans 1. 9% X 2. 11% X 3. 10% X 4. 8% Q.11 A train without stoppage travels on an average speed of 80 km/h and with stoppage it travels at 64 km/h. How many Question ID: 16794316393 Ans X 1. 14

| | 3. 12 | |
|------|--|---|
| | ★ 4. 10 | |
| Q.12 | The value of $\frac{94.3 \times 94.3 + 5.7 \times 5.7 - 94.3 \times 5.7}{9.43 \times 9.43 \times 9.43 + 0.57 \times 0.57 \times 0.57}$ is equal to | Question ID : 16794316380 |
| Ans | √ 1. 10 | |
| | × 2. 100 | |
| | × 3. 1000 | |
| | × 4. 10000 | |
| Q.13 | What is the greatest five digit number which when divided by 6, 7, 8 and 12 leaves the remainder 4 in each case | Question ID : 16794316383 |
| Ans | 1. 37 | Quodisinis (1977-1978) |
| | × 2. 35 | |
| | × 3. 34 | |
| | × 4. 36 | |
| Q.14 | एक नाव 2 घंटे 20 मिनट में धारा के प्रतिकूल 16 km जा सकती है और मूल बिंदु पर लौट सकती है। यदि धारा वें गति 2 km/hr है, तो स्थिर पानी में नाव की गति km/hr में क्या है? | Question ID : 16794316394 |
| Ans | √ 1. 14 | |
| | X 2. 15 | |
| | X 3. 18 | ACHERS |
| | X 4. 16 | ACTIENS |
| Q.15 | If 3 women or 5 men can do a piece of work in 60 hours, then in how many hours 8 men and 12 women will complet | |
| Ans | that work? X 1. 8 | Question ID : 16794316395 |
| | X 2. 9 | |
| | × 3. 10 | |
| | ✓ 4. 12 | |
| Q.16 | The HCF of two numbers is 18 and their sum is 288. If both numbers are three digit numbers, what is the sum of their | r |
| Ans | reciprocals? | Question ID : 16794316382 |
| | × 1. $\frac{8}{495}$ | |
| | | |
| | × 2. 7 567 | |
| | | |
| | √ 3. $\frac{8}{567}$ | |
| | \times 4. $\frac{16}{63}$ | |
| | 4. 63 | |
| Q.17 | A और B एक काम को क्रमशः 30 दिन और 20 दिन में पूरा कर सकते हैं। दोनों ने एक साथ काम शुरू किय | , |
| Ans | लेकिन 6 दिन के बाद A ने काम छोड़ दिया । कितने दिनों में काम पूरा किया गया? | Question ID : 16794316396 |
| Allo | X 1. 10 | |
| | X 2. 14 | |
| | √ 3. 16 | |
| | | |

X 2. 16

Comprehension:

The following table gives the savings in rupees, from the pocket money of A and B during 6 months. Read the table and answer the following questions:

| Month | March | April | May | June | July | August |
|-------|-------|-------|-----|------|------|--------|
| A | 140 | 120 | 100 | 160 | 140 | 140 |
| В | 180 | 140 | 100 | 140 | 130 | 210 |

SubOuestion No: 18

Q.1 The savings of A for the month of April is what percent of total savings of A of all 6 months?

Question ID: 16794316399



Comprehension:

The following table gives the savings in rupees, from the pocket money of A and B during 6 months. Read the table and answer the following questions:

| · | 92 | | | 20 | | |
|-------|-------|-------|-----|------|------|--------|
| Month | March | April | May | June | July | August |
| A | 140 | 120 | 100 | 160 | 140 | 140 |
| В | 180 | 140 | 100 | 140 | 130 | 210 |

SubQuestion No: 19

Q.1 The savings of B are what percent more than savings of A?

Question ID: 16794316398

Ans

$$\times 1. \frac{100}{9}\%$$

Comprehension:

The following table gives the savings in rupees, from the pocket money of A and B during 6 months. Read the table and answer the following questions:

| Month | March | April | May | June | July | August |
|-------|-------|-------|-----|------|------|--------|
| A | 140 | 120 | 100 | 160 | 140 | 140 |
| В | 180 | 140 | 100 | 140 | 130 | 210 |

SubQuestion No: 20

Q.2 If savings of B are represented in a pie-chart, what is the central angle of the sector representing the savings for the month of June?

Question ID: 16794316400

Question ID: 16794316405

Question ID: 16794316414



X 2. 62°

X 3. 66°

X 4. 60°

Section: General English

Q.1 Choose the most appropriate grammatical sentence from the following:



Three quarter of the students are against the new rules



Three quarters of the students is against the new rules



The three quarters of the students is against the new rules



Three quarters of the students are against the new rules

Q.2 Choose the most appropriate grammatical sentence from the following:



The number of engineering colleges is gradually being reduced.



The number of engineering colleges are gradually reduced.



The number of engineering colleges is gradually reduced.

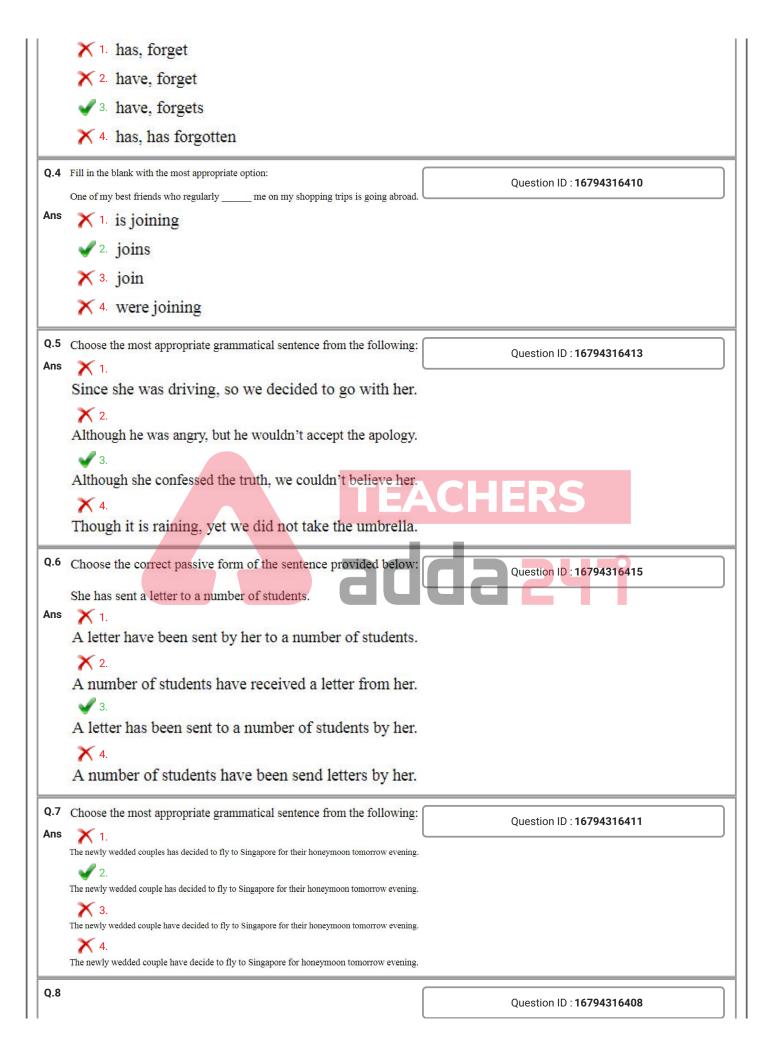


The number of engineering colleges are gradually being reduced.

