

# SLAT 2020

## Previous Year Paper

**English Language:**

**Direction:** Read the passage and answer the following questions:

Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple. It matters in which plane the embryo is cut. If it is cut in a plane different from the one used by the early investigators, it will not form two whole embryos.

A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversibly committed to their fates, and what are the “morphogenetic determinants” that tell a cell what to become? But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively. Recent discoveries in molecular biology, however, have opened up prospects for a resolution of the debate. Now investigators think they know at least some of the molecules that act as morphogenetic determinants in early development. They have been able to show that, in a sense, cell determination begins even before an egg is fertilized.

Studying sea urchins, biologist Paul Gross found that an unfertilized egg contains substances that function as morphogenetic determinants. They are located in the cytoplasm of the egg cell; i.e., in that part of the cell's protoplasm that lies outside of the nucleus. In the unfertilized egg, the substances are inactive and are not distributed homogeneously. When the egg is fertilized, the substances become active and, presumably, govern the behavior of the

genes they interact with. Since the substances are unevenly distributed in the egg, when the fertilized egg divides, the resulting cells are different from the start and so can be qualitatively different in their own gene activity.

The substances that Gross studied are maternal messenger RNA's—products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, is the synthesis of histones, a class of proteins that bind to DNA. Once synthesized, the histones move into the cell nucleus, where a section of DNA wraps around them to form a structure that resembles beads, or knots, on a string. The beads are DNA segments wrapped around the histones; the string is the intervening DNA. And it is the structure of these beaded DNA strings that guide the fate of the cells in which they are located.

1. Which of the following is dependent on the fertilization of an egg?

- A. division of a cell into its nucleus and the cytoplasm.
- B. synthesis of proteins called histones.
- C. generation of all of a cell's morphogenetic determinants.
- D. determination of egg cell's potential for division.

**Ans. B**

Refer to these lines:

“The substances that Gross studied are maternal messenger RNA's—products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, is the synthesis of histones, a class of proteins that bind to DNA.”

Hence, it is clear that after fertilization, the non-uniformly distributed substances went on to carry out the process of synthesis of

histones. Hence, option B is the right answer.

2. When biologists believed that the cells in the early embryo were determined, they made which of the following mistake?

- A. They did not realize that there was a connection between the issue of cell determination and the outcome of the separation experiment.
- B. They assumed that the results of experiments on embryos did not depend on the particular animal species used for such experiments.
- C. They assumed that it was crucial to perform the separation experiment at an early stage in the embryo's life.
- D. None of the above

**Ans. C**

Refer to these lines:

"Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple."

Here, the answer lies in the final statement, which clears the context here. Biologists once believed that just by cutting the embryo at an early stage in life, the experiment would be successful. However, this was not the case. Hence, option C is the right answer.

3. The main topic of the passage is:

- A. the main contribution of modern embryology to molecular biology.
- B. the role of molecular biology is disproving older theories of embryonic development.
- C. the early development of embryos of lower marine organisms like a sea urchin.

D. cell determination as an issue in the study of embryonic development.

**Ans. D**

Refer to these lines:

"A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversibly committed to their fates, and what are the "morphogenetic determinants" that tell a cell what to become? But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively. Recent discoveries in molecular biology, however, have opened up prospects for a resolution of the debate." From the above excerpt, it is clear that there was a debate going on regarding the development of embryos but the conclusion was never reached. Then, recent discoveries in molecular biology turned the game on its head and the focus shifted towards finer details related to embryonic development. Hence, option D is the right answer.

**Direction:** Read the passage and answer the following questions:

Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple. It matters in which plane the embryo is cut. If it is cut in a plane different from the one used by the early investigators, it will not form two whole embryos.

A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversibly committed to their fates, and

what are the “morphogenetic determinants” that tell a cell what to become? But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively. Recent discoveries in molecular biology, however, have opened up prospects for a resolution of the debate. Now investigators think they know at least some of the molecules that act as morphogenetic determinants in early development. They have been able to show that, in a sense, cell determination begins even before an egg is fertilized.

Studying sea urchins, biologist Paul Gross found that an unfertilized egg contains substances that function as morphogenetic determinants. They are located in the cytoplasm of the egg cell; i.e., in that part of the cell's protoplasm that lies outside of the nucleus. In the unfertilized egg, the substances are inactive and are not distributed homogeneously. When the egg is fertilized, the substances become active and, presumably, govern the behavior of the genes they interact with. Since the substances are unevenly distributed in the egg, when the fertilized egg divides, the resulting cells are different from the start and so can be qualitatively different in their own gene activity.

The substances that Gross studied are maternal messenger RNA's—products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, is the synthesis of histones, a class of proteins that bind to DNA. Once synthesized, the histones move into the cell nucleus, where a section of DNA wraps around them to form a structure that resembles beads, or knots, on a string. The beads are DNA segments wrapped around the histones; the string is the intervening DNA. And it is the structure of these beaded DNA strings that guide the fate of the cells in which they are located.

4. The morphogenetic determinants present in the unfertilized egg cell are which of the following?
- A. histones
  - B. non-beaded intervening DNA
  - C. cytoplasm
  - D. maternal messenger RNA

**Ans. D**

Refer to these lines:

“The substances that Gross studied are maternal messenger RNA's—products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, is the synthesis of histones, a class of proteins that bind to DNA.”

Hence, option D is the right answer.

5. It can be inferred that the initial production of histones takes place after an egg is fertilized
- A. in certain sections of the cell nucleus
  - B. in the beaded portion of the DNA string
  - C. in the cytoplasm
  - D. in the maternal genes

**Ans. C**

From the 2<sup>nd</sup> paragraph, it is clear that before fertilization, the morphogenetic determinants remain in the cytoplasm, and from there onwards, the whole process of creation of histones takes place. Hence, option C is the right answer.

**Direction:** Read the passage and answer the following questions:

The sun today is a yellow dwarf star. It is fueled by thermonuclear reactions near its center that converts hydrogen to helium. The Sun has existed in its present state for about 4 billion and 600 million years and is thousands of times larger than the Earth. By studying the other stars, astronomers can predict what the rest of the Sun's life will be like. About 5 billion years from now, the core of the Sun will shrink and become

hotter. The surface temperature will fall. The higher temperature of the center will increase the rate of thermonuclear reactions. The outer regions of the Sun will expand approximately 35 million miles, about the distance of Mercury, which is the closest planet to the Sun. The Sun will be a red giant star. Temperatures on the Earth will become too hot for life to exist. Once the Sun has used up the thermonuclear energy as a red giant, it will begin to shrink. After it shrinks to the size of the Earth, it will become a white dwarf star. The Sun may throw off a huge amount of gases in violent eruptions called nova explosions as it changes from a red giant to a white dwarf. After billions of years as a white dwarf, the Sun will have used up all its fuel and will have lost its heat. Such a star is called a black dwarf. After the Sun has become a black dwarf, the Earth will be dark and cold. If any atmosphere remains there, it will be frozen into the Earth's surface.

6. It can be inferred from the passage that the sun:

- A. has been in existence for 10 billion years.
- B. is changing its size and brightness.
- C. will continue as a yellow dwarf star for another 10 billion years.
- D. is approximately halfway through its life as a yellow dwarf.

**Ans. D**

Refer to these lines:

“The Sun has existed in its present state for about 4 billion and 600 million years and is thousands of times larger than the Earth. By studying the other stars, astronomers can predict what the rest of the Sun's life will be like. About 5 billion years from now, the core of the Sun will shrink and become hotter.”

