Exam Date
October 15, 2017

INTELLIGENCE BUREAU (IB)

ASSISTANT CENTRAL INTELLIGENCE OFFICER

(Grade-2) Pre. Exam 2017

In this exam, total 100 questions were asked. The questions were based on four subjects namely, Quantative Aptitude, General Awareness, Anlytical/Logical Ability and English Language. The exam duration was 60 min.

1. The average price of 80 mobile phones is ₹ 30000. If the highest and lowest price mobile phones are sold out then the average price of remaining 78 mobile phones is ₹ 29500. The cost of the highest mobile is ₹ 80000. The cost of lowest price mobile is

a. ₹ 18000 *b.* ₹ 15000 *c.* ₹ 19000
d. Can't be determined

✓ ***(c)*** Average price of 80 mobiles
= ₹ 30000
∴ Total price of 80 mobiles = 30000 × 80
= ₹ 2400000
Now, average price of 78 mobiles
= ₹ 29500
∴ Total price of 78 mobiles = 29500 × 78
= ₹ 2301000
∴ Total price of highest and lowest price mobile phone = 2400000 – 2301000
= ₹ 99000
∵ The cost of highest price mobile = ₹ 80000
∴ The cost of lowest price mobile
= 99000 – 80000 = ₹ 19000

2. In a Company, the average income of all the employees is ₹ 20000 per month. Recently the company announced increment of ₹ 2000 per month for all the employees. The new average income of all the employees is

a. ₹ 22000 *b.* ₹ 24000
c. ₹ 28000 *d.* ₹ 26000

✓ ***(a)*** Average income of all employees = ₹ 20000 per month
Now, increment of every employee
= ₹ 2000 per month
∴ New average income of all employees
= 20000 + 2000
= ₹ 22000 per month

3. Pranav went to the bank at the speed of 60 km/h while returning for his home he covered the half of the distance at the speed of 10 km/h, but suddenly he realised that he was getting late so he increased the speed and reached the home by covering rest half of the distance at the speed of 30 km/h. The average speed of the Pranav in the whole length of journey is

a. 24 km/h *b.* 14 km/h
c. 16 km/h *d.* 10 km/h

✓ ***(a)*** Average speed of Pranav in return

$$= \frac{1}{\frac{1}{2\times 10}+\frac{1}{2\times 30}} = \frac{1}{\frac{1}{20}+\frac{1}{60}} = \frac{1}{\frac{1}{15}} = 15 \text{ km/h}$$

Now, average speed of Pranav in whole journey

$$= \frac{2\times 60\times 15}{60+15} = \frac{2\times 60\times 15}{75} = 24 \text{ km/h}$$

4. The average expenditure of Mr. Sharma for the January to June is ₹ 4200 and he spent ₹ 1200 in January and ₹ 1500 in July. The average expenditure for the months of February to July is?

a. ₹ 2750 *b.* ₹ 3250 *c.* ₹ 4250 *d.* ₹ 4500

✓ ***(c)*** Average expense of January to June
= ₹ 4200
∴ Total expense from January to June
= 4200 × 6 = ₹ 25200
Expense in the month of January = ₹ 1200
and expense in the month of July = ₹ 1500
∴ January + February + March + April + May + June = 25200
⇒ 1200 + February + March + April + May + June = 25200
⇒ February + March + April + May + June
= 25200 – 1200 = 24000
∴ February + March + April + May + June + July = 24000 + 1500 = 25500
∴ Average expense of February to July

$$= \frac{25500}{6} = ₹\ 4250$$

5. At the end of a business conference the ten people present all shake hands with each other once. How many handshakes will there be altogether?

a. 20 *b.* 45 *c.* 55 *d.* 90

✓ ***(b)*** Here, $n = 10$
∴ Number of handshakes = ${}^{n}C_2 = {}^{10}C_2$

$$= \frac{10!}{2!\,8!} = \frac{10\times 9\times 8!}{1\times 2\times 8!} = \frac{90}{2} = 45$$

6. The average presence of students of a class in a college on Monday, Tuesday and Wednesday is 32 and on the Wednesday, Thursday, Friday and Saturday is 30. If the average number of students on all the six days is 26 then the number of students who attended the class on Wednesday is

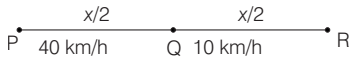
a. 50 *b.* 40 *c.* 60 *d.* 70

✓ ***(c)*** Total present student of
$M + T + W = 32 \times 3 = 96$ …(i)
and total present student of
$W + T + F + S = 30 \times 4 = 120$ …(ii)
and total present student all
$M + T + W + T + F + S$
$= 26 \times 6 = 156$ …(ii)
Now, putting the value of Eqs. (ii) in Eqs. (iii), we have
$M + T + 120 = 156$
⇒ $M + T = 156 - 120 = 36$
⇒ $M + T = 36$ …(iii)
Now, solving Eqs. (i) and (iv), we have
$W = 60$
i.e., 60 students attended the class on Wednesday

7. Suresh started his journey from P to Q by his bike at the speed of 40 km/h and then, the same distance he travelled on his foot at the speed of 10 km/h from Q to R. Then he returned from R to P via Q at the speed of 24 km/h. The average speed of the whole trip is

a. 18.5 km/h *b.* 19.8 km/h
c. 18.2 km/h *d.* 19.2 km/h

✓ ***(d)*** Let, Suresh complete his $\frac{x}{2}$ journey by his bike and $\frac{x}{2}$ journey by foot.