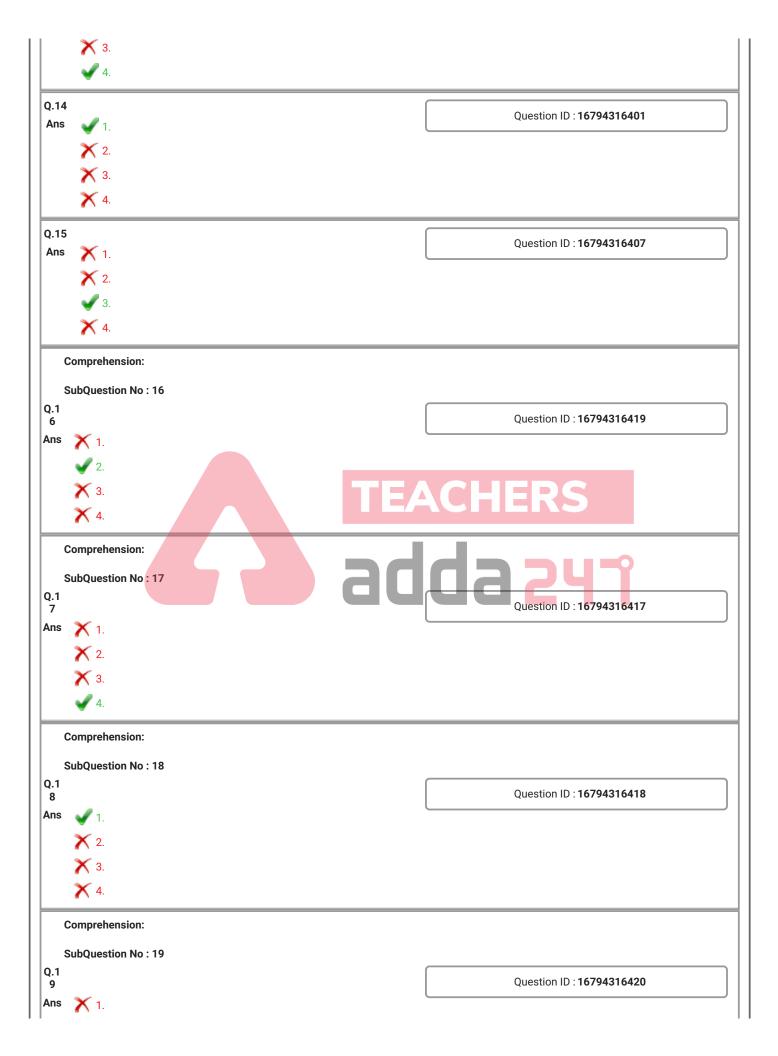
Q.3 Fill in the blank with the most appropriate option:

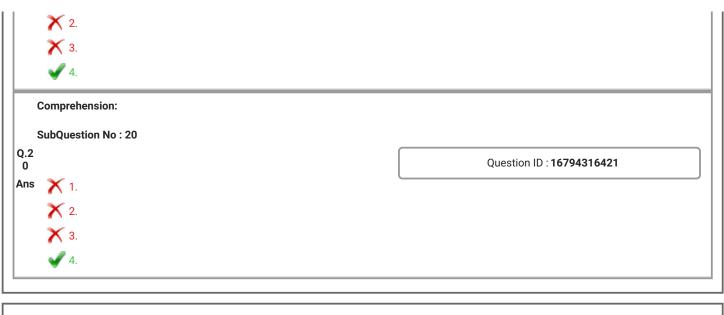
She seems to always _____ things to do that she ____ all the time.