Options A and C are factually incorrect while option B can be neglected because

the Sun's brightness is not in the picture here.

7. Which of the following best described the sequence of the stage that the Sun will probably pass through?

- A. White dwarf, red giant, black dwarf, yellow dwarf
- B. Yellow dwarf, red giant, white dwarf, black dwarf
- C. Red giant, white dwarf, red dwarf, nova explosion
- D. Yellow dwarf, white dwarf, red giant, black giant

**Ans. B**

This is a fact-based question, the answer to which is explicitly mentioned in the passage.

8. What is the primary purpose of the passage?

- A. to prevent a theory of red giants star.
- B. to describe the changes that the sun will go through.
- C. to discuss conditions on Earth in the far future.
- D. Scientist's prediction to the danger posed by the sun.

**Ans. B**

Except for option B, the rest of the options lie outside the scope of the passage. The passage does not mention scientists' predictions, nor does it contain details regarding the condition of Earth and a theory on red giants star.

9. What will probably be the first step of change as the Sun becomes the red giant?

- A. It will throw off a huge amount of gases.
- B. Its surface will become hotter and shrink.
- C. Its core will cool off and use less fuel.
- D. Its center will grow smaller and hotter.

**Ans. B**

Refer to these lines:

“About 5 billion years from now, the core of the Sun will shrink and become hotter. The surface temperature will fall. The higher temperature of the center will increase the rate of thermonuclear reactions. The outer regions of the Sun will expand approximately 35 million miles. about the distance of Mercury, which is the closest planet to the Sun. The Sun will be a red giant star.”

Hence, option B is the right answer.

**Direction:** Read the passage and answer the following questions:

The sun today is a yellow dwarf star. It is fueled by thermonuclear reactions near its center that converts hydrogen to helium. The Sun has existed in its present state for about 4 billion and 600 million years and is thousands of times larger than the Earth. By studying the other stars, astronomers can predict what the rest of the Sun's life will be like. About 5 billion years from now, the core of the Sun will shrink and become hotter. The surface temperature will fall. The higher temperature of the center will increase the rate of thermonuclear reactions. The outer regions of the Sun will expand approximately 35 million miles. about the distance of Mercury, which is the closest planet to the Sun. The Sun will be a red giant star. Temperatures on the Earth will become too hot for life to exist. Once the Sun has used up the thermonuclear energy as a red giant, it will begin to shrink. After it shrinks to the size of the Earth, it will become a white dwarf star. The Sun may throw off a huge amount of gases in violent eruptions called nova explosions as it changes from a red giant to a white dwarf. After billions of years as a white dwarf, the Sun will have used up all its fuel and will have lost its heat. Such a star is called a black dwarf. After the Sun has become a black dwarf, the Earth will be dark and

cold. If any atmosphere remains there, it will be frozen into the Earth's surface.

10. When the Sun becomes a red giant, what will be the conditions be like on Earth? A. Its atmosphere will freeze and become solid.

B. It will be enveloped in the expanding surface of the sun.

C. It will become too hot for life to exist.

D. It will be completely destroyed by nova explosions.

**Ans. C**

Refer to these lines:

“The Sun will be a red giant star. Temperatures on the Earth will become too hot for life to exist. Once the Sun has used up the thermonuclear energy as a red giant, it will begin to shrink.”

Hence, option C is the right answer.

**Direction:** Read the passage and answer the following questions:

What distinguishes humans from animals? For some it is language. for others, it is altruistic willingness to help other members of the species. However, this kind of altruism seems to exist in the animal world as well. Researchers working with Christophe Borsch at the Max Planck Institute for Evolutionary Anthropology in Leipzig observed that West African Chimpanzees adopt orphaned young even though they are not related to them. Several Animals lavished care on a juvenile for several Years. Surprisingly, half of these adoptive parents are male. This behavior is thought to be encouraged by the pressure of leopards, with whom the West African Chimpanzees share their habitat. The constant threat from the big cats seems to have encouraged cohesion and solidarity within the group. Accordingly, the scientists observed more chimpanzee adoptions in West Africa's Tai National

Park than in East Africa. Wild Chimpanzees appear to be more prepared to help than those living in captivity. In zoos, chimpanzees cooperate with other members of the group to only a very limited extent. 'Our observations show that altruism in wild chimpanzees is much more widespread than studies of chimpanzees in zoos would suggest'. concludes Christophe Borsch'.

11. About the recently discovered altruistic zeal in chimpanzees, all of the following can be inferred except:

- A. Chimpanzees found in Tai National Park in West Africa are observed to be more altruistic than those found in East Africa.
- B. Chimpanzees found in West Africa are more altruistic than those found anywhere else.
- C. Chimpanzees adopt orphans that are unrelated to them.
- D. Chimpanzees living in the wild are more altruistic than those in cages.

**Ans. B**

The comparison with the Chimpanzees around the world makes the option B seem far-fetched. Hence, it can't be inferred from the passage. The rest of the options are explicitly stated in the passage and hence, are true.

12. Which of the following is not a reason for the altruistic behavior observed in West African Chimpanzees.

- A. The presence of a natural altruistic willingness to help others.
- B. The presence of a natural environment that simulates such a behavior.
- C. The presence of a natural sense of competition in animals.
- D. The presence of a constant threat from leopards in their environment.

**Ans. C**

Except for option C, all aforementioned statements are true to a greater extent. The presence of a natural altruistic willingness to help others is discussed in 1<sup>st</sup> paragraph. Options B and D are discussed in the excerpt given below:

"This behavior is thought to be encouraged by the pressure of leopards, with whom the West African Chimpanzees share their habitat. The constant threat from the big cats seems to have encouraged cohesion and solidarity within the group."

However, the natural sense of competition is not discussed anywhere in the passage. Hence, option C is the right answer.

13. While discovering the adoptive streak in animals, what surprised the author?

- A. Even female chimpanzees adopt juveniles of other species.
- B. Even chimpanzees adopt orphan juveniles of big cats.
- C. Even male chimpanzees adopt juveniles of other species.
- D. Even big cats adopt orphan juveniles of chimpanzees.

**Ans. C**

Refer to these lines:

"Several Animals lavished care on a juvenile for several Years. Surprisingly, half of these adoptive parents are male."

Hence, option C is the right answer.

14. Which of the following does the author want to establish by suggesting that animals are altruistic?

- A. that human beings are beginning to behave like animals.
- B. that animals are beginning to behave like animals.
- C. that animals too, like humans, share empathy with fellow creatures.
- D. that humans are not so empathetic to fellow creatures as animals are.

**Ans. C**

The 1<sup>st</sup> and the last paragraph holds the answer to this questions. The author has started by pointing out the differences between human and animal behavior. Then, as the discussion moves on, it has been demonstrated that the animals too show empathy for fellow creatures. Hence option C is the right answer.

15. In the expression, 'This behavior is thought to be encouraged', the word 'this' refers to which of the following-

- A. that chimpanzees do not behave strictly according to their gender as humans.
- B. that sexual limitations do not stop a male chimpanzee from being altruistic and adoptive in behavior.
- C. That chimpanzees exhibit a sense of altruism existing in them.
- D. None of the above.

**Ans. C**

The passage has talked about the presence of altruistic behavior in Chimpanzees. This has been the main idea of the passage and here, the word 'this' also refers to the main idea. Hence, the rest of the options are automatically eliminated and the answer is option C.