Then, average speed of journey from P to R

$$= \frac{x}{\frac{x}{2\times 40}+\frac{x}{2\times 10}}$$

$$= \frac{1}{\frac{1}{80}+\frac{1}{20}} = \frac{1}{\frac{5}{80}} = \frac{80}{5} = \frac{1+4}{80} = 16 \text{ km/h}$$

∴ Suresh's average speed in whole journey

$$= \frac{2\times 16\times 24}{(16+24)}$$

$$= \frac{2\times 16\times 24}{40} = \frac{16\times 24}{20}$$

$$= \frac{16\times 6}{5} = \frac{96}{5} = 19.2 \text{ km/h}$$

8. Ramesh walked 6 km to reach the station from his house, then he boarded a train whose average speed was 60 km/h and thus he reached his destination. In this way he took a total time of 3 hours. If the average speed of the entire journey was 32 km/h then the average speed of walking is

a. 5 km/h *b.* 8 km/h
c. 2 km/h *d.* 4 km/h

✓ ***(*)*** Let, average speed of walking $= x$ km/h

Then, according to the question,

$$3(x+60) = 32x + 6$$
$$\Rightarrow \quad 3x + 180 = 32x + 6$$
$$\Rightarrow \quad 32x - 3x = 180 - 6$$
$$\Rightarrow \quad 29x = 174$$
$$\Rightarrow \quad x = 6 \text{ km/h}$$

∴ Average speed of walking = 6 km/h

9. Bala travels first one-third of the total distance at the speed of 10 km/h and the next one-third distance at the speed of 20 km/h and the last one-third distance at the speed of 60 km/h. What is the average speed of Bala?

a. 18 km/h *b.* 19 km/h
c. 16 km/h *d.* 12 km/h

✓ ***(a)*** Average speed of Bala

$$= \frac{1}{\frac{1}{3\times 10}+\frac{1}{3\times 20}+\frac{1}{3\times 60}}$$

$$= \frac{1}{\frac{1}{30}+\frac{1}{60}+\frac{1}{180}}$$

$$= \frac{1}{\left(\frac{6+3+1}{180}\right)} = \frac{1}{\frac{10}{180}} = \frac{180}{10} = 18 \text{ km/h}$$

10. The distance of the school and house of Suresh is 80 km. One day he was late by 1 hour than the normal time to leave for the college, so he increased his speed by 4km/h and thus he reached to college at the normal time. What is the changed speed of Suresh?

a. 28 km/h *b.* 25 km/h
c. 20 km/h *d.* 24 km/h

✓ ***(c)*** Let, normal speed of Suresh = x km/h
So, changed speed of Suresh $= (x + 4)$ km/h

Here, Distance $(D) = 80$ km, $a = x$, $b = (x + 4)$ $(t_1 + t_2) = 1$

Now, By formula, $D = \frac{ab\,(t_1 + t_2)}{(b - a)}$

$$\Rightarrow 80 = \frac{x(x+4)\times 1}{x+4-x}$$

$$\Rightarrow 80 = \frac{x(x+4)}{4}$$

$$\Rightarrow \quad x^2 + 4x = 320$$
$$\Rightarrow \quad x^2 + 4x - 320 = 0$$
$$\Rightarrow \quad x^2 + 20x - 16x - 320 = 0$$
$$\Rightarrow \quad x(x+20) - 16(x+20) = 0$$
$$\Rightarrow \quad (x+20)(x-16) = 0$$
$$\Rightarrow \quad x = 16 \qquad [\because x = -20 \text{ not possible}]$$

∴ Changed speed of Suresh = $(x + 4)$ km/h
$= (16 + 4) = 20$ km/h

11. Anita goes to college at 20 km/h and reaches college 4 minutes late. Next time she goes at 25 km/h and reaches the college 2 minutes earlier than the scheduled time. What is the distance of her school?

a. 16 km *b.* 12 km *c.* 15 km *d.* 10 km

✓ ***(d)*** Here, $a = 20$ km/h, $b = 25$ km/h,

$$t_1 = \frac{4}{60} \text{ h}, \; t_2 = \frac{2}{60} \text{ h}, \; D = ?$$

Now, by formula, $D = \frac{ab\,(t_1 + t_2)}{(b - a)}$

$$\Rightarrow \quad D = \frac{20\times 25\left(\frac{4}{60}+\frac{2}{60}\right)}{(25-20)} \text{ km}$$

$$\Rightarrow \quad D = \frac{20\times 25\times \frac{6}{60}}{5} = \frac{2\times 25}{5}$$

$$\Rightarrow \quad D = 2\times 5$$
$$\Rightarrow \quad D = 10 \text{ km}$$

12. Two places R and S are 800 km apart from each other. Two persons start from R towards S at an interval of 2 hours. Whereas A leaves R for S before B. The speeds of A and B are 40 and 60 km/h respectively. B overtakes A at M, which is on the way from R to S. What is the ratio of time taken by A and B to meet at M?