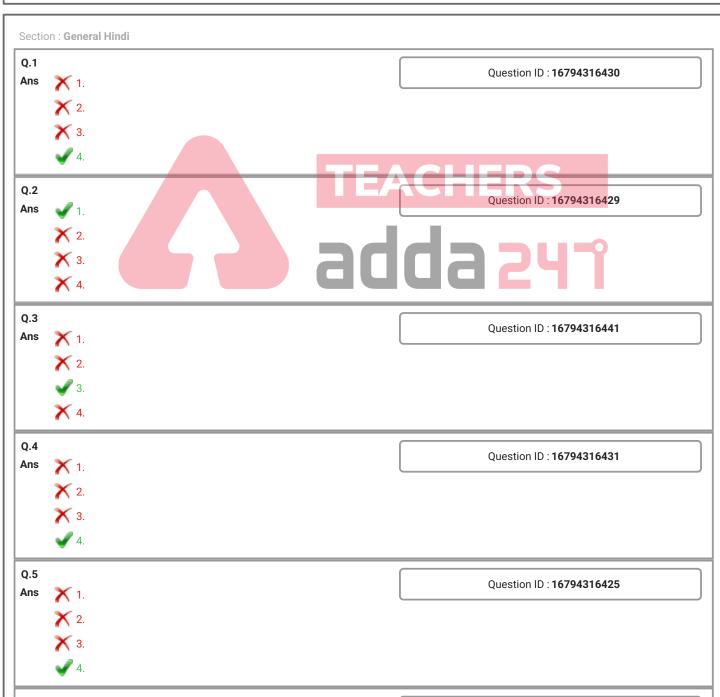
Question ID: 16794316406

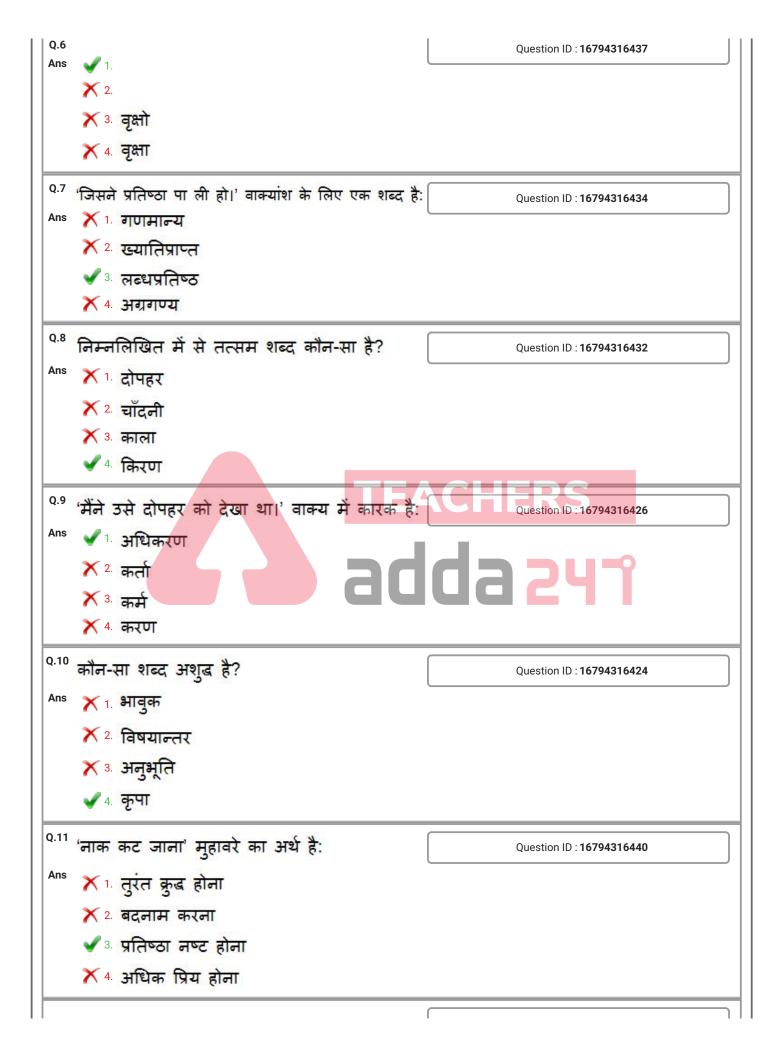


| | Fill in the blank with the most appropriate option: |
|-------------|--|
| | The arrival of many delegates a positive outlook. |
| Ans | × 1. Indicate |
| | × 2. is |
| | ✓ 3. indicates |
| | × 4. are |
| Q.9 | Fill in the blank with the most appropriate option: Question ID: 16794316404 |
| | If you had told me what was wrong, |
| Ans | ★ 1. I will not have hesitated to help you |
| | × 2. I will have hesitate to help you |
| | ✓ 3. I would not have hesitated to help you |
| | × 4. I would not hesitate to help you |
| | - Washing and the Secretary of Control of Co |
| Q.10 Ans | Choose the most appropriate grammatical sentence from the following: Question ID: 16794316402 |
| Alis | 1. I have a great time at your party last week. |
| | I have had a great time at your party last week. |
| | ★ 3. I had a greatest time at your party last week. |
| | The state of the s |
| _ | ✓ 4. I had a great time at your party last week. |
| | Choose the most appropriate grammatical sentence from the following: Question ID: 16794316403 |
| Ans | X 1. What would you do when you will finish alasses? |
| | What would you do when you will finish classes? |
| | What would you do when you finishes classes? |
| | ✓ 3. What will you do when you finish classes? |
| | × 4. |
| | What will you do when you will finish classes? |
| 0.12 | \$24.00 (1900 1977) a 10.00 1 (1900 10 (1900 1970 1970 1970 1970 1970 1970 1970 |
| Ans | Choose the most appropriate grammatical sentence from the following: Question ID: 16794316412 |
| | Who is supplying these students with such dangerous drugs? |
| | × 2. |
| | X 3. |
| | ★ 4. |
| Q.13 | Question ID : 16794316409 |
| Ans | X 1. |
| | ★ 2. |