### GK & Current Affairs

16. Lakshadweep, the Union Territory of India, jurisdiction falls under the High Court of \_\_\_\_\_

- A. Kolkata
- B. Tamil Nadu
- C. Bombay
- D. Kerala

**Ans. D**

Lakshadweep is under the jurisdiction of High Court of Kerala. There is a Munsiff Court in Andrott having jurisdiction over islands of Kavaratti, Andrott, Minicoy and Kalpeni.

17. With which of the following is "Leaf Republic" associated in the West?

- A. Restaurant serving South Indian food
- B. Disposable plates and bowls
- C. Clothing brand
- D. Artificial Plants

**Ans. B**

In order to make your fastest meals come together with eco-responsibility, German company Leaf Republic has devised a biodegradable alternative to cardboard or plastic plates in proposing leaf plates. After edible cutlery, here is the green plate. Fully biodegradable, they decompose in less than a month. The perfect ally for a picnic. But this is not their only asset: the plates also resist water, demolishing along the way their cardboard counterpart. And between us, eating in a leaf, will really makes you adventurous or spice up your life in the office.

18. Which country minted the world's smallest gold coin of 2.96 millimetre (0.12 inches), that feature a face of scientist Albert Einstein?

- A. USA
- B. France
- C. Switzerland
- D. United Kingdom

**Ans. C**

Switzerland has minted the smallest gold coin the world has ever seen, state-owned Swissmint announced Thursday. The 2.96-millimeter (0.12-inch) gold coin, weighing only 0.063 grams (1/500th of an ounce), is so small the viewer needs to squint closely to see world-famous physicist Albert Einstein sticking his tongue out. The coin has a nominal value of 1/4 of a Swiss franc (\$0.26, €0.23) and can be ordered online. According to Swissmint, 999 of the coins have been made, and a single coin will be sold for 199 francs and accompanied with a

special magnifying glass so owners can see Einstein. The gold coin represents Swissmint's official 2020 commemorative coin and celebrates the works of Einstein.

19. Which State records the highest number of missing women?

- A. Uttar Pradesh
- B. Maharashtra
- C. Bihar
- D. Jharkhand

**Ans. B**

The state of Maharashtra tops the chart when it comes to the cases of missing persons registered in 2019, stated the recently released National Crime Records Bureau (NCRB) report. According to the NCRB report, total 66,478 persons went missing in 2019 from Maharashtra which is nearly 19,000 more than the state at second number, Madhya Pradesh (MP) which had reported 47,452 missing cases last year followed by West Bengal (WB) which reported 47,337 missing cases.

20. Identify the first metal to be used in India?

- A. Silver
- B. Iron
- C. Copper
- D. Bronze

**Ans. C**

The first metal to be extensively used by the people in India was copper. Archaeological evidence suggests that copper was first used between 8,000 and 5,000 B.C., most likely in the regions known now as Turkey, Iran, Iraq and toward the end of that period the Indian subcontinent.

21. The International Organisation for Migration had come out with its World Migration Report 2020. Which of the following findings are true?

I. India with a strong 17.5 million diaspora across the world, continues to be the largest country of origin of international migrants, followed by Mexico with 11.8 million and China with 10.7 million making the top three.

II. Out of the total 270 million, around 164 million people, two-thirds of the total migrants are looking for a job.

III. 141 million, almost half of the international migrants are living in North America and Europe.

IV. The Total Number of Migrants in the year 2019 is estimated to be 270 million.

V. 96.5 percent of people globally are estimated to be residing in the country where they were born.

- A. Only I and II
- B. Only I, II and III
- C. Only II and IV
- D. All of these are true

**Ans. D**

IOM headquartered in Geneva, Switzerland, was established in 1951, became a related organization to the United Nations in September 1951. The 2020 World Migration Report marks the tenth edition in the series with the first edition being published in 1999. India with a strong 17.5 million diaspora across the world, continues to be the largest country of origin of international migrants, followed by Mexico with 11.8 million and China with 10.7 million making the top three. Out of the total 270 million, around 164 million people, two-thirds of the total migrants are looking for a job. 141 million, almost half of the international migrants are living in North America and Europe. The Total Number of Migrants in the year 2019 is estimated to be 270 million. 96.5 percent of people globally are estimated to be residing in the country where they were born.

22. Name the Made in India, fast interceptor vessel that was gifted by India to Maldives on December 4, 2019 to enhance its maritime security?

- A. COUACH
- B. RAJSHREE
- C. KAAMIYAAB
- D. RANI ABAKKA

**Ans. C**

Taking forward its 'Neighbourhood First' policy, India on Wednesday handed over a patrol vessel to the Maldives and launched the RuPay card, during a video conference between Prime Minister Narendra Modi and Maldives President Ibrahim Mohamed Solih. Four bilateral grant projects as part of the development partnership between India and the Maldives were highlighted at the digital video conference. India gifted a 'Made in India' patrol vessel named "KAAMIYAAB" to the Maldives National Defence Force (MNDF). The vessel will be manned by eight MNDF personnel trained in India and will be a valuable asset for the Maldives in enhancing its maritime security, fostering its blue economy and safeguarding its tourism industry.

23. In 2019, Indian born American economist, Dr. Abhijeet Banerjee won the 2019 Nobel Prize in Economics for his work on Alleviating Global Poverty. He shared his Nobel with two other people, one being his wife, Esther Dufflo. Who was the second person from Harvard University who shared the Nobel with the couple?

- A. Michael Kremer
- B. Alan Greenspan
- C. Richard Thaler
- D. John Greze

**Ans. A**

The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019 was awarded jointly to Abhijit Banerjee, Esther Duflo and Michael Kremer "for their

experimental approach to alleviating global poverty."

24. From the following statements, identify the country:

- I. It is India's Largest Trading Partner in Europe.
- II. It contributes with the 7<sup>th</sup> Largest Foreign Direct Investment in India.
- III. It has about 1,69,000 people of Indian Origin.
- A. France
- B. Italy
- C. Germany
- D. Netherlands

**Ans. D**

India exported US\$322.8 billion worth of goods around the globe in 2019. That dollar amount reflects a -0.4% reduction since 2015 but a 22.3% gain from 2018 to 2019. Applying a continental lens, almost half (47.8%) of India's exports by value were delivered to fellow Asian countries while 19.3% were sold to European importers. India shipped another 18.8% worth of goods to North America. Smaller percentages went to Africa (9.1%), Latin America excluding Mexico but including the Caribbean (3%), and Oceania led by Australia (1.1%).

Below is a list highlighting 10 of India's top trading partners in terms of countries that imported the most Indian shipments by dollar value during 2019. Also shown is each import country's percentage of total Indian exports.

- 1. United States: US\$54.2 billion (16.8% of India's total exports)
- 2. United Arab Emirates: \$29.7 billion (9.2%)
- 3. China: \$17 billion (5.3%)
- 4. Hong Kong: \$11.5 billion (3.5%)
- 5. Singapore: \$10.7 billion (3.3%)
- 6. United Kingdom: \$8.82 billion (2.7%)
- 7. Netherlands: \$8.75 billion (2.7%)
- 8. Germany: \$8.6 billion (2.7%)

9. Bangladesh: \$8.3 billion (2.6%)  
10. Nepal: \$7 billion (2.2%)

25. Which Indian State has become the first state in the country to enact a law on Contract Farming which is based on the Model Contract Farming Act?