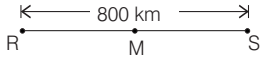
a. 1 : 3 *b.* 1 : 2
c. 1 : 4 *d.* 3 : 2

✓ ***(d)*** Speed of $A = 40$ km/h,
Difference of time = 2 h
Speed of $B = 60$ km/h
∴ Required ratio of time
= Speed of B : speed of $A = 60 : 40$
$= 3 : 2$

13. Two places R and S are 800 km apart from each other. Two persons start from R towards S at an interval of 2 hours. Whereas A leaves R for S before B. The speeds of A and B are 40 km/h and 60 km/h respectively. B overtakes A at M, which is on the way from R to S. What is the distance from R, where B overtakes A?

a. 260 km *b.* 235 km
c. 240 km *d.* 300 km

✓ ***(c)*** Distance covered by A in 6 hours
$= 40 \times 6 = 240$ km



and distance covered by B in 4 hours
$= 60 \times 4$
$= 240$ km

i.e., on point M, B overtakes A.
∴ Distance from R to $M = 240$ km

14. Ajay covers certain distance with his own speed own, when he reduces his speed by 10 km/h, his time duration for the journey increases by 40 hours while if, he increases his speed by 5 km/h from his original speed, he takes 10 hours less than the original time taken. Find the distance covered by him.

a. 1000 km *b.* 1200 km
c. 1500 km *d.* 1800 km

✓ ***(c)***

15. The driver of an ambulance sees a bus 40 m ahead of him, after 20 seconds, the bus is 60 meter behind. If the speed of the ambulance is 30 km/h what is the speed of the bus?

a. 10 km/h
b. 12 km/h
c. 15 km/h
d. 22 km/h

✓ ***(c)***

16. Two rabbits start running towards each other, one from A to B and another from B to A. They cross each other after one hour and the first rabbit reaches B, 5/6 hour before the second rabbit reaches A. If the distance between A and B is 50 km, what is the speed of the slower rabbit?

a. 20 km/h *b.* 10 km/h
c. 15 km/h *d.* 25 km/h

✓ ***(b)*** Here, $D = 50$ km, $T = 5/6$ hours
Let, speed of slower rabbit = x km/h

$\therefore$ Speed of faster rabbit = $\frac{D}{T} = \frac{50}{5/6}$

$= \frac{50 \times 6}{5} = 60$ km/h

Now, according to the question,

$\frac{(60 - x)}{1} = 50 \quad \Rightarrow \quad 60 - x = 50$

$\Rightarrow x = 60 - 50 = 10 \Rightarrow \quad x = 10$

$\therefore$ Speed of slower rabbit = 10 km/h

17. Pranav walked at 5 km/h for certain part of the journey and then he took an auto for the remaining part of the journey travelling at 25 km/h. If he took 10 hours for the entire journey, what part of journey did he travelled by auto if the average speed of the entire journey be 17 km/h?

a. 750 *b.* 100 km
c. 150 km *d.* 200 km

✓ ***(d)***

18. 5, 12, ? 41, 87, 214

a. 19 *b.* 35 *c.* 22 *d.* 26

✓ ***(c)*** 5, 12, [22], 41, 87, 214
+7, +10, +19, +46, +127
+3, +9, +27, +81
×3, ×3, ×3

19. 14, ?, 13, 17.5, 21.75

a. 10 *b.* 12 *c.* 12.5 *d.* 13.25

✓ ***(b)*** 14, [12], 13, 17.5, 21.75
$\times\frac{1}{2}+5$, $\times\frac{1}{2}+7$, $\times\frac{1}{2}+11$, $\times\frac{1}{2}+13$

20. 15, 5, 4.5, 5.8, 7.9, ?

a. 9.6 *b.* 11.42 *c.* 12.23 *d.* 10.74

✓ ***(b)***

21. Find the sum of first 30 natural numbers

a. 470 *b.* 468 *c.* 465 *d.* 463

✓ ***(c)*** Here, $n = 30$
We know that, sum of first n natural numbers = $\frac{n(n+1)}{2}$

$\therefore$ Sum of first 30 natural numbers

$= \frac{30(30+1)}{2} = 15 \times 31 = 465$

22. 56% of Y is 182. What is Y?

a. 350 *b.* 364 *c.* 325 *d.* 330

✓ ***(c)*** Given, 56% of $Y = 182$

$\Rightarrow \quad \frac{56}{100} \times Y = 182$

$\Rightarrow \quad Y = \frac{100 \times 182}{56}$

$\Rightarrow \quad Y = 325$

23. Which of the following two ratios is greater 17:18 and 10:11?

a. 17/18 *b.* 10/11
c. Both are same *d.* Cannot determine

✓ ***(a)*** Here, $\frac{a}{b} = \frac{17}{18}$ and $\frac{c}{d} = \frac{10}{11}$

$\therefore \quad ad > bc \quad \Rightarrow 17 \times 11 > 18 \times 10$

$\Rightarrow 187 > 180 \quad \because \quad ad > bc$

$\therefore \quad \frac{a}{b} > \frac{c}{d} \quad$ *i.e.* $\quad \frac{17}{18} > \frac{10}{11}$

24. In a palace, supplies are available for 35 days for only 75 people. 15 Guests arrive in the palace for vacation on day 1 itself. For how many days will these supplies be sufficient for all these people?

a. 90 days *b.* 11.25 days
c. 42 days *d.* 22.5 days

✓ ***(*)*** Here, $M_1 = 75, D_1 = 35$,
$M_2 = 75 + 15 = 90, D_2 = ?$
$M_1D_1 = D_2D_2 \Rightarrow 75 \times 35 = 90 \times D_2$

$\Rightarrow \quad D_2 = \frac{75 \times 35}{90} = \frac{2625}{90} = 29.166$

$\Rightarrow \quad D_2 \approx 29$

Hence, these supplies sufficient for 29 days.

