Home Assignment
for SSC & Railways Aspirants

1. संयुक्त राष्ट्र जलवायु परिवर्तन शिखर सम्मेलन, 2019 निम्न में से किस शहर में आयोजित किया गया था?

A. न्यूयॉर्क   B. टोक्यो
C. प्रयोंगयांग   D. पेरिस
E. टोरोंटो

Ans. A
Sol.
• On 23rd September the UN Climate Change Summit, 2019 was held in General Assembly Hall at UN Headquarters in New York.
• UN Secretary-General Antonio Guterres called on world leaders to bring forth their concrete plans, and ambitious actions to solve the climate crisis.
• The key focus of the summit is to accelerate the actions to implement the Paris agreement.
• Prime Minister Narendra Modi represented India's body of work at UN Climate Action Summit.

2. आयुष्मान भारत-प्रधानमंत्री जन आरोग्य योजना (AB-PMJAY) के तहत सबसे अधिक स्वर्ण कार्ड जारी करने वाला कौन देश का पहला राज्य बन गया है?

A. उत्तर प्रदेश   B. हरियाणा
C. हिमाचल प्रदेश   D. जम्मू एवं कश्मीर
E. ओडिशा

Ans. D
Sol.
• Jammu and Kashmir became the first state in the country to issue the highest number of golden cards under Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).
• According to the Chief Executive Officer, State Health Agency, Bhupinder Kumar - over 11 lakh golden cards have been generated within the first 90 days of the launch of the scheme with 60% of families having at least one golden card which is highest in the country.
• On 23rd September Ayushman Bharat - the Pradhan Mantri Jan Arogya Yojana has completed one year of its launch.
Note:

• On 23rd September 2018, Prime Minister Narendra Modi had launched the scheme from Ranchi, Jharkhand.
• The scheme is renamed as PM Jan Arogya Yojana.
• The Pradhan Mantri Jan Arogya Yojana, popularly known as Ayushman Bharat, looks to provide cashless hospitalisation for 1,354 procedures to 10 crore poor families for Rs 5 lakh per family per year.

3. विश्व समुद्री दिवस 2019 किस तारीख को मनाया गया?

A. 24 सितम्बर   B. 25 सितम्बर
C. 26 सितम्बर   D. 27 सितम्बर
E. 28 सितम्बर

Ans. C
Sol.
• The **World Maritime Day** (WMD) is being observed on **26th September 2019** (last Thursday of September).
• 2019 Theme: '**Empowering women in the maritime community**'.
• **This year's theme provides** an opportunity to raise awareness of the importance of gender equality, in line with the United Nations' Sustainable Development Goals (SDGs), and to highlight the important - yet under-utilized - contribution of women within the maritime sector.
• The **National Maritime Day 2019** was observed on 5th April 2019.

4. आई.एम.डी विश्व प्रतिस्पर्धा केंद्र की विश्व डिजिटल प्रतिस्पर्धा रैंकिंग 2019 के अनुसार भारत की रैंक क्या है?

A. 50वां   B. 48वां
C. 46वां   D. 44वां
E. 40वां

Ans. D
Sol.
• India has been ranked at **44th positions** in the World Digital competitiveness rankings 2019.
• As compared to the previous year's ranking, India improved its ranking from 48th place in 2018 to 44th rank this year as the country has improved overall in all

factors like - knowledge, technology and future-readiness.

• The **US was ranked as the world's most digitally** competitive economy, followed by **Singapore** in the second place.

• The World Digital competitiveness ranking is published by the IMD World Competitiveness Center.

• It measures the capacity and readiness of 63 nations to adopt and explore digital technologies as a key driver for economic transformation in business, government and wider society.

5. निम्न में से किसे 2019 के लिए शास्त्र रामानुजन पुरस्कार से सम्मानित किया गया है?

A. विनफ्राइड कोहनेन   B. माइकल स्क्लोजर

C. आनंद कुमार   D. कोलसन व्हाइटहेड

E. एडम हार्पर

Ans. E

Sol.

• The SASTRA Ramanujan Prize for 2019 will be awarded to mathematician Adam Harper (Assistant Professor with the University of Warwick, England.

• Mr. Harper was awarded the prize for several outstanding contributions to analytic and probabilistic number theory.

• The prize carries a citation and an award of USD 10,00 and is conferred annually on mathematicians from across the world who are less than 32 years of age, working in an area influenced by the genius Srinivasa Ramanujan.

• Every year, this prize is awarded by SASTRA University on its campus near Kumbakonam in Tamil Nadu, on Ramanujan's birth anniversary (22nd December).