- A. Karnataka
- B. Maharashtra
- C. Tamil Nadu
- D. Telangana

**Ans. C**

Tamil Nadu has become the first State in the country to enact a law on contract farming with President Ram Nath Kovind giving assent to the Agricultural Produce and Livestock Contract Farming and Services (Promotion and Facilitation) Act. State government said the law would safeguard interests of farmers during times of bumper harvest or fluctuating market prices. The farmers would be paid at a pre-determined price, which had been arrived at the time of signing agreements with buyers. Such agreements would have to be registered with designated officers from the Department of Agricultural Marketing and Agri Business. A six-member body, called the Tamil Nadu State Contract Farming and Services (Promotion and Facilitation) Authority, would be formed to ensure proper implementation of this Act and make suggestions to the State government for promotion and better performance of contract farming.

26. Which state bagged the first position for the implementation of Pradhan Mantri Matru Vandana Yojana?

- A. Kerala
- B. Rajasthan
- C. Punjab
- D. Madhya Pradesh

**Ans. D**

Madhya Pradesh has bagged the first position for the implementation of Pradhan Mantri Matru Vandana Yojana. Union Minister of Women and Child Development Smriti Irani had presented the award to Madhya Pradesh. The main objective of the Matru Vandana Yojana is to provide incentives of five thousand rupees for the loss of wages of working women and to ensure their proper rest and nutrition during pregnancy. The payment of the incentive amount is deposited directly into the bank account. In Madhya Pradesh, more than 14 lakh 55 thousand beneficiaries have been registered under the Pradhan Mantri Matru Vandana Yojana. The first installment has been paid to about 13 lakh 40 thousand women, while second installment to around 12 lakh and third installment has been paid to 8 lakh 80 thousand beneficiaries.

27. Name the Indian Space Research Organisation (ISRO)'s half-humanoid robot, which will be on board the Gaganyaan mission?

- A. Vyommitra
- B. Vikasmitra
- C. Suryamitra
- D. Vayamitra

**Ans. A**

The Indian Space Research Organisation (ISRO) is getting ready to begin its human spaceflight program, which aims to carry its first astronauts starting in 2022. In advance of that milestone, however, the agency will be launching its "Gaganyaan" crewed orbital spacecraft later this year (if all goes to plan) — and while it won't carry any human passengers, it will have one robotic crew member on board. "Vyommitra" (via Times of India) is the name ISRO has given to its "half-humanoid" robotic astronaut, which will be on board the Gaganyaan when it takes its first flight in December. The robot has a range of functions and

features, including being able to operate switch panels to control the capsule, and it can operate as a “companion,” with the ability to “converse with the astronauts, recognize them and respond to their queries,” as the robot put it in its own words at an unveiling event.

28. Under the Indus Water Treaty (IWT), India has been given the exclusive rights of which three rivers?

- I. Chenab
  - II. Ravi
  - III. Beas
  - IV. Satluj
  - V. Jhelum
- A. Only II, III and IV  
B. Only I and II  
C. Only IV and V  
D. Only III, IV and V

**Ans. A**

The Indus system comprises of main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej. The basin is mainly shared by India and Pakistan with a small share for China and Afghanistan. Under the Indus Waters Treaty signed between India and Pakistan in 1960, all the waters of three rivers, namely Ravi, Sutlej and Beas (Eastern Rivers) averaging around 33 million acre feet (MAF) were allocated to India for exclusive use. The waters of Western rivers - Indus, Jhelum, and Chenab averaging to around 135 MAF were allocated to Pakistan except for specified domestic, non-consumptive and agricultural use permitted to India as provided in the Treaty. India has also been given the right to generate hydroelectricity through run of the river (RoR) projects on the Western Rivers which, subject to specific criteria for design and operation is unrestricted.

29. Which one of the public policy program launched by the NDA government from 2014-19 has been featured in one of the top 12 best practices from around the world list in the special issue of the British Medical Journal?

- A. Beti Bachao, Beti Padhao  
B. Skill India Mission  
C. Jan Dhan Yojana  
D. Mission Indradhanush

**Ans. D**

Mission Indradhanush (IMI), a campaign mode vaccination programme launched by Prime Minister Narendra Modi in 2017, is one of 12 best practices from around the world to be featured in a special issue of the BMJ (British Medical Journal) next month. Partners' Forum is short for the meeting every four years of The Partnership for Maternal, Newborn & Child Health (The Partnership, PMNCH) that is an alliance of more than 1,000 organisations in 192 countries. The organisations work in the sexual, reproductive, maternal, newborn, child and adolescent health communities, as well as health influencing sectors.

30. Which of the following account is freely repatriable?

- A. NRE  
B. NRO  
C. FCNR (B)  
D. Both A and C

**Ans. D**

The Non Resident External Account (NRE Account) is a Savings / Current. Recurring Deposit / Fixed Deposit bank account held in India, in Indian Rupees. Such accounts can be opened only by the NRI. Balances held in NRE account are fully repatriable. With effect from March 1, 2014, interest rates offered by banks on NRE deposits cannot be higher than those offered by them on comparable domestic rupee deposits.

FCNR (B) stands for Foreign Currency Non-Resident (Bank) account:- This account is opened by NRIs. In this account a person invests a fixed sum of money for a period not less than one year and max five years in any foreign currency in FCNR account. After the completion of fixed period principal and interest is paid in foreign currency in which he had deposited. In this way NRI are saved from foreign exchange rate risk. Account can be in any freely convertible currency.

### Legal Reasoning:

'A' is sitting on a moored boat on a river. 'B' unfastens the moorings, without 'A's' consent and intentionally causes the boat to drift down the river, plunging down a waterfall. 'A' suffers several fractures and was unable to go for work for three months.

31. Which of the following statements is correct?

- A. 'B' is guilty of committing the offence of voluntarily causing grievous hurt only.
- B. 'B' is guilty of committing the offences of voluntarily causing hurt and criminal force.
- C. 'B' is guilty of committing the offence of criminal force only.
- D. 'B' is guilty of committing the offences of voluntarily causing grievous hurt and criminal force.

**Ans. D**

It is presumed from the facts that B unfastened the moorings without A's consent and further intentionally caused the boat to drift down due to which A suffered several fractures.

32.

### Principle:

A person is said to be of sound mind for the purpose of making a contract if, at the time when he makes it, he is capable of understanding it and of forming a rational judgement as to its effect upon his interests.

### Facts:

Annie is a painter and is also a patient in a mental asylum. She suffers with Schizophrenia with lucid intervals. During one such interval, she agreed to paint a portrait for Lucy on payment of a specified sum. Lucy paid the entire amount in advance. One week later, on the day of delivery of the portrait, Annie refused to deliver saying that she suffers from insanity. Can Lucy enforce performance?

- A. Yes, because Annie was of sound mind when she entered into the contract.
- B. No, because it was Lucy's duty to check the mental status of Annie before making full payment.
- C. Yes, because a good painter can paint irrespective of his/her mental stability.
- D. No, because Annie had been a patient of mental asylum thus Lucy should not have entered into contract with Annie.

**Ans. B**

It was Lucy's duty to check the mental status of Annie before making full payment because Lucy was undergoing such interval of mental disease.

33. A fire broke out in Mr. Rathore's farm. Mr. Rathore believed that he was entitled to free services of Goodwill Fire Brigade Services and therefore he called for their services. The fire brigade could not put out the fire. It then turned out that Mr. Rathore's farm was not within the free service area specified by the brigade services. In furtherance of the same, Goodwill Services claimed remuneration for their services. In this case –

- A. Mr. Rathore is not liable to pay because breaking of fire was not under his control.
- B. Mr. Rathore is liable to pay because there was an implied contract between him and the Goodwill Services.
- C. Mr. Rathore should have been informed by Goodwill Services prior to starting of the

task and therefore Mr. Rathore is not liable to pay.