25. The difference between Compound Interest & Simple Interest on a certain sum of money for 2 years @ 5% p.a. is ₹ 122. Find the sum.

a. ₹ 14000 *b.* ₹ 15000
c. ₹ 16000 *d.* ₹ 17000

✓ ***(*)*** Here, $D =$ ₹ 122, $P = ?$, $r = 5\%$,
$T = 2$ years
We know that if difference of CI and SI for 2 years,

Then, $P = \frac{D \times (100)^2}{r^2}$

$\Rightarrow \quad P = \frac{122 \times 100 \times 100}{5 \times 5}$

$\Rightarrow \quad P = 122 \times 400 \Rightarrow P =$ ₹ 48800

26. 2017 India-ASEAN Youth Summit was held from August 14-19, 2017 in

a. New Delhi *b.* Mumbai
c. Bhopal *d.* Chennai

✓ ***(c)*** The summit was jointly organised by Union Ministry of Youth Affairs and Sports, along with the Ministry of External Affairs as part of a year-long series of events to celebrate 25 years of partnership with Association of South-East Asian Nations (ASEAN) countries.

27. Under project 'Navika Sagar Parikrama', which will commence in September, 2017, a team of women officers of the Indian Navy would circumnavigate the globe on an Indian built sail boat named

a. INSV Durga *b.* INSV Sindhu
c. INSV Amba *d.* INSV Tarini

✓ ***(d)*** Six women officers of the Indian Navy, who are due to circumnavigate the globe on the sailing vessel, INSV Tarini. This is the first-ever Indian circumnavigation of the globe by an all-women crew. They will begin their voyage later this month from Goa and expect to return to Goa in March, 2018, after completing the circumnavigation. The expedition has been titled Navika Sagar Parikrama. The Parikrama will be covered in five legs, with stop-overs at 4 ports: Fremantle (Australia), Lyttleton (New Zealand), Port Stanley (Falklands) and Cape Town (South Africa). INSV Tarini is a 55-foot sailing vessel, which has been built indigenously and was inducted in the Indian Navy earlier this year.

28. On August 18, 2017, which Asian country launched its first cyber court specialising in handling internet-related cases?

a. Japan *b.* China
c. South Korea *d.* Thailand

✓ ***(b)*** On August 18, 2017, China launched its first cyber court specialising in handling internet-related cases in the e-commerce hub of Hangzhou amid a spike in the number of online disputes. The Internet Court in Hangzhou, capital of East China's Zhejiang Province will handle cases such as online trade disputes and copyright lawsuits.

29. On August 18, 2017, Power Grid Corporation announced that it will get a loan of $500 million from which international financial institution for its various projects?

a. Asian Development Bank
b. World Bank
c. International Monetary Fund
d. New Development Bank

✓ ***(a)*** As announced by Power Grid, the proceeds of the loan are proposed to be utilised for funding of Green Energy Corridor (Part D); 800KV High Voltage Direct Current (HVDC) bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, Tamil Nadu) and 320 KV HDVC link between Pugalur and North Trichur (Kerala).

30. Who among the following cricketer has continued to be the world's top-ranked One-day batsman in the latest ICC ODI rankings, released in Dubai on August 18, 2017?

a. Virat Kohli *b.* David Warner
c. AB De Villiers *d.* Joe Root

✓ ***(a)***

31. Who among the following has won a silver medal in the javelin throw at the first World Para Athletics Junior Championships in Nottwil, Switzerland?
a. Prince Ahuja *b.* Jatinder Singh
c. Prakash Jaishankar *d.* Rinku Hooda

✓ ***(d)*** India's junior para-athlete Rinku Hooda won a silver medal in the javelin throw at the first World Para Athletics Junior Championships in Nottwil, Switzerland. 18 year old Rinku Hooda threw a distance of 54.92 to make the second place.

32. 'Requisitioning & Acquisition of Immovable Property (Amendment) Bill 2017', a bill providing for amendment to the regulations governing compensation amount payable at the time of acquisition of immovable property by the Central government was introduced in the Lok Sabha on July 18, 2017. This bill is an amendment to the original act that came into force in
a. 1952 *b.* 1951 *c.* 1950 *d.* 1949

✓ ***(a)*** The Requisitioning and Acquisition of Immovable Property Act empowers the Central government to requisition any immovable property and also to acquire them under certain specified conditions. The Act came into force in March, 1952. The bill seeks to amend the provision to allow the Central government to reissue the notice of acquisition in order to ensure that the property's owner gets an opportunity to be heard.

33. A bill providing for setting up of the Indian Institute of Petroleum and Energy in …… was introduced in the Lok Sabha on July 18, 2018.
a. Punjab *b.* Haryana
c. Telangana *d.* Andhra Pradesh

✓ ***(d)*** 'The Indian Institute of Petroleum and Energy Bill 2017' was introduced by Minister of State for Petroleum and Natural Gas Dharmendra Pradhan. The institute would be established in Visakhapatnam district in pursuance of the Central government's commitment for setting up a petroleum university under the Andhra Pradesh Reorganisation Act 2014.

34. The best example of the extinction of species due to man's intervention is
a. Kiwi *b.* Dodo
c. Przewalski's horse *d.* Bustard

✓ ***(d)*** The Great Indian Bustard, a bird species once found in abundance across the grasslands of India, is facing the risk of extinction. The 2011 Red List of birds, released by the International Union for Conservation of Nature (IUCN), has enlisted the bird in the Critically Endangered category, the highest level of threat. The population of the species is estimated to be just 250.

35. Which of following utilises sunlight in a direct fashion?
a. Photo voltaic cell
b. Solar thermal cells
c. Bio gas production
d. Both (a) and (b)

✓ ***(b)*** Solar thermal technology uses the Sun's energy, rather than fossil fuels, to generate low-cost, environmentally friendly thermal energy. This energy is used to heat water or other fluids, and can also power solar cooling systems. Solar thermal systems differ from solar photovoltaic (PV) systems, which generate electricity rather than heat.