6. महाराष्ट्र में मुख्य निर्वाचन अधिकारी (सी.ई.ओ) द्वारा मतदान के महत्व के बारे में लोगों में जागरूकता पैदा करने के लिए निम्न में से किसे "सद्भावना राजदूत" के रूप में चुना गया है?

A. करिश्मा कपूर   B. करीना कपूर

C. कैटरीना कैफ   D. विद्या बालन

E. माधुरी दिक्षित

Ans. E

Sol.

• Actor **Madhuri Dixit** has been chosen as "**goodwill ambassador**" by the **Chief Electoral Officer** (CEO) in Maharashtra to **create awareness among people** about the importance of voting.

• **Madhuri Dixit** will be seen in a video titled '**Let's Vote**' speaking about the **democratic process** and role of voters in the development of the country.

• **Maharashtra State Assembly polls** are scheduled for **21st October** and results will be declared on **24th October 2019**.

• A **goodwill ambassado**r is a person who advocates for a specific cause (country or organisation) based on their notability.

• Goodwill ambassadors generally deliver goodwill or promote ideals from one entity to another, or to a population.

7. निम्न में से किस फुटबॉल खिलाड़ी ने मिलान, इटली में ला स्काला में फीफा का वर्ष 2019 का सर्वश्रेष्ठ पुरुष खिलाड़ी का पुरस्कार जीता है?

A. विर्गिल वैन डिज्क   B. लियोनेल मेस्सी

C. क्रिस्टियानो रोनाल्डो   D. मोहम्मद सालाह

E. सर्जियो एगुएरो

Ans. B

Sol.

• Argentine footballer Lionel Messi (32-years) won the FIFA's best male player of the year award 2019 at La Scala in Milan, Italy.

• Messi beats Virgil van Dijk and Cristiano Ronaldo to win the Best Men's Player award.

• Lionel Messi has won this award for the record sixth time (earlier,2009, 2010, 2011, 2012 & 2015).

• American footballer Megan Rapinoe has won the Best FIFA Football Women's Player award 2019.

• Rapinoe beat Alex Morgan and Lucy Bronze to win The Best Women's Player award.

• Jurgen Klopp (Germany) has won the best FIFA men's coach award.

• Daniel Zsori (Hungarian-Romanian) received FIFA's Puskas award.

8. 8 अध्यापको का एक समूह है | एक अध्यापक समूह छोड़ देता है और एक नया अध्यापक समूह में आ जाता है | इस वजह से अध्यापकों का औसत आयु 2 साल पहले की औसत आयु के बराबर हो जाती है | यदि जाने वाले अध्यापक की आयु 42 थी, तो गये अध्यापक की आयु (वर्षों में) क्या है?

A. 22   B. 28
C. 24   D. 26

Ans. D

Sol. Let the average age of teachers be x
Average age two years ago =x-2
Age of teacher who left the group is 42
So difference between age of teacher who left and age of teacher who join=8x-8(x-2)=16
So age of new teacher=42-16=26

9. एक गोलाकार गेंद जिसकी त्रिज्या 3 से.मी. है को पिघलाया गया और तीन नये गोलाकार गेंद जिनकी त्रिज्या 1.5 से.मी. 2 से.मी. और X से.मी. है | तो X का मान बतायें कितना है |

A. 5 cm   B. 2.5 cm
C. 3 cm   D. 2.25 cm

Ans. B

Sol.
Volume of sphere= $\frac{4}{3}\pi r^3$
Given, radius of original ball=3 cm
Its volume= $\frac{4}{3}\pi(3)^3$
Since it is melted and re-casted into 3 smaller spheres,
So, Volume of original ball=total volume of 3 small balls
$\Rightarrow$
$\frac{4}{3}\pi r^3 = \frac{4}{3}\pi(1.5)^3 + \frac{4}{3}\pi(2)^3 + \frac{4}{3}\pi(x)^3$
$\Rightarrow 27 = 1.5^3 + 2^3 + x^3$
$\Rightarrow X = 2.5$
Hence, radius of third ball x=2.5 cm.