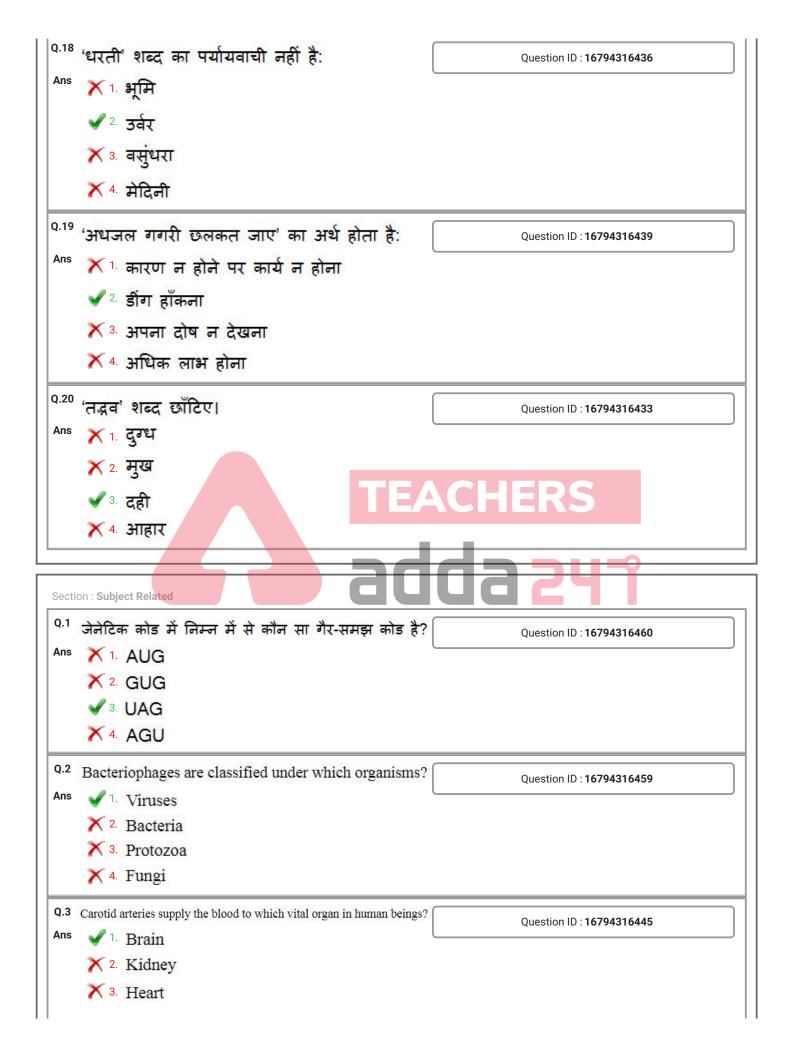


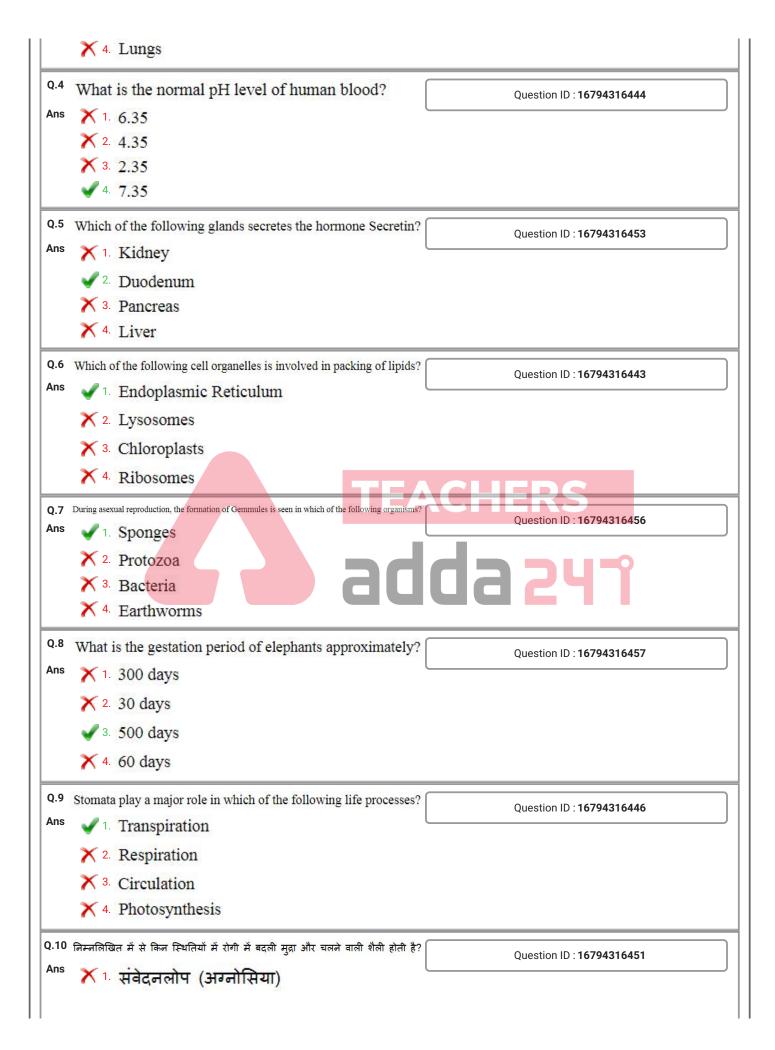


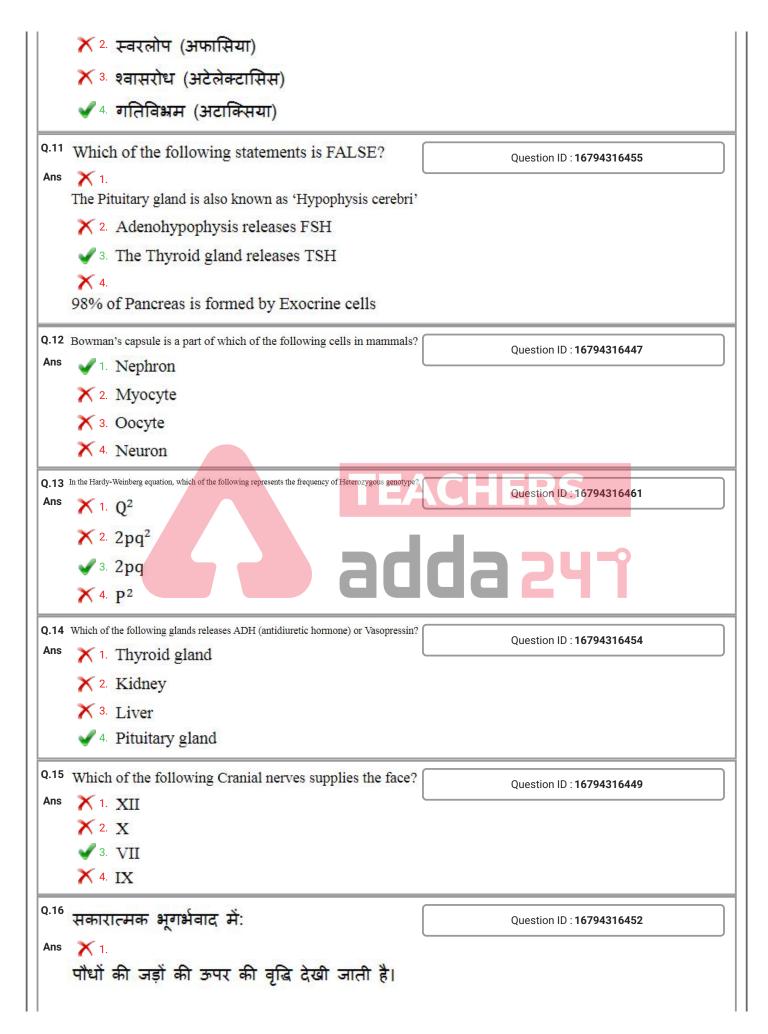




Q.12 'वही <u>अपराधी</u> है।' रेखांकित का विलोम होगा: Question ID: 16794316435 Ans 🗸 1. निरपराध 🗙 2. कुसूरवार 🗙 ३. कुख्यात 🗙 4. निर्दोष Q.13 'ग्रामगत' शब्द में समास है: Question ID: 16794316428 Ans 🗸 1. तत्पुरूष 🗶 2. बहुब्रीहि X 3. अटययीभाव 🗙 4. दवंदव वर्णमाला में 'इ' से पहले कौन-सा वर्ण आता है? Question ID: 16794316423 Ans 💢 1. ढ X 2. ET 🗸 3. ਬ X 4. ठ ^{Q.15} कर्तृवाच्य वाला वाक्य छाँटिए। Question ID: 16794316438 Ans 🔀 1. प्रश्नपत्र बनाया गया। X 2 भोजन कर लिया जाए। √ 3. आज हम यहीं रुकेंगे। 🗙 4. सारा सामान लाया जा चुका है। ^{Q.16} 'वर्त्स्य' शब्द का वर्ण विच्छेद होगा: Question ID: 16794316422 Ans 🗙 1. व + अ त + अ स + र्य + अ X2 q + 3 q + 4 + 3 + 7 + 4 + 3 🗙 ४ व् + अ + त् + स् र् य् + अ ^{Q.17} 'अन्नाभाव' शब्द बना है: Question ID: 16794316427 Ans X 1. अन्ना + भवि से × 2. अन्न + भाव मे X 3. अन्नाभा + व से √ 4. अल्ल + अभवि से







पौधों की जड़ों की नीचे की वृद्धि देखी जाती है। **X** 3. पौधों की टहनियों के ऊपर की वृद्धि देखी जाती है। **X** 4. पौधों की टहनियों के नीचे की ओर वृद्धि देखी जाती है। Q.17 Which of the following organisms is an example of Chemotrophic nutrition? Question ID: 16794316442 X 1. Clostridium X 2. Spirogyra ✓ 3. Archaebacteria X 4. Paramecium 0.18 The two cerebral hemispheres of the human brain are inter-connected by which of the following tissues? Question ID: 16794316450 X 1. Corpus luteum X 2. Corpus delicti X 3. Corpus albicans 4. Corpus callosum Q.19 मानव शरीर के निम्नलिखित अंगों में से किस अंग में यूरिया चक्र होता है? Question ID: 16794316448 🗸 1. यकृत adda 241 **X** 2. कोलोन 🗙 ३. तिल्ली (स्प्लीन) 🗙 ४. गुर्दा Q.20 Which of the following hormones plays a major role during Parturition in human beings? Question ID: 16794316458 X 1. Progesterone 2. Oxytocin X 3. Prolactin X 4. Estrogen Section: Subject Related Q.1 ग्रीनहाउस गैस, निम्नलिखित में से किस प्रकार के विकिरण उत्सर्जित करते हैं? Ouestion ID: 16794316475

Section : Subject Related

Q.1 ग्रीनहाउस गैस, निम्नलिखित में से किस प्रकार के विकिरण उत्सर्जित करते हैं?