36. In 'Internet' term WWWW, the 4th W stands for
a. Web *b.* Worm
c. Wreck *d.* Wsjk

✓ ***(b)*** The World-Wide Web Worm (WWWW) is claimed to be the first search engine for the World-Wide Web, though it was not released until March, 1994, by which time a number of other search engines had been made publicly available. It was developed in September, 1993 by Oliver McBryan at the University of Colorado. The worm created a database of 300000 multimedia objects which could be obtained or searched for keywords via the WWW. In contrast to present-day search engines, the WWWW featured support for Perl regular expressions.

37. IPv6 addresses have a size of
a. 64 bits *b.* 128 bits
c. 256 bits *d.* 512 bits

✓ ***(b)*** An IPv6 address is represented as eight groups of four hexadecimal digits, each group representing 16 bits (two octets, a group sometimes also called a hextet). The groups are separated by colons (:). An example of an IPv6 address is: 2001 : 0db8 : 85a3 : 0000 : 0000 : 8a2e : 0370 : 7334.

38. The Constitution of India recognises
a. Only religious minorities
b. Only linguistic minorities
c. Religious and Linguistic minorities
d. Religious, Linguistic & Ethnic minorities

✓ ***(c)*** The religious and linguistic minorities, who have been placed on a par in Article-30, have to be considered in terms of the State concerned. Not surprisingly, this issue surfaced again in Bal Patil (2004) and Srivastava (2007).

39. During which of the following Mughal Emperor's rule, number of Hindus employed by Emperor's Administration was the highest?
a. Humayun
b. Akbar
c. Shahjahan
d. Aurangzeb

✓ ***(d)*** A number of non-Muslims including Hindus, Sikhs, Marathas and Jats, were employed by Aurangzeb in his court. He did not compromise on the fundamentals of Islam, which are infact the moving spirit of every faith.

40. The Mansabdari system introduced by Akbar was borrowed from the system followed in
a. Afghanistan *b.* Turkey
c. Mongolia *d.* Persia

✓ ***(c)*** Mansabdar implies the generic term for the military-kind grading of all royal functionaries of the Mughal Empire. The Mansabdari system introduced by Akbar was borrowed from the system followed in Mongolia.

41. Who among the following is said to have witnessed the reigons of eight Delhi Sultans?
a. Ziauddin Barani
b. Shams-i-Siraj Afif
c. Minhaj-us-Siraj
d. Amir Khusrau

✓ ***(d)*** Amir Khusrau (1253-1325) is regarded as the 'father of qawwali' .He was an Indian musician, scholar and poet. He was an iconic figure in the cultural history of the Indian subcontinent.He is said to have witnessed the reigns of eight Delhi Sultans from 'Ghiyasuddin Balban to Sultan Muhammad bin Tughluq'.

42. The President of India referred the Ayodhya issue to the Supreme Court under which Article?
a. 143 *b.* 132 *c.* 138 *d.* 136

✓ ***(a)*** Under Article-143(1) of the Constitution, if at any time it appears to the President that a question of law or fact has arisen, or is likely to arise, which is of such a nature and of such public importance that it is expedient to obtain the opinion of the Supreme Court upon it, he may refer the question to that court for consideration and the court may, after such hearing as it thinks fit, report to the President its opinion thereon.

43. Right to Privacy as a Fundamental Right is implied in
a. Right to Freedom
b. Right to Life & Personal Liberty
c. Right to Equality
d. Right against Exploitation

✓ ***(a)*** The Right to Privacy is protected as an intrinsic part of the Right to Life and Personal Liberty.Under Article-21 and as a part of the freedoms guaranteed by Part-III of the Constitution. The Right to Privacy in India has developed through a series of decisions over the past 60 years.

44. The interval between two sessions of Parliament must not exceed
a. 3 months *b.* 6 months
c. 4 months *d.* 100 days

✓ ***(b)*** Under Article-85 the President has the power to summon and prorogue either House of Parliament from time to time and to dissolve the Lok Sabha. It is also provided that six months must to intervene between the last sitting in one session and the first sitting in the succeeding sesision. In other words the interval between two session must not exceed six months. The Suprme Court has helt that the maximum interval of 6 months applies to a live, existing and functional. Legislative Assembly and not to a dissolved Assembly. This provision also ensures that there will be at least two sessions of the Parliament in a Year and the gap between the date of propagation and the commencement of the next session will not exceed six months.

45. With reference to inflation in India, which of the following statements is correct?

a. Controlling the inflation in India is the responsibility of the government of India only.
b. The Reserve Bank of India has no role in controlling the inflation.
c. Decreased money circulation helps in controlling the inflation.
d. Increased money circulation helps in controlling the inflation.

✓ ***(c)*** The amount of money that people prefer to hold is bounded in both directions. If the supply of money decreases, many people will be left with less money than they are comfortable with and decrease their spending to save up. The market responds by lowering prices. At some point the fall price level causes people to prefer a lower amount of money. Inflation is the opposite process, where people spend money to get rid of excesses. If inflation is the norm, then a modest reduction of the money supply only decelerates inflation.

46. Which of the following brings out the Consumer Price Index Number for Industrial Workers?

a. The Reserve Bank of India
b. The Department of Economic Affairs
c. The Labour Bureau
d. The Department of Personnel and Training

✓ ***(c)***Consumer Price index Numbers for Industrial Workers, one of the most widely used statistics in the country, have been compiled and maintained by Labour Bureau since its inception in October, 1946.These index numbers, apart from being utilised for fixation and revision of wages, determination of Variable Dearness Allowances, measuring inflationary trend in the country and policy formulation by the government, are also used by researchers for various analytical purposes.