D. Mr. Rathore is not liable to pay because there was not consensus ad idem.

**Ans. B**

Mr. Rathore is liable to pay because there was an implied contract between him and the Goodwill Services because mere belief of entitlement is not a defence.

34.

**Principle 1:**

Communication of Proposal is complete when it comes to the knowledge of the person to who it is made.

**Principle 2:**

Communication of acceptance is complete as against the proposer when it is put in a course of transmission to him, so as to be out of the power of the acceptor.

**Principle 3:**

Communication of acceptance is complete as against the acceptor when it comes to the knowledge of the proposer.

**Facts:**

A sends a letter on April 5, 2019 to B and C proposing to sell his house for 50 lakhs. B receives the letter of April 6, 2019 and immediately posts the letter accepting the offer to A. However, due to delay in postal service. C receives the letter on April 7, 2019 and also immediately posts his acceptance. A receives both the letters together on April 8, 2019 but opens C's letter first.

A. As against B, acceptance was complete on April 6, 2019.

B. As against A, acceptance for both B and C was complete on April 8, 2019.

C. As against C, acceptance was complete on April 7, 2019

D. As against C, acceptance was complete on April 8, 2019

**Ans. B**

The time shall be counted as April 8, 2019 because A received both letters together.

35. Act of God as a valid defence to the rule of Strict Liability signifies

A. An act of supernatural powers.

B. An act of religious institutions.

C. An act of religious preachers.

D. An act of religious person.

**Ans. A**

Act of God is an act of supernatural powers.

36.

**Principle:**

In order to convert a proposal into promise, acceptance must be absolute and unqualified.

**Facts:**

Nitin wanted to sell his house. Ramesh showed interest and enquired about the asking price. Nitin wrote back asking for Rs. 50 lakh. Ramesh responded saying he is willing to pay Rs. 45 lakhs only. Nitin sells his house to Mohan for Rs. 50 lakhs.

A. Nitin was bound to sell his house to Ramesh at 45 lakhs.

B. Ramesh had accepted Nitin's offer to sell his house.

C. Nitin has breached his promise to sell the house to Ramesh.

D. Nitin was not bound to sell his house to Ramesh.

**Ans. D**

Since Nitin did not respond to Ramesh's proposal he is not bound to sell his house to him.

37. In the case of M.C Mehta vs. Union of India, which of the following principles has been laid down?

A. Hazardous Liability

B. Absolute Liability

C. Strict Liability

D. Conditional Liability

**Ans. B**

The rule of Absolute Liability was laid down in MC Mehta vs Union of India case.

38.

**Principle:**

When a person is arrested on a charge of committing an offence with valid grounds for commission of offence, it shall be lawful for a registered medical practitioner, acting at the request of a police officer or any authority in good faith, to make reasonable examination to ascertain the facts and to use such force as is reasonably necessary for that purpose.

**Facts:**

Blood drops are found near the crime scene of B's murder from where A, the prime suspect, is arrested. Upon A's arrest, the investigating officer directed the doctor at government hospital to collect A's blood sample for forensic analysis.

A. The investigating officer had no authority since A has not been held guilty of B's murder till now and has a right against self-incrimination.

B. The investigating officer's action is necessary for fair investigation of B's murder.

C. The investigating officer's action is legitimate since A is the prime suspect of B's murder.

D. The investigating officer's action is legitimate since A was arrested from the crime scene and his blood sample shall afford evidence as to his involvement in B's murder.

**Ans. D**

The investigating officer's action is legitimate since A was arrested from the crime scene and his blood sample shall afford evidence as to his involvement in B's murder.

39. The defendant wanted to buy old oats for his house. The plaintiff sowed him the sample of oats he had but said nothing about their age. The defendant kept the sample for twenty four hours and then placed the order for oats. After a portion of them was delivered to him he found that they were new, and therefore, rejected them. The agreement/contract is?

A. valid

B. void

C. voidable

D. illegal

**Ans. C**

The contract is voidable at the option of the defendant as the plaintiff said nothing about the age and he desired old oats.

40.

**Principle:**

Whoever intending to take any movable property out of the possession of any person without that person's consent, moves that property out of his possession, is said to commit theft.

**Facts:**

A, the driver of Z takes a gold chain from Z's drawer and hides it in Z's house. A informs B, a servant of Z about the gold chain and they agree to share the proceeds of the gold chain between them after the chain is taken from the house and sold in the market. Before A could take the gold chain, it was discovered by Z. Decide if an offence was committed and is so who committed the offence.

A. Both A and B are liable for the offence.

B. Only B is liable for the offence.

C. No offence is committed.

D. Only A is liable for the offence.

**Ans. A**

Both A and B are liable for the offence as both were involved in keeping the property out of Z's possession.

41. Which of the following statement(s) is/are correct?

- (i) Motive is immaterial in case of a tort, whereas in case of breach of contract, motive is relevant in ascertaining damages.
- (ii) In case of a tort, duty is owed to the community at large, whereas in case of a contract, duty is owed to definite person(s)
- (iii) In a tort action, the primary purpose of compensation is deterrence.

- A. Only (i)
- B. Only (ii)
- C. (i) and (iii)
- D. (i) and (ii)

**Ans. C**

Options I and II are correct and option II is incorrect.

42. The maxim 'Damnum Sine Injuria' means

- A. Violation of a legal right with damage.
- B. Damage with violation of a legal right.
- C. Damage without violation of a legal right.
- D. Violation of a legal right without damage.

**Ans. C**

Damnum sine Injuria is a legal maxim which refers to as damages without injury or damages in which there is no infringement of any legal right which are vested with the plaintiff.

43.

**Principle:**

Any direct physical interference with goods in somebody's possession without lawful justification is called trespass of goods.

**Facts:**

Mr. Verma purchased a car from a person who had no title to it and sent it to a garage for repair. Mr. Sharma believing wrongly that the car belonged to him, removed it from the garage.

Which of the following statements is correct?

A. Mr. Sharma cannot be held responsible for trespass of goods as he was under a wrong belief.

B. Mr. Sharma can be held responsible for trespass of goods.

C. Mr. Sharma cannot be held responsible as he has a lawful justification based on possession.

D. Mr. Sharma has not committed any wrong.

**Ans. B**

Since the car was in garage, Mr Sharma taking the car away would constitute trespass of goods.

44. The Coal India Limited, Kolkata decided to hold an auction to sell Coal at a subsidised rates to the public. 15 bidders participated through registration for the auction. However, Coal India Limited was unaware that all the 12 bidders have entered into bid-rigging agreement wherein they agreed not to bid for more than a certain amount.

A. The contract will be valid.

B. The contract will be void since the maximum number of parties to a contract under Indian Partnership Act, 1932 and under Indian Contract Act, 1872 is ten.

C. The contract will be void because Coal India Limited is not a party to it.

D. The contract will be void since the object of the contract is to cause a loss to the interests of Coal India Limited and Public Interest.

**Ans. D**

The contract will be void since the object of the contract is to cause a loss to the interests of Coal India Limited and Public Interest.

45. 'X' a publisher of the daily newspaper YZ, sends an enveloped letter to B claiming that C is a cheat. C files a case of defamation.

In the instant which of the following outcome is correct?

- A. X is not liable there is absence of publication.
- B. X has committed defamation as it has harmed the reputation of C in right thinking people.
- C. X is immune under privilege for being a publisher.
- D. X has not committed any defamation as the statement is a fair comment.

**Ans. A**

X is not liable there is absence of publication.

**Logical Reasoning:**

46.

Select the option that is related to the third term in the same way as the second term is related to the first term.