Ans

X 1. दर्शनीय

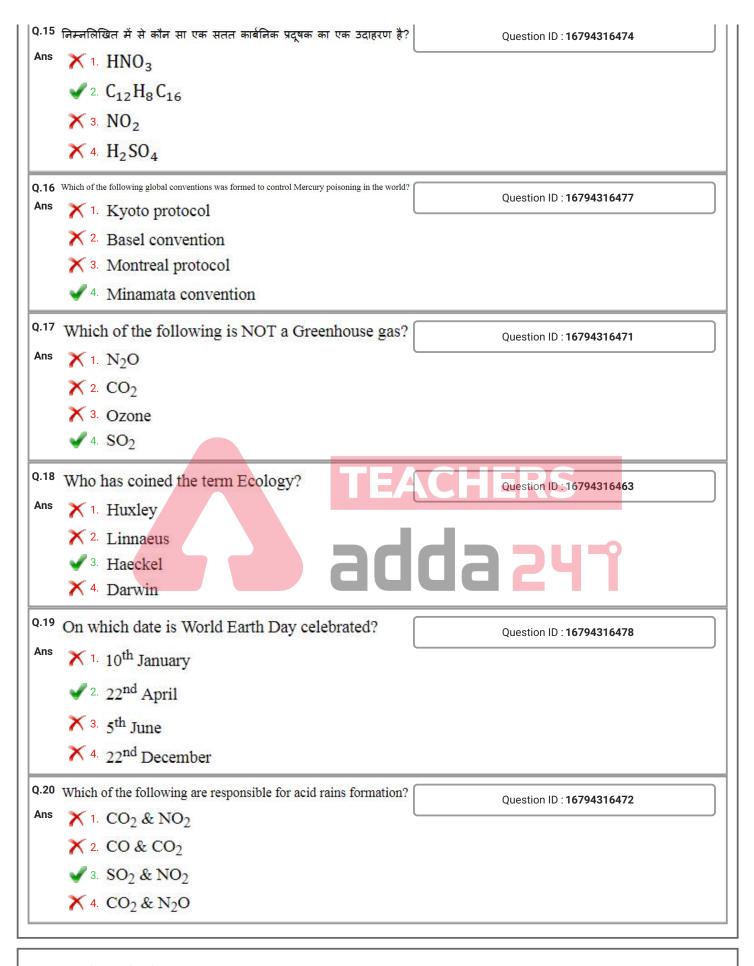
V 2. अवरक्त

X 3. पराबैंगनी

X 4. गामा

| Q.2 | In which year was the Environment Protection Act of India enacted? | Question ID : 16794316476 |
|-----|--|----------------------------------|
| Ans | X 1. 1992 | |
| | × 2. 2000 | |
| | X 3. 1974 | |
| | √ 4. 1986 | |
| Q.3 | Green Revolution is associated with which of the following? | Question ID : 16794316479 |
| Ans | ✓ 1. Agriculture | |
| | × 2. Aquaculture | |
| | X 3. Sericulture | |
| | × 4. Vermiculture | |
| Q.4 | Mycobacterium bovis infection in cattle leads to which of the following diseases in humans? | |
| Ans | X 1. Cow pox | Question ID : 16794316480 |
| | × 2. Leprosy | |
| | X 3. Anthrax | |
| | ✓ 4. Tuberculosis | |
| Q.5 | 2 22 2 4 | |
| | निम्नलिखित में से कौन सा जैव कारक का उदाहरण है? | Question ID : 16794316462 |
| Ans | X 1. पानी | CHERS |
| | √ 2. जीवाणु | |
| | ★3. 伊胄 | |
| | 🗙 4 सूर्य की रौशनी | da 241 |
| | र सूर्य का राराना | |
| Q.6 | What is a common feature between Rhizobium and Azospirillum? | Question ID : 16794316470 |
| Ans | ✗¹ Both are nitrogen fixing fungi | |
| | × 2. Both are parasites | |
| | 3. Both are nitrogen fixing bacteria | |
| | X 4. Both are harmful for plants | |
| 0.7 | Tourist continue to the continue of the contin | |
| | निम्नलिखित में से कौन सा ऊर्जा का नवीकरणीय (अक्षय) स्रोत है? | Question ID : 16794316469 |
| Ans | √ 1. सूर्य की रौशनी | |
| | 🗡 2. जीवाश्म ईंधन | |
| | Х 3. पेट्रोलियम | |
| | × 4. कोयला | |
| | • भाषला | |
| Q.8 | Which of the following chemicals damage the Ozone layer? | Question ID : 16794316465 |
| Ans | X ¹ Sulfuric acid | |
| | Sulfulle delu | |

| | √ 2. Chlorofluorocarbons | |
|------|---|----------------------------------|
| | ✗ 3. Sulphur hexafluoride | |
| | × 4. Hexachloro carbons | |
| Q.9 | Which of the following plants can survive in extremely saline conditions? | Question ID : 16794316467 |
| Ans | ★ 1. Epiphytes | |
| | × 2. Hydrophytes | |
| | X 3. Xerophytes | |
| | √ 4. Halophytes | |
| Q.10 | Infection with H5N1 leads to which one of the following diseases? | Question ID : 16794316481 |
| Ans | ★ 1. Fowl cholera | |
| | × 2. HIV | |
| | × 3. Swine flu | |
| | ✓ 4. Bird flu | |
| | The process of change in structure of a species of a community over time is known as: | Question ID : 16794316466 |
| Ans | X 1. Ecosphere | |
| | ✓ 2. Ecological succession | CHEDC |
| | PARK THE BOOK PRODUCT AND PRODUCT OF THE PARK | CHERS |
| | ★ 4. Ecological niche | |
| Q.12 | The build-up of toxins in a food chain is known as: | Question ID : 16794316473 |
| Ans | ✓ 1. Bio-magnification | uaci |
| | × 2. Bio-augmentation | |
| | X 3. Bio-degradation → 3. Bio-degradation | |
| | X⁴. Bio-accumulation | |
| Q.13 | Which of the following is a primary producer in a food chain? | Question ID : 16794316468 |
| Ans | ✓ 1. Green plants | |
| | × 2. Snake | |
| | × 3. Eagle | |
| | × 4. Frog | |
| Q.14 | Which of the following is the lowest region of atmosphere? | Question ID : 16794316464 |
| Ans | X 1. Stratosphere | |
| | × 2. Ionosphere | |
| | X 3. Exosphere | |
| | ✓ 4. Troposphere | |
| | | |