47. 'Golden Revolution' is related to

a. Precious minerals *b.* pulses
c. Jute *d.* Horticulture

✓ ***(d)*** In India , the period between 1991 to 2003 is termed as Golden Revolution. Golden revolution is about Honey and Horticulture production. During this period there is huge production of fruits, vegetables ,honey and other horticulture products.

48. A country is said to be in a debt trap if

a. It has to abide by the conditionalities imposed by the International Monetary Fund
b. It has to borrow to make interest payments on outstanding loans
c. It has been refused loans or aid by creditors abroad
d. The World Bank charges a very high rate of interest on outstanding and new loans

✓ ***(b)*** A debt trap is a situation in which a borrower is led into a cycle of reborrowing, or rolling over, their loan payments because they are unable to afford the scheduled payments on the principal of a loan. These traps are usually caused by high-interest rates and short terms.

49. With respect to GST, consider following statements GST

1. Reduces cascading effect
2. Is a comprehensive indirect tax
3. Aimed at forging a common domestic market
4. Alcohol and petroleum are exempted from GST

a. 1, 2, 3 correct
b. 2, 3 correct
c. 2, 3, 4 correct
d. All of the above are correct

✓ ***(c)***

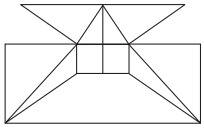
50. India's current account deficit in Balance of Trade is mainly due to

1. Increasing imports of oil and petroleum
2. Increasing imports of gold and silver
3. Increasing imports of food grains
4. Increasing imports of iron and steel

a. 1, 2 and 3 *b.* 1 and 3
c. 1 and 2 *d.* 1 and 4

✓ ***(d)***

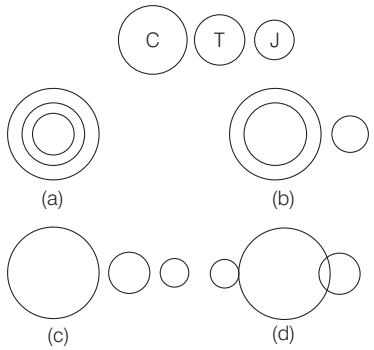
51. Find the minimum number of straight lines required to make the given figure.



a. 16 *b.* 17
c. 18 *d.* 19

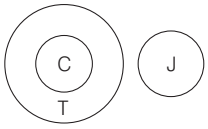
✓ ***(a)*** From fig it is clear that 16 straight lines are required to make the given figure.

52. Which of the following figures best depicts the relationship among criminals, thieves and judges?



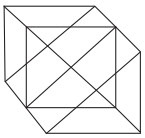
a. a *b.* b *c.* c *d.* d

✓ ***(b)*** The figures in option (b) is best depicts the relationship among criminal, thieves and judges.



Criminal and thieves are in same category and judges are different.

53. Find the number of triangles in the given figure.



a. 18 *b.* 20 *c.* 24 *d.* 27

✓ ***(c)*** There are total 24 triangles in the given figure.

54. Of the following two statements, both of which cannot be true but both can also be false. Which are these two statements?

I. All machines make noise.
II. Some machines are noisy.
III. No machine makes noise.
IV. Some machines are not noisy.

a. I and II *b.* III and IV
c. I and III *d.* II and IV

✓ ***(d)***

55. Insert arithmetical in signs in the equation for it to be correct 8 4 2 = 16

a. +, × *b.* −, + *c.* ÷, + *d.* +, ÷

✓ ***(a)*** Here, 8 4 2 = 16
Now, place the sign of option (a).
$\Rightarrow \quad 8 + 4 \times 2 = 16$
$\Rightarrow \quad 8 + 8 = 16$
$\Rightarrow \quad 16 = 16$
Hence, option (a) is the right answer.

56. If $84 \times 13 = 8$, $37 \times 13 = 6$, $26 \times 11 = 6$, then $56 \times 22 = ?$

a. 3 *b.* 5 *c.* 7 *d.* 9

✓ (c) As, $84 \times 13 = 8$
$\Rightarrow (8 + 4) - (1 + 3) = 8 \quad \Rightarrow 12 - 4 = 8$
and $37 \times 13 = 6$
$\Rightarrow (3 + 7) - (1 + 3) = 6 \quad \Rightarrow 10 - 4 = 6$
and $26 \times 11 = 6$
$\Rightarrow (2 + 6) - (1 + 1) = 6 \quad \Rightarrow 8 - 2 = 6$
Same as, $56 \times 22 = ?$
$\Rightarrow (5 + 6) - (2 + 2) = ? \quad \Rightarrow 11 - 4 = ?$
$\Rightarrow \quad ? = 7$

57. If + means divide, × means –, ÷ means multiply and – means plus, then find the value of $9 + 3 \div 4 - 8 \times 2$
a. 15 *b.* 17 *c.* 18 *d.* 20

✓ ***(c)*** Given, $9 + 3 \div 4 - 8 \times 2$
Now, changing the sign as per the question,
$\Rightarrow 9 \div 3 \times 4 + 8 - 2 \Rightarrow \frac{9}{3} \times 4 + 8 - 2$
$\Rightarrow 3 \times 4 + 8 - 2 \quad \Rightarrow 12 + 8 - 2$
$\Rightarrow 20 - 2 \quad \Rightarrow 18$

58. Find the next term of the sequence 1, 8, 4, 27, 9, …
a. 8 *b.* 9 *c.* 64 *d.* 16

✓ ***(c)*** 1 8 4 27 9 [64]
$\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$
$(1)^2$ $(2)^3$ $(2)^2$ $(3)^3$ $(3)^2$ $(4)^3$

59. David divides 78 by half and adds 11. What number he gets at the end?
a. 50 *b.* 44½ *c.* 167 *d.* 83½

✓ ***(c)*** According to the question,
$$\frac{78}{\frac{1}{2}} + 11 = \frac{78 \times 2}{1} + 11$$
$$= 156 + 11 = 167$$
Hence, David gets 167 at end.