Vigilance : Indiscretion :: Exculpate : ?

- A. Exonerate
- B. Discharge
- C. Liberate
- D. Condemn

**Ans. D**

Indiscretion is antonym of Vigilance, same as Condemn is antonym of Exculpate.

47. Four persons – A, B, C & D like four different sports Cricket, Football, Chess, Tennis not necessarily in the same order. They live in four different cities Delhi, Patna, Nagpur, Chennai in any order. Read the following information about them and answer the following questions:

- 1) Neither D nor the person from Chennai likes Cricket.
- 2) B likes either Football or Chess.
- 3) A is from Patna.
- 4) A likes either Chess or Tennis.

5) The person who likes Tennis is from Nagpur.

The person living in Delhi likes which sport?

- A. Tennis
- B. Cricket
- C. Chess
- D. Football

**Ans. B**

Persons: A, B, C & D

Sports: Cricket, Football, Chess, Tennis

1. A is from Patna.
2. The person who likes Tennis is from Nagpur.
3. A likes either Chess or Tennis.  
(It means A likes Chess.)

Person	City	Sport
A	Patna	Chess
B		
C		
D		

4. B likes either Football or Chess.

(It means B likes Football – Refer point 3)

Person	City	Sport
A	Patna	Chess
B		Football
C		
D		

5. Neither D nor the person from Chennai likes Cricket.

(It means C likes Cricket as only he is left.)  
(D likes Tennis and he is from Nagpur – Refer point 2)

(Place of C will be Delhi – Refer point 5)

Therefore, final arrangement will be as follows:

Person	City	Sport
A	Patna	Chess
B	Chennai	Football
C	Delhi	Cricket
D	Nagpur	Tennis

Hence, the person living in Delhi likes Cricket.

48. The person who lives in Nagpur likes which sport?

- A. Chess
- B. Football
- C. Tennis
- D. Cricket

**Ans. C**

Persons: A, B, C & D

Sports: Cricket, Football, Chess, Tennis

1. A is from Patna.
2. The person who likes Tennis is from Nagpur.
3. A likes either Chess or Tennis.  
(It means A likes Chess.)

Person	City	Sport
A	Patna	Chess
B		
C		
D		

4. B likes either Football or Chess.  
(It means B likes Football – Refer point 3)

Person	City	Sport
A	Patna	Chess
B		Football
C		
D		

5. Neither D nor the person from Chennai likes Cricket.

(It means C likes Cricket as only he is left.)

(D likes Tennis and he is from Nagpur – Refer point 2)

(Place of C will be Delhi – Refer point 5)

Therefore, final arrangement will be as follows:

Person	City	Sport
A	Patna	Chess
B	Chennai	Football
C	Delhi	Cricket
D	Nagpur	Tennis

Hence, the person who lives in Nagpur Tennis.

49. Four persons – A, B, C & D like four different sports Cricket, Football, Chess, Tennis not necessarily in the same order. They live in four different cities Delhi, Patna, Nagpur, Chennai in any order. Read

the following information about them and answer the following questions:

- 1) Neither D nor the person from Chennai likes Cricket.
- 2) B likes either Football or Chess.
- 3) A is from Patna.
- 4) A likes either Chess or Tennis.
- 5) The person who likes Tennis is from Nagpur.

Find the correct combination. A. A – Delhi

B. Nagpur – Chess

C. B – Tennis

D. Patna – Chess

**Ans. A**

Persons: A, B, C & D

Sports: Cricket, Football, Chess, Tennis

1. A is from Patna.
2. The person who likes Tennis is from Nagpur.
3. A likes either Chess or Tennis.  
(It means A likes Chess.)

Person	City	Sport
A	Patna	Chess
B		
C		
D		

4. B likes either Football or Chess.  
(It means B likes Football – Refer point 3)

Person	City	Sport
A	Patna	Chess
B		Football
C		
D		

5. Neither D nor the person from Chennai likes Cricket.

(It means C likes Cricket as only he is left.)

(D likes Tennis and he is from Nagpur – Refer point 2)

(Place of C will be Delhi – Refer point 5)

Therefore, final arrangement will be as follows:

Person	City	Sport
A	Patna	Chess
B	Chennai	Football
C	Delhi	Cricket
D	Nagpur	Tennis

Hence, correct option is (d).

50. The following question consists of two statements. one labeled as the Assertion (A) and the other as 'Reason (R.) You are to examine these statements carefully and decide if both are individually true, and if so whether R is the correct explanation of A .

**Assertion (A):**

There is inflation in India.

**Reason (R):**

Government should take measures to keep inflation in check.

A. both (A) and (R) are individually true and (R) is the correct explanation of (A)

B. (A) is true but (R) is false

C. both (A) and (R) are individually true but (R) is not the correct explanation of (A)

D. (A) is false but (R) is true

**Ans. C**

Although both statements can be individually verified, R is not the correct explanation for A. Rather, it is the course of action which needs to be followed. Hence, option C is the right answer.

51. Select the option that is related to the third term in the same way as the second term is related to the first term.

Provisional : Interim :: Zenith : ?

A. Peak

B. Liberate

C. Designed

D. Lucid

**Ans. A**

Meaning of provisional is interim, same as meaning of zenith is peak.

52. Insert the missing number.

25 150 22 ? 19 152 17 153

A. 151

B. 110

C. 154

D. 120

**Ans. C**

$$25 \times 6 = 150$$

$$22 \times 7 = \mathbf{154}$$

$$19 \times 8 = 152$$

$$17 \times 9 = 153$$

Therefore, missing number is 154.

53. Five fisherwoman Bina, Hina, Mina, Tina and Dina are sitting in a row in the market. Mina is sitting to the left of Bina and right of Tina. Hina is sitting to the right of Dina. Dina is sitting somewhere between Tina and Hina. Who is sitting immediate right to Tina?

A. Mina

B. Hina

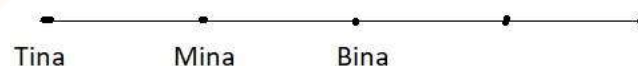
C. Mina

D. Dina

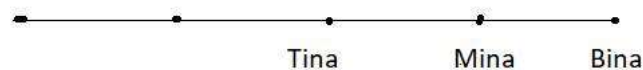
**Ans. C**

1. Mina is sitting to the left of Bina and right of Tina.

Case 1.



Case 2.



2. Hina is sitting to the right of Dina.

3. Dina is sitting somewhere between Tina and Hina.

(Here, case 2 will get eliminated.)

Therefore, final arrangement will be as follows:



Hence, Mina is sitting immediate right to Tina.

54. The following question consists of two statements. one labeled as the Assertion (A) and the other as 'Reason (R). You are to examine these statements carefully and decide if both are individually true, and if so whether R is the correct explanation of A .

**Assertion (A):**

The euro currency has eleven member-nations only while the other nations will continue with their established currencies for the time being.

**Reason (R):**

The other group of nations has its own common currency.

- A. both (A) and (R) are individually true and (R) is the correct explanation of (A)
- B. (A) is true but (R) is false
- C. both (A) and (R) are individually true but (R) is not the correct explanation of (A)
- D. (A) is false but (R) is true

**Ans. A**

Since the other group of nations has its own currency, the Euro currency will have only the member-nations as the others look forward to continuing with their established currencies. Hence, option A is the right answer.

55. The following question consists of two statements. one labeled as the Assertion (A) and the other as 'Reason (R). You are to examine these statements carefully and decide if both are individually true, and if so whether R is the correct explanation of A .