10. एक 9 मीटर ऊंचे कोनिकल टैंट के आधार कि परिधि 44 मीटर है | तो उसमें भरी जाने वाली वायु का आयतन ज्ञात करें |

A. 430 cm³   B. 462 cm³
C. 472 cm³   D. 492 cm³

Ans. B

Sol.
Given, circumference of the base=44 m
Circumference of a cone=$2\pi r$
$\Rightarrow 2\pi r = 44$ m
$\Rightarrow R = 7$ m

Height of cone given=9m
Volume of a cone=$\frac{1}{3}\pi r^2 h$
$\Rightarrow \frac{1}{3} * \frac{22}{7} * 9 * 7 * 7$
$\Rightarrow 462 m^3$

11. त्रिभुज ABC में भुजाओं AB, BC और AC की लंबाई क्रमशः 12, 18 और 20 इकाई है। D, AC पर एक बिंदु इस प्रकार है कि AB=DB है। तो AD:DC का मान ज्ञात करें।

A. 11:9   B. 12:5
C. 11:3   D. 14:9

Ans. A

Sol. Let BE $\perp$ AC

As ABD is isosceles triangle
let, DE=EA= x
In $\Delta BDE \to BE^2 = 144 - x^2$
In
$\Delta BCE \to BE^2 = 324 - (20 - 2x + x)^2$
on comparing both equations
$144 - x^2 = 324 - (20 - x)^2$
$144 = -76 + 40x$
$x = \frac{11}{2}$
hence AD:DC= 11:9

12. एक त्रिभुज ABCमें, AB = 9, AC = 7 और $\angle B + \angle C = 120^0$.तो त्रिभुज का परिमाप ज्ञात करें:

A. $16 + 7\sqrt{3}$ B. $16 + \sqrt{67}$
C. $16 + 6\sqrt{3}$ D. इनमें से कोई नहीं

Ans. B

Sol.

A.T.Q.

$\angle B + \angle C = 120^0$

$\angle A = 60^0$

From cosine rule

$BC^2 = AB^2 + AC^2 - 2AB.AC.\cos A$

$BC^2 = 81 + 49 - 2 \times 7 \times 9 \times \cos 60^0$
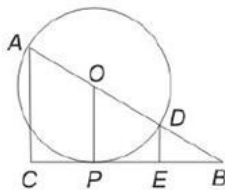
$BC^2 = 67$

$BC = \sqrt{67}$

Required perimeter = 9 + 7 + $\sqrt{67}$

= 16+ $\sqrt{67}$

13. दी गई आकृति में, स्पर्श रेखा CB पर AC तथा DE लम्ब है। रेखा AB वृत्त के केंद्र बिंदु O से गुजरती है जिसकी त्रिज्या 20 से.मी. है। यदि AC की लम्बाई 36 से.मी. है तो DE की लम्बाई (से.मी. में) क्या होगी ?

A. 4   B. 6

C. 2   D. 8

Ans. A

Sol. Let BD be x. In triangles BOP and BAC, AC and OP are parallel and perpendicular on a same line so these triangles are similar triangles.

$\therefore \dfrac{BO}{OP} = \dfrac{BA}{AC}$

$\Rightarrow \dfrac{x+20}{20} = \dfrac{x+40}{36}$

⇒9x + 180 = 5x + 200

⇒4x = 20

⇒x = 5 cm

Similarly, triangles BDE and BAC are similar, so

$\dfrac{BD}{DE} = \dfrac{BA}{AC}$

$\Rightarrow \dfrac{5}{DE} = \dfrac{5+40}{36}$

⇒DE = 4 cm

14. एक समवृत्तीय बेलन जिसकी उंचाई 40 सेमी. है एवं इसके आधार की परिधि 66 सेमी. है, का आयतन है:

A. 55440 सेमी.^{3} B. 3465 सेमी.^{3}

C. 7720 सेमी.^{3} D. 13860 सेमी.^{3}

Ans. D

Sol.

$2\pi r = 66\,cm$

$r = \dfrac{66 \times 7}{2 \times 22} = \dfrac{21}{2}\,cm$

Volume of a cylinder = $\pi r^2 h$

$= \dfrac{22}{7} \times \dfrac{21}{2} \times \dfrac{21}{2} \times 40$

$= 22 \times 3 \times 21 \times 10$

$= 13860\,cm^3$

Hence, option D is correct.

15. निम्नलिखित शब्दों को शब्दकोष में आने वाले क्रम के अनुसार लिखें|

1) Teacher

2) Torture

3) Team

4) Toy

5) Traffic

A. 2, 1, 3, 5, 4   B. 1, 3, 2, 4, 5

C. 2, 3, 4, 5,1   D. 1, 3, 2, 5, 4

Ans. B

Sol.

शब्दकोष के अनुसार सही क्रम हैं -

Teacher (1) → Team (3) →Torture (2) → Toy (4) →Traffic (5)

Hence, option (B) is correct.

RRB NTPC 2019
Online Test Series

1. Based on the Latest Exam Pattern

2. Available in Hindi & English

3. All India Rank & Performance Analysis

4. Detailed Explanation of Solutions

5. Available on Mobile & Desktop

gradeup