60. In a knockout football competition 23 teams participated. What was the least number of matches they needed to play to decide the winner?
a. 11 *b.* 21 *c.* 22 *d.* 62

✓ ***(b)*** Required match = 23 – 2 = 21

61. At half past 5 in the evening, the smaller angle between the hour & minute hands of a clock is
a. 10° *b.* 12°
c. 15° *d.* 18°

✓ ***(c)*** At 5 : 30 p.m, hour hand is behind minute hand
∴ Angle between both the hands
$$= \left[30\left(\frac{x}{5} - t\right) - \frac{x}{2}\right]^\circ$$
Here, $t = 5$ and $x = 30$
$$\therefore \text{Required angle} = \left[30\left(\frac{30}{5} - 5\right) - \frac{30}{2}\right]^\circ$$
$= [30 (6 - 5) - 15]°$
$= (30 \times 1 - 15)° = (30 - 15)° = 15°$

62. Fill in the blanks
BA_BA_BAC_ACB_CBAC
a. AACB *b.* BBCA *c.* CCBA *d.* CBAC

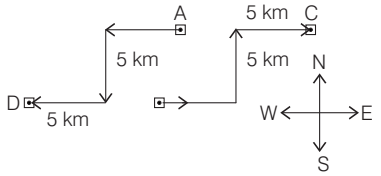
✓ ***(c)*** BAC/BAC/BAC/BAC/BAC/BAC
$\Rightarrow$ CCBA

63. Angles of a given triangle are in the ratio of 2:3:4. What kind of triangle is the given triangle?
a. Right-angled *b.* Obtuse angle
c. Isosceles *d.* Acute angle

✓ ***(d)*** Let, angles of a triangle are $2x$, $3x$ and $4x$.
$\therefore \quad 2x + 3x + 4x = 180°$
$\Rightarrow \quad 9x = 180° \Rightarrow \quad x = 20°$
∴ Angles are $2 \times 20°$, $3 \times 20°$ and $4 \times 20°$ *i.e.* 40°, 60° and 80°.
Since, all the angles of a triangle are acute
Hence, given triangle is acute angle triangle.

64. The houses of A and B face each other on a road going North-South, A's being on the western side. A comes out of his house, turns left, travels 5 km, turns right, travels 5 km to the front of D's house. B does exactly the same and reaches the front of C's house. In this context, which one of the following statements is correct?
a. C and D live on the same street.
b. C's house faces South.
c. Houses of C & D are less than 20 km apart.
d. None of the above

✓ ***(b)*** Direction diagram from given information is as below



It is clear from diagram that C's house face South.

65. BEH, DGJ, (?), EJO, GLQ, INS
a. FLR *b.* FIS *c.* FKO *d.* FIL

✓ ***(d)*** B $\xrightarrow{+2}$ D $\xrightarrow{+2}$ F $\xrightarrow{-1}$ E $\xrightarrow{+2}$ G $\xrightarrow{+2}$ I
E $\xrightarrow{+2}$ G $\xrightarrow{+2}$ I $\xrightarrow{+1}$ J $\xrightarrow{+2}$ L $\xrightarrow{+2}$ N
H $\xrightarrow{+2}$ J $\xrightarrow{+2}$ L $\xrightarrow{+3}$ O $\xrightarrow{+2}$ Q $\xrightarrow{+2}$ S

66. H, V, G, T, F, R, E, P, ?
a. K, L *b.* D, N *c.* C, D *d.* L, K

✓ ***(b)*** H $\xrightarrow{-1}$ V $\xrightarrow{-1}$ G $\xrightarrow{-1}$ T $\xrightarrow{-1}$ F $\xrightarrow{-2}$ R $\xrightarrow{-2}$ E $\xrightarrow{-2}$ P $\xrightarrow{-2}$ D $\xrightarrow{}$ N

67. 4 : 10 : : 8 : ?
a. 10 *b.* 13 *c.* 17 *d.* 14

✓ ***(d)***

68. If TOUR is written as 1234, CLEAR is written as 56784 and SPARE is written as 90847, find the code for CARE
a. 1247 *b.* 4847 *c.* 5247 *d.* 5847

✓ ***(d)***

69. CALANDER is coded in a code as CALANDER. Find the code for CIRCULAR under the same rule.
a. LACANDER *b.* CRIUCALR
c. CLANADER *d.* None of these

✓ ***(b)*** As, C A L A N D E R
$\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$
C L A N A E D R
Same as, C I R C U L A R
$\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$ $\downarrow$
C R I U C A L R

70. A. Either he is happy or he is poor.
B. He is a happy.
Inference He is poor.
a. The inference is definitely true.
b. The inference is definitely false.
c. The inference is probably false or true.
d. The inference can not be drawn.

✓ ***(b)***

71. A. Those who are honest are good teachers.
B. Hard working people are honest.
Inference Hard work is the necessary quality of a good teacher.
a. The inference is definitely true.
b. The inference is definitely false.
c. The inference is probably false or true.
d. The inference can not be drawn.

✓ ***(a)***

72. Based on the following statements, which is the correct conclusion drawn?
Only gentlemen can become members of the club. Many of the members of the club are officers. Some of the officers have been invited for dinner.
a. All the members of the club have been invited for dinner.
b. Some of the officers are not gentlemen.
c. All gentlemen are members of the club.
d. Only gentlemen have been invited for dinner.