Section: Subject Related

| | How many series of acidic salts can be formed by orthophosphoric acid? | Question ID : 16794316490 |
|------|--|----------------------------------|
| Ans | X 1. 1 | |
| | √ 2. 2 | |
| | X 3. 4 | |
| | X 4. 3 | |
| | N 4. 3 | |
| Q.2 | $\label{thm:metalloids} \mbox{Metalloids among P-block are NOT present in which of the following groups?}$ | Question ID : 16794316486 |
| Ans | × 1. 13 th and 14 th groups | Question is . 10774310400 |
| | | |
| | × 2. 15 th group | |
| | × 3. 16 th group | |
| | | |
| | ✓ 4. 18 th group | |
| 0.3 | Four gases A, B, C, D have Henry's law constants 3, 4, 5, 6 respectively. Maximum solubility of the gas in the liquid is | |
| Ans | found in: | Question ID : 16794316482 |
| Allo | X 1. D | |
| | X 2. B | |
| | X 3. It is the same for all | |
| | ✓ 4. A | |
| 0.4 | On heating, crystalline magnesium sulfate loses 5% to 24% of its mass. The mass of water (in grams) present in the | |
| Ans | salt is: | Question ID : 16794316484 |
| | | CITEILS |
| | × 2. 180 | - |
| | × 3. 48.76 | |
| | ✓ 4. 126 | |
| Q.5 | The fossil fuel that is used to manufacture carbon black is: | |
| Ans | ★ 1. Producer gas | Question ID : 16794316499 |
| | | |
| | × 2. Synthesis gas | |
| | X 3. Coal gas | |
| | ✓ 4. Natural gas | |
| | ▼ meditions air G iner | |
| ' | The correct expression for ionisation enthalpy of hydrogen atom in terms of Rydberg's constant (RH) is: | Question ID : 16794316487 |
| Ans | \checkmark 1. hCR_H | |
| | × 2. R _H .C | |
| | | |
| | \times 3. $\frac{3}{4}hCR_H$ | |
| | \times 4. $2hCR_H$ | |
| | HEAVENING 315-7-1 | |
| | In terms of ionisation enthalpy, H resembles which of the group's elements more? | Question ID : 16794316489 |
| Ans | × 1. Both 1 st and 17 th group | |
| | × 2. 1 st group | |
| | Brook | |
| 1 | | |

| ✓ 3. 17 th group |
|-----------------------------|
|-----------------------------|

X 4. Neither 1st group nor 17th group

Q.8 The Brownian movement is due to:

Question ID: 16794316483

Ans

X 1.

equal bombardment of large particles of dispersion medium by colloidal particles.



unequal bombardment of colloidal particles by the molecules of the dispersion medium size.



equal bombardment of colloidal particles by the molecules of dispersion medium.



bombardment of small size particles of dispersion medium by colloidal particles.

Q.9 Bauxite ore is concentrated by which of the following methods?

Question ID: 16794316494

Ans

Electromagnetic separation

X 2. Froth flotation

3. Leaching

X 4. Hydraulic washing

Q.10 The values of a, b, c, d, e, f to balance the following equation are $aK_2Cr_2O_7 + bKCl + cH_2SO_4 \rightarrow dCrO_2Cl_2 + eKHSO_4 + fH_2O_5$

Question ID: 16794316492

Ans
$$\times$$
 1. $a = 2$, $b = 4$, $c = 6$, $d = 2$, $e = 6$, $f = 3$

$$\times$$
 2. $a = 4$, $b = 2$, $c = 6$, $d = 6$, $e = 2$, $f = 3$

$$\times$$
 3. $a = 6$, $b = 4$, $c = 2$, $d = 6$, $e = 3$, $f = 2$

$$\checkmark$$
 4. $a = 1$, $b = 4$, $c = 6$, $d = 2$, $e = 6$, $f = 3$



Q.11 Nitrites on hydrolysis gives a compound 'X' which on reaction with H^+ or $\bar{O}H$ gives Y. When Y is diluted to 5-10%, it is known as a

Question ID: 16794316501

Ans

X 1. Wash

× 2. Rectified spirit

3. Vinegar

X 4. Azo dye

Q.12 Rust is a mixture of:

Question ID: 16794316495

Ans \times 1. Fe₃O₄ and Fe(OH)₂

× 2. FeO and Fe(OH)₂

 \checkmark 3. Fe₂O₃ and Fe(OH)₃

X 4. FeO and Fe(OH)₂

Q.13 Which of the following statements regarding nuclides is INCORRECT?

Ans **X** 1.

Isotopes show similar chemical properties but different physical properties

Ouestion ID: 16794316485



Isobars show similar physical properties but different chemical properties



Isotopes show similar chemical as well as physical properties



Isotopes show different physical and chemical properties

Q.14 The correct increasing order of pH of isomolar solutions of $K_2O(pH_1)$, $K_2S(pH_2)$, $K_2Se(pH_3)$, and $K_2Te(pH_4)$ is:

$$\checkmark$$
 1. $pH_4 < pH_3 < pH_2 < pH_1$

 \times 2. pH₂ < pH₁ < pH₂ < pH₄

$$X$$
 3. $pH_1 = pH_2 > pH_3 > pH_4$

$$\times$$
 4. pH₁ > pH₂ > pH₃ > pH₄

Q.15 लोहे के पदार्थों को मैग्नीशियम के छोटे टुकड़ों से जोड़कर संक्षारण से बचाया जाता है, जहाँ:

मैग्नीशियम एक उत्सर्गी (सैक्रफिशल) एनोड है।

X 2.

मैग्नीशियम एक उत्सर्गी (सैक्रफिशल) कैथोड है।

X 3. लोहा एक उत्सर्गी (सैक्रफिशल) एनोड है।

🗡 4 लोहा एक उत्सर्गी (सैक्रफिशल) कैथोड है।

Q.16 Identify the correct order of size of the species:

Ans $X = Se^{-2} > Br^{-} > Rb^{+} > Kr$

 X^2 $Se^{-2} > Br^- > Rb^+ > Kr > Sr^{+2}$

 $\sqrt{3}$ $Se^{-2} > Br^{-} > Rb^{+} > Sr^{+2}$

 $X 4. Rr^{-} > Se^{-2} > Kr > Rh^{+} > Sr^{+2}$

Q.17 निम्नलिखित में से कौन सा एक इलेक्टोफिलिक योग अभिक्रिया है?

 \checkmark 1. $CH_3CH = CH_2 + HBr \rightarrow CH_3CH(Br)CH_3$

 \times 2. $C_6H_6 + Cl_2 \xrightarrow{Anhydraes} C_6H_5Cl + HCl$

X 3.