**Assertion (A):**

Mothers don't like the way their sons behave and sons on their part consider their mothers to be old fashioned.

**Reason (R):**

The generation gap keeps the two apart.

- A. both (A) and (R) are individually true and (R) is the correct explanation of (A)
- B. (A) is true but (R) is false

- C. both (A) and (R) are individually true but (R) is not the correct explanation of (A)
- D. (A) is false but (R) is true

**Ans. A**






The generation gap between the mothers and sons is the reason why sons consider their mothers old-fashioned. In this technological age, the younger generation has gone far ahead of their parents, and hence, option A is the right answer.

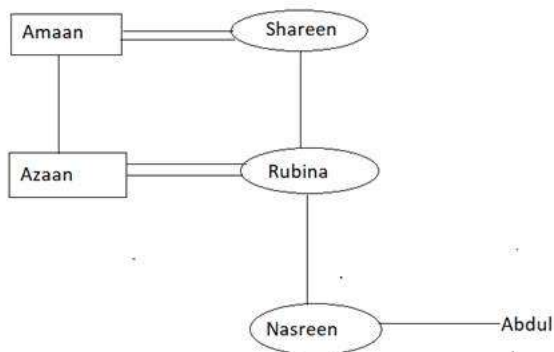
56. Azaan is the only son of Amaan. Nasreen is the daughter of Rubina and granddaughter of Shaheen. Shaheen is the wife of Amaan. Nasreen is the sister of Abdul. How is Azaan related to Abdul?

- A. Brother
- B. Father
- C. Grandfather
- D. Son

**Ans. B**

Best possible diagram of family relation from the given relation will be as follows:

Symbol in diagram	Meaning
	Female
	Male
	Married Couple
	Siblings
	Difference of a generation



Azaan is father of Abdul.

57. In a certain language if the word COMMERCE is written as DQPQJXJM how will the word SOCIOLOGY be written?

- A. TRMFWTROK
- B. TQMFWRTOK
- C. None of the options are correct
- D. TQFMWRTOK

**Ans. C**

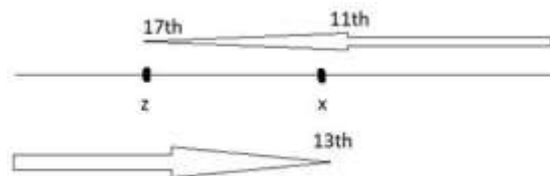


Hence, code for SOCIOLOGY will be TQFMTRVOH i.e., none of the options are correct.

58. In a row of boys, X is 13<sup>th</sup> from the left and Z is 17<sup>th</sup> from the right. If in this row X is 11<sup>th</sup> from the right, then what is the position of Z from the left?

- A. 10<sup>th</sup>
- B. 7<sup>th</sup>
- C. 12<sup>th</sup>
- D. 6<sup>th</sup>

**Ans. B**



Since, position of Z is 17<sup>th</sup> from the right and position of X is 11<sup>th</sup> from the right, it means there are 5 persons are seated between X and Z. Also, position of X is 13<sup>th</sup> from the left,

So, position of Z from left =  $13 - 6 = 7^{\text{th}}$

59. A, B, C, D and E are five people working in the same company. B is older than E but shorter than C. C is younger than A but taller than E. A is younger than E. D is older than A but is shorter in the group.

If G, who is taller than C, joins the group, then find the maximum number of persons who could be shorter than G and taller than E.

- A. Four
- B. One
- C. Two
- D. Three

**Ans. D**

Here, we should consider the statement which says about length since we do not need information of their ages.

Now, B is shorter than C.  $\Rightarrow C > B$ .

C is taller than E.  $\Rightarrow C > E$ .

D is shortest in the group.

G is taller than C.  $\Rightarrow G > C$

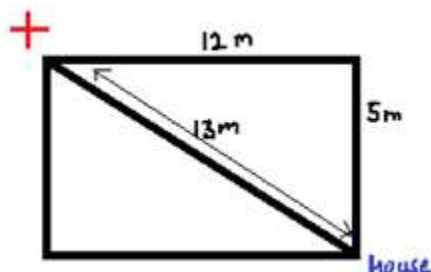
Therefore, maximum number of persons who is shorter than G and taller than E will be three i.e., A, B and C.

60. There is a rectangular park which has 12m and 5m as its length and breadth. At its one point there is an ambulance and the hospital is at its opposite end forming a diagonal in the park. If the speed of the ambulance is 1m/min so what is minimum time required for it to reach the hospital?

- A. 12min
- B. 13min
- C. 17min
- D. 5min

**Ans. B**

If the length and breadth are 12 and 5 resp. so the diagonal will be of 13m by Pythagoras theorem, and if the speed is 1 m/1min and the shortest distance is 13m in a diagonal to reach the hospital, so the time taken will be 13min for 13m.



**Analytical Reasoning:**

61. Here are some words translated from an artificial language

gorblflur means fan belt

pixngorbl means ceiling fan

arthtusl means tile roof

Which word could mean “ceiling tile”?

A. Pixnarth

B. Arthflur

C. Flurgorbl

D. Gorbtlusl

**Ans. A**

gorblflur means fan belt...(i)

pixngorbl means ceiling fan...(ii)

arthtusl means tile roof...(iii)

After analyzing (i), (ii) and (iii), it is clear that no any terms of equation (i) can be the answer of “ceiling tile”, further it is clear that code for ceiling can be either pixn or gorbl, same as code for roof can be either art hot tusl. Therefore, we can easily conclude that code of “ceiling tile” will be Pixnarth.

62. In front of his friends, Paul introduced a man as ‘He is my grandfather’s only daughter-in-law’s brother’. How is Paul related to the man?

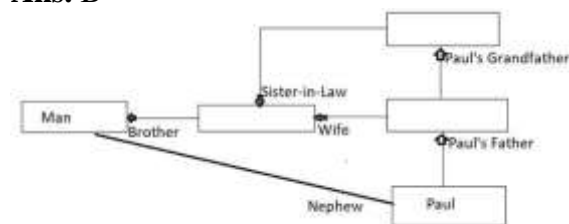
A. Brother

B. Nephew

C. Uncle

D. Cousin

**Ans. B**



It is clear from the above that Paul is nephew of the man.

63. There is a family of six persons A, B, C, X, Y and Z. The professions of the family members are Software professional, Medical representative, Professor, Frontline executive, Manager and Legal Advisor.

- There are 2 married couples

- The manager is the grandfather of Z, who is a software Professional

- C, the Frontline executive, is married to the lady Professor

- B is the mother of Z and Y

- The Medical representative, X is married to the Manager

Who are the two married couples in the family?

A. AB and XC

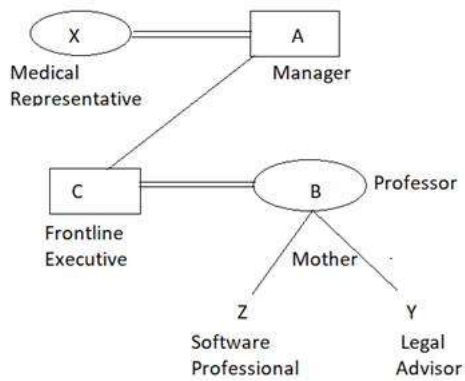
B. AX and CB

C. CZ and XY

D. AY and XC

**Ans. B**

Symbol in diagram	Meaning
○	Female
□	Male
≡	Married Couple
—	Siblings
	Difference of a generation



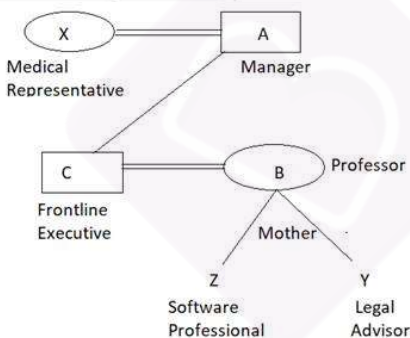
It is clear from the above diagram that AX and CB are the married couples in the family.