✓ ***(d)***

73. In a family there are husband, wife, two sons and two daughters. All the ladies were invited to a dinner. Both sons went out to play. Husband did not return from office. Who was at home?
a. Only wife was at home
b. All ladies were at home
c. Only sons were at home
d. Nobody was at home

✓ ***(d)***

74. If A is the son of Q, Q and Y are sisters, Z is the mother of Y, P is the son of Z, then which of the following statements is correct?
a. P is maternal uncle of A.
b. P and Y are sisters.
c. A and P are cousins.
d. None of the above

✓ ***(a)***

75. There are 5 books A, B, C, D and E placed on a table. If A is placed below E, C is placed above D, B is placed below A and D is placed above E, then which of the following books touches the surface of the table?
a. C *b.* B *c.* A *d.* E

✓ ***(c)***

76. 'To decamp' would mean
a. To remove tent
b. To evict campers
c. To decrease pressure
d. To leave suddenly

✓ ***(d)***

77. Which pair is wrongly matched?
a. Discreet : Separate
b. Gamut : Whole
c. Exacerbated : Increased
d. Allude : Escape

✓ ***(d)***

78. Identify the correct pair.
a. Elude : Dodge *b.* Allude : Escape
c. Forbear *d.* Latter : Afterwards

✓ ***(b)*** 'Allude' doesn't have the similar meaning. Rest of the words have their synonyms in pair.

79. A devil's advocate would be
a. An evil person
b. A counter argument presenter
c. Advocate of a criminal
d. Unregistered advocate

✓ ***(b)*** 'A devil's advocate' means 'one who is a counter agument presenter'.

80. Satish heard it from the horse's mouth means
a. from an authoritative source
b. from a close friend
c. from the closest family member
d. from his boss

✓ ***(a)***

81. Satish is seated ..... Sunita.
a. besides *b.* beside *c.* clearly *d.* closest

✓ ***(b)*** 'Beside' means 'close by' which gives the proper context.

82. Identify the incorrect pair.
a. Moot : Debatable
b. Singularly : Individually
c. Regimen : Prescription
d. Sever : Detach

✓ ***(c)***

83. 'I haven't studied a lot lately'. Here, 'lately' is a/an
a. Adverb *b.* Adjective
c. Noun *d.* Preposition

✓ ***(a)***

84. Which sentence of following is correct?
a. The flowers was arranged carefully.
b. The meeting start promptly at 1100.
c. Computers save time.
d. Lightning strike indiscriminately.

✓ ***(c)***

85. Identify the incorrect sentence.
a. None of the minutes was wasted.
b. None of the time was wasted.
c. Is any of the pizza left?
d. None of the above

✓ ***(c)***

86. Among the two statements :
i. Either Satish or Sejal takes out the garbage.
ii. Each of these prescriptions have side effects.
a. Both are correct
b. (i) is correct, (ii) is incorrect
c. (i) is incorrect, (ii) is correct
d. Both are incorrect.

✓ ***(b)***

87. Choose the sentence that has incorrect form of words.
a. When will you bring you're pictures to work?
b. It is your responsibility to go into details
c. If you're planning to attend, do let me know.
d. None of the above

✓ ***(a)***

88. I ... her speak on Friday night about the advantages of organic gardening.
a. will have heard *b.* would hear
c. would have heard *d.* will hear

✓ ***(b)*** The action is probable in future. Hence 'Would hear' is suitable usage here.

89. Choose an incorrect/incomplete sentence.
a. The children in the park, including all those on the swings.
b. Sarita is an excellent school teacher.
c. She couldn't believe the premise of the story.
d. I saw Dr. Ghose because Dr. Khan was on leave.

✓ ***(d)***

90. What is not correct if 'nest is to bird'?
a. Hangar is to aircraft
b. Vault is to money
c. Orchestra is to music
d. Wine is to bees

✓ ***(c)***

91. The exact opposite of 'Lascivious' would mean
a. Devoted *b.* Chaste
c. Fluid *d.* Manifest

✓ ***(b)***

92. 'Repercussion' would mean
a. Reaction *b.* Concussion
c. Recollection *d.* Clever reply

✓ ***(a)***

93. ..... to go out to an Italian restaurant tonight?
a. Do you like *b.* Are you liking
c. You like *d.* Would you like

✓ ***(d)***

94. Excuse me, ... time please?
a. you have the *b.* what is
c. have you got the *d.* what

✓ ***(c)***

95. He likes reading. He was a ..... reader. (Fill in the best fitting word)
a. anxious *b.* enthusiastic
c. voracious *d.* fervent

✓ ***(d)***

96. I remember my sister taking me to the museum.
(Choose the best fit among the alternatives)
a. I remember I was taken to the museum.
b. I remember being taken to the museum by my sister.
c. I remember myself being taken to the museum by my sister.
d. I remember taken to the museum by my sister.

✓ ***(c)***

97. To make a clean breast of means
a. To gain prominence
b. To praise oneself
c. To confess everything
d. To destroy everything

✓ ***(c)***

98. 'To be above board' means
a. To have a good height
b. To be honest
c. To have no debts *d.* To beautiful

✓ ***(b)***

99. That which cannot be corrected means
a. Unintelligible *b.* Indelible
c. Illegible *d.* Incorrigible

✓ ***(d)***

100. State in which the few govern the many is called
a. Monarchy *b.* Oligarchy
c. Plutocracy *d.* Autocracy

✓ ***(b)***