 $\mathit{CH}_{3}\mathit{CH} = \mathit{CH}_{2} + \mathit{HBr} \xrightarrow{\mathit{Peroxide}} \mathit{CH}_{3}\mathit{CH}_{2}\mathit{Br}$

 \times 4. $C_6H_6 + Cl_2 \xrightarrow{Anhydraes} C_6H_5Cl$

Q.18 'x' moles of ozone are required to oxidise 1 mole of lead sulphide. 'y' moles of O2 are evolved in this reaction. The mass ratio of x and y is:

Ans X 1. 4:3

X 2. 1 : 1

3. 3:2

X 4. 2:3

Question ID: 16794316491

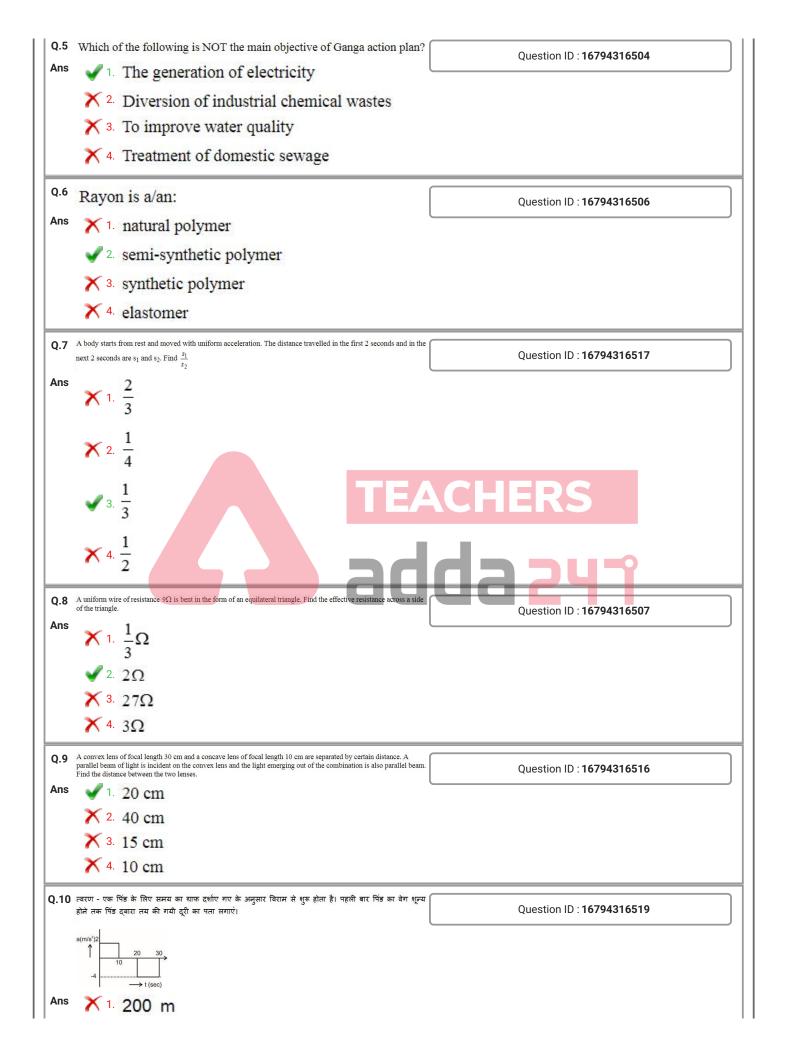
Question ID: 16794316496

Question ID: 16794316488

Question ID: 16794316497

Question ID: 16794316493

Q.19 The composition of power alcohol is: Ouestion ID: 16794316500 √ 1. 80% petrol and 20% ethanol × 2. 50% petrol and 50% ethanol X 3. 20% petrol and 80% ethanol X 4. 95% petrol and 5% ethanol Q.20 What is the total number of chain isomers possible for n-Hexane? Ouestion ID: 16794316498 Ans X 1. 9 2. 5 X 3. 4 X 4. 6 Section: Subject Related 0.1 The focal length of an equiconvex lens is 20 cm and radius of curvature of each curved surface is 10 cm. one of the two arved surfaces is silvered. Find the effective focal length of the combination Question ID: 16794316513 Ans \times 1. $\frac{20}{3}$ cm, concave \checkmark 2. $\frac{10}{3}$ cm, concave X 3. 10 cm concave X 4. 10 cm convex Q.2 Which of the following is an important and major ingredient present in cement Question ID: 16794316505 X 1 Dicalcium silicate X 2. Gypsum 3. Tricalcium silicate Y 4. Tricalcium aluminate Q.3 A fish is at a depth of 12 cm from the surface of a lake. And a bird is at a height of 15 cm above the surface of the lake. The fish and the bird are on the same vertical line. The refractive index of water in the lake is $\frac{4}{3}$. Find the apparent Question ID: 16794316514 distance of fish as observed by the bird. X 1. 31 cm Ans X 2. 21 cm ✓ 3. 24 cm X 4. 27 cm Q.4 The mechanism of cleaning action of soap is similar to that of: Question ID: 16794316502 Ans X 1. Toothpastes 2. Liquid dish washing detergents X 3. Shaving soaps X 4. Hair conditioners



- √ 2. 350 m
- X 3. 100 m
- X 4. 300 m

Q.11 आजकल डाईक्लोरीन (Cl_2) को पेपर की ब्लीचिंग में किससे बदल दिया गया है?

Question ID: 16794316503

Ans

- **४** ¹ हाइड्रोजन पेरोक्साइड
- X 2. ब्लीचिंग पाउडर
- **X** 3. ओजोन
- 🗙 ४ सल्फर डाइऑक्साइड

Q.12 A wire of length L is bent in the form a circular loop. And current is passed through the loop. The magnetic field induction at the centre of the loop is B. Find the current passing through the loop.

Question ID: 16794316510

Ans

- ightharpoonup 1. $\frac{B\pi L}{\mu_0}$
- \times 2. $\frac{BL}{\pi}$
- \checkmark 3. $\frac{\mathit{BL}}{\mu_0\pi}$
- imes 4. $\frac{B\pi}{L\mu_0}$

TEACHERS

Q.13 A balloon is filled with air. The mass of the air in the balloon is 10 gr. A small hole is made to the balloon and released. The balloon moves up with an average speed of 5 cm/s and shrinks completely in 5 seconds. Find the average form acting on the balloon.

Question ID: 16794316520

Ans

- √ 1. 10 dynes
- × 2. 5 dynes
- × 3. 20 dynes
- × 4. 15 dynes

 ${\bf Q.14}$ A square loop of side l is carrying current i. as shown. Find the magnetic field induction at the centre of the loop.