64. How is A related to Y?

- A. Grandfather
- B. Mother
- C. Father
- D. Grandmother

**Ans. A**

Symbol in diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of a generation



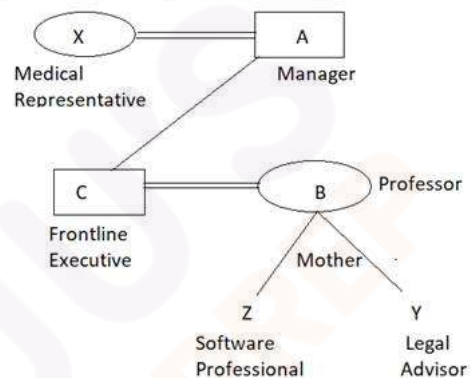
It is clear from the above diagram that A is the grandfather of Y.

65. What is the profession of A?

- A. Professor
- B. Legal Advisor
- C. Manager
- D. Medical Representative

**Ans. C**

Symbol in diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of a generation



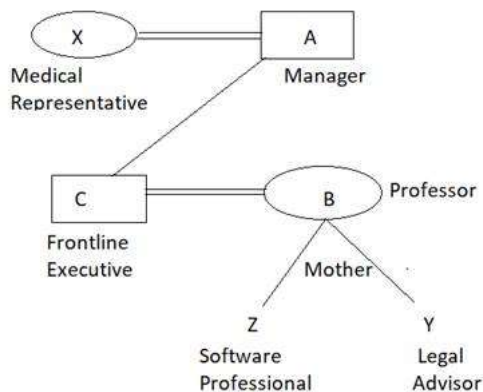
It is clear from the above diagram that A is Manager.

66. Find the odd one.

- A. A
- B. X
- C. B
- D. Y

**Ans. D**

Symbol in diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of a generation



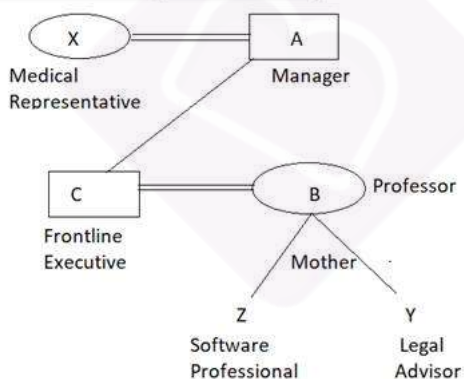
Except Y all are married.

67. Find the correct statement.

- A. A is mother of C
- B. Y is son of B
- C. Z is son of X
- D. Y and Z are unmarried.

**Ans. D**

Symbol in diagram	Meaning
	Female
	Male
	Married Couple
	Siblings
	Difference of a generation



Since, gender of Y and Z is not definite, so we can't say that they are daughter or son of anybody but it is definite that both are unmarried.

68. How many colored crayons (minimum) are required to fill the spaces in the figure given below with no two adjacent spaces have the same color?



- A. 5
- B. 3
- C. 6
- D. 2

**Ans. B**

The given figure can be labelled as shown below:



The spaces P, Q and R have to be shaded by three different colours definitely (since each of these three spaces lies adjacent to the other two).

Now, in order that no two adjacent spaces be shaded by the same colour, the spaces T, U and S must be shaded with the colours of the spaces P, Q and R respectively.

Also the spaces X, V and W must be shaded with the colours of the spaces S, T and U respectively i.e. with the colours of the spaces R, P and Q respectively. Thus, minimum three colour pencils are required. Therefore, we can say that minimum three coloured crayons are required to fill the spaces.

69. Find out the word that cannot be formed using the letter of the given word from the given alternatives.

JUXTAPOSITION

- A. Spot
- B. Taxi
- C. Post
- D. Toxic

**Ans. D**

Letter "C" is not present in the word JUXTAPOSITION. Hence, word "Toxic" cannot be formed.

70. If PARROT is coded as LDNUKW and TERM is coded as PHNP then how is FRIEND to be coded as?

- A. JOMBRA
- B. UIRVMW
- C. BUEHJG
- D. CVFIKH

**Ans. C**

P	A	R	R	O	T	T	E	R	M
-4	+3	-4	+3	-4	+3	-4	+3	-4	+3
L	D	N	U	K	W	P	H	N	P

Same as,

F	R	I	E	N	D
-4	+3	-4	+3	-4	+3
B	U	E	H	J	G

Therefore, code for FRIEND will be BUEHJG.

71. What number should come next:

52, 51, 53, 52, 54, 53, ....

- A. 51
- B. 57
- C. 52
- D. 55

**Ans. D**

52  $\xrightarrow{-1}$  51  $\xrightarrow{+2}$  53  $\xrightarrow{-1}$  52  $\xrightarrow{+2}$  54  $\xrightarrow{-1}$  53  $\xrightarrow{+2}$  55

Therefore, next term will be 55.

72. Find out the word that cannot be formed using the letter of the given word from the given alternatives.

TRANSLATION

- A. Transit
- B. Transmit
- C. Ration
- D. Nation

**Ans. B**

Letter "m" is not present in the word TRANSLATION. Hence, word "Transmit" cannot be formed.

73. Rohit owns a stationary shop. He marks his goods 25% above the cost price and allows his customers 12% reduction on their bills. What percent profit does he make?

- A. 15
- B. 10
- C. 16
- D. 12

**Ans. B**

Let CP = Rs. 100

MP =  $100 \times (125/100)$  = Rs. 125

discount, d = 12%

SP =  $125 \times (88/100)$  = Rs. 110

Profit = 110 - 100 = 10

Profit percent =  $(10/100) \times 100$  = 10%

74. If 27<sup>th</sup> May 2026 is Wednesday, then 17<sup>th</sup> February 2026 comes on which day?

- A. Tuesday
- B. Thursday
- C. Friday
- D. Monday

**Ans. A**

Number of days in May = 27

Number of days in April = 30

Number of days in March = 31

Number of days in February = 28 - 17 = 11

[Since, 2026 is a ordinary year, so number of days in Feb month will be 28]

Total number of days = 27 + 30 + 31 + 11 = 99

When we divide 99 with 7 we get 1 as remainder, it means there are 1 odd day.

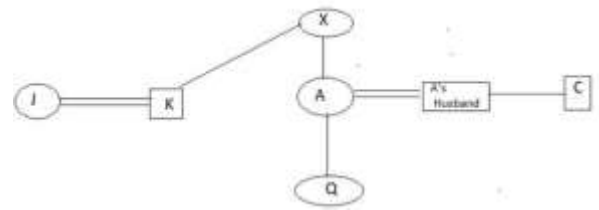
So, day on 17<sup>th</sup> February 2026 = Wednesday - 1 = Tuesday

75. Q is daughter of A. K is husband of J. J is the daughter-in-law of X, who is mother of A. C is brother of A's husband. How is A's husband related to X?

- A. Son
- B. Father-in-Law
- C. Son-in-Law
- D. Father

**Ans. C**

Symbol in diagram	Meaning
○	Female
□	Male
=	Married Couple
—	Siblings
	Difference of a generation



From the above it is clear that A's husband is son-in law of X.