Question ID : **16794316509**

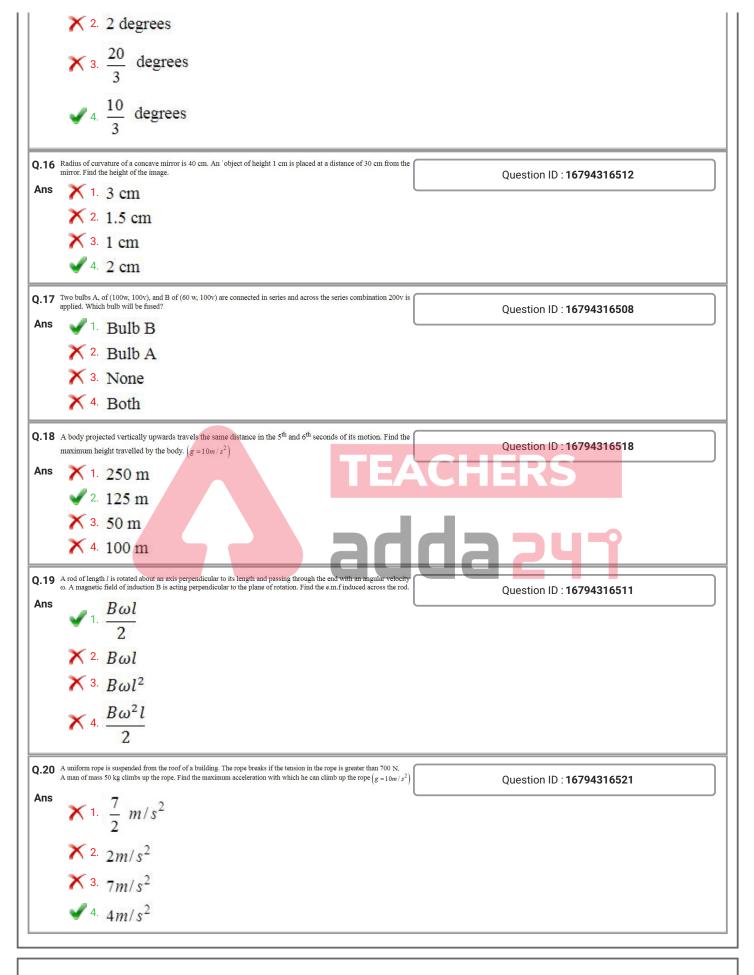


Ans

- \times 1. $\frac{\mu_0 i}{2\pi l}$
- \checkmark 2. $8\sqrt{2} \frac{\mu oi}{4\pi l}$
- $\chi_{3.} \sqrt{2} \frac{\mu_0 i}{\pi l}$
- X 4. Zero

Q.15 Two small angled prisms of refractive indices 1.6 and 1.5 are arranged such that light ray passes through the combination without deviation. The angle of prism for the prism of refractive index 1.5 is 4°. Find the angle of prism of the other.

Question ID : 16794316515



Q.11 A spring of spring constant k is suspended from the roof and a block of mass m is suspended at the other end of the spring. The block is suddenly released. Find the maximum elongation produced in the spring.

Question ID: 16794316526

Question ID: 16794316530

Ans

$$\sqrt{1. \frac{2mg}{k}}$$

$$\times$$
 2. $\frac{mg}{2k}$

$$\times$$
 3. $\frac{mg}{k}$

$$\times$$
 4. $\frac{mg}{4k}$

Q.2 Two liquids of densities d₁ and d₂ are mixed in equal masses. Find the resultant density of the mixture.

Ans

$$\checkmark$$
 1. $\frac{2d_1d_2}{d_1+d_2}$

$$\times$$
 2. $\sqrt{d_1d_2}$

$$imes$$
 3. $\frac{d_1d_2}{d_1+d_2}$

$$\times$$
 4. $\frac{d_1+d_2}{2}$

Q.3 Mass of the earth is M and its radius is R. An object of mass m is placed on the surface of earth. Find the work done in Question ID: 16794316524

Ans

$$\int 1. \frac{GMn}{3P}$$

$$\times$$
 2. $\frac{GMm}{2R}$



$$\times$$
 4. $\frac{2 GMm}{3 R}$

Q.4 Three point masses each of mass *m* are placed at the three corners of an equilateral triangle of side *x*. Find the resultant force acting on any one particle at the corner.

Question ID: 16794316531

Ouestion ID: 16794316527

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Ans

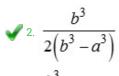
$$\times$$
 1. $\frac{Gm^2}{x^2}$

$$\times$$
 2. $\frac{3Gm^2}{x^2}$

$$\checkmark$$
 4. $\frac{\sqrt{3}Gm^2}{x^2}$

Q.5 A solid sphere of radius *b* is having a concentric cavity of radius *a*. The sphere floats on the surface of water such that half of its volume sinks in water. Find the relative density of material of the sphere.

$$\times$$
 1. $\frac{b^3}{b^3 - a^3}$



$$\times$$
 3. $\frac{b^3}{a^3}$

$$\times$$
 4. $\frac{2b^3}{b^3 - a^3}$

Q.6 At what height above the surface of earth weight of an object reduces by 1%. Radius of earth is 6400 km.

it what height above the surface of earth weight of an object feduces by 170. Radius of earth is 040

Ans

- ✓ 1. 32 km
- × 2. 3.2 km
- X 3. 6.4 km
- X 4. 64 km
- **Q.7** द्रव्यमान m तथा लंबाई l की एक समान चेन को समतल क्षैतिजीय मेज पर इस प्रकार रखा जाता है कि इसकी लंबाई का $\frac{1}{4}$ भाग मेज के किनारे से लटकता रहता है। चेन फिसलकर गिर जाती है। मेज के किनारे से चेन की लंबाई का आधा भाग लटकने पर चेन की गतिज ऊर्जा क्या होगी?

Question ID: 16794316525

Question ID: 16794316522

Ans













Q.8 Weight of an object in air is 10 gr. Weight of this object is when it is completely immersed in water is 8.5 gr. Find the volume of the object. Density of water is 1gr/cm³:

Ans

$$\times$$
 1. 0.75 cm³

Q.9 A man standing in between two parallel cliffs produces a sound and first echo is heard after 2 seconds and second echo is heard after 3 second. If the speed of sound in air 340 m/s. Find the distance between two cliffs.

Question ID: 16794316529

Question ID: 16794316528

Ans

Q.10 Mass of uniform circular ring is M and its radius is R. Find the maximum intensity of gravitation field on the axis of the ring

Question ID: 16794316523

$$\checkmark$$
 1. $\frac{2}{3\sqrt{3}}\frac{GM}{R^2}$

$$\times$$
 2. $\frac{2GM}{R^2}$

| X | 3. | GM |
|---|----|-------|
| | | R^2 |

$$\times$$
 4. $\frac{3}{2\sqrt{2}}\frac{GM}{R^2}$

Q.11 One of the important aims of teaching mathematics to children is to comprehend mathematical language. Which of the following is not a part of mathematical language?

Question ID: 16794316537

Ans

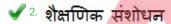
Q.12 Which of the following emphasizes the role of rewards and punishment in learning?

Question ID: 16794316532

- X 1. Law of exercise
- X 2. Law of readiness
- √ 3. Law of effect.
- X 4. Law of practice

Q.13 स्कूलों में विभेदित आकलन इस बात का एक उदाहरण है कि कौन से कारक शामिल हैं?

Question ID: 16794316536







0.14 Choose the best option from the following.

Text books contain information about human rights, values and social norms. Thus we can call text books as

Ouestion ID: 16794316538

- X 1. Knowledge body
- X 2. Repository of content
- √ 3. Tools for social change
- X 4. Source of information

Q.15 Ajanta paintings are categorized as:

Question ID: 16794316533

- Ans X 1. Intangible cultural heritage
 - √ 2. Tangible cultural heritage
 - X 3. Environmental heritage
 - X 4. Natural heritage

Q.16 एक प्रभावी समावेशी वातावरण अक्षमता के बिना बड़े समूह के लिए फायदेमंद है क्योंकि यह कई विशेषताओं को विकसित करता है। इनमें से कौन सा गैर-अक्षम समूह को शामिल करने का लाभ नहीं है?

Question ID: 16794316541

- 🗙 1. दया
- X 2. सहनशीलता
- ※ 3. स्वीकार

