## Genera <br>  <br> Studies <br> Paper II <br> For Civil Services Preliminary Exams

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4000 plus Objective Type Questions


# GENERAL STUDIES 

PAPER-II

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## Publisher's Note

V\&S publishers, after the grand success of a number of Academic and General books, is pleased to bring out a series of books, The Gen $\boldsymbol{X}$ series which means generating Xcellence in generation $\boldsymbol{X}$. Under the series we are going to publish a comprehensive and updated book 'General Studies - Paper - II' which is based on new pattern of Civil Services Aptitude Test (CSAT) exam. The book has been designed keeping in mind the real-time problems faced by the aspirants of civil services and the changing scenario of the questions asked in the Civil Services Preliminary Exams. It will help the aspirants to grasp concepts in depth and learn through 4000 plus questions given with explanatory notes. The book is also useful for various other competitive exams such as State Civil Services, SSC, Banking, and Railway etc. conducted at national and state level.
The book has been divided into seven major sections namely: Comprehension Skills, Interpersonal Skills including Communication Skills, Logical Reasoning and Analytical Ability, Decision Making and Problem Solving, General Mental Ability, Basic Numeracy, Data Interpretation and Data Sufficiency. In the beginning of each chapter the concepts have been explained through solved examples followed by 300 plus Multiple Choice Questions with Answer Key and Explanatory Notes. Previous four years Solved Papers help candidates to know the level of difficulty and grasp the structure of questions asked in the exam. Five Mock Test Papers have been included for thorough practice and to understand the pattern of exam. A step-wise preparation strategy has been given in the introductory section of the book.

To get success in such prestigious exam as civil services conducted by Union Public Service Commission, the aspirants have to go through extensive study of the topics covered in the new syllabus and make a dedicated effort during preparation. This exam not only tests the in-depth knowledge of the candidates but also identifies their efficiency in terms of application of the gained knowledge in problem solving. The main objective of this exam is to indentify decision making potentials and problem solving approaches of a candidate. Therefore, this exam requires careful attention towards comprehension of concepts and theories, thorough practice, and application of the concepts in everyday life situations. Hard working, Regularity, and Self-Confidence are essential to go through such a tough exam and to achieve this goal. Therefore, a candidate should make a sincere effort to qualify in the exam.

We wish you success in the examination and a very bright future in the field of civil services. Good Luck!!!

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## Preface

Aspiring for great things in life is human tendency. A person without any ambition in life is like a ship without a rudder. He has no destination. He does not have any urge to make a start. He is tossed up like a straw in the wind. He achieves nothing. But an aspirant wants to scale the greater height of success. However, success is not a matter of luck or mere intellect but of well oriented and disciplined effort. In the battle of life, the man who wins is the one who tries to win and believes he can. Success has its own price that is hard work. It comes to those who dare and act. Today, life has become very fast paced. Everyone is striving to be the best and as a result, competition has increased manifolds. The ticking of the clock is one of the most important things in the world, for it marks the passage of time. It reminds that another second, another hour, another day has gone. Despite this constant reminder, most of us are as a mere wastrel of time. There is plenty of time, we tell ourselves. Certainly, we are mistaken. The challenge is ahead. There is no time to stand and stare. Come forward with strong determination and self-belief, you will be the winner.
Every year the Union Public Service Commission (UPSC) announces for the recruitment of Officers for different Central Services Groups-A \& B including IAS, IFS, IPS, IRS, etc. The book in your hand has been prepared exclusively for the aspirants of the UPSC Civil Services Exams taking into consideration the changed syllabus and the new scheme of exams. Taking this book as your base, you may impart a solid foundation to your preparation, which will be useful for your success in every way.
This book is unique in several senses. From the very inception, it has been our policy not to compromise with quality and quantity in the preparation of this book. Therefore, we have provided each and every topic as per the syllabus and based on the previous years' papers.
All the questions included in this book are of a standard nature and entirely based on the syllabus and therefore, quite useful for taking the exams at ease. The questions have been framed in appropriate patterns so that the candidates may handle the level of difficulty of questions quite efficiently. The competitive exams are much more difficult these days than they used to be earlier. At the same time, the number of candidates is also increasing, while the number of vacancies is not increasing in the same proportion. Therefore, the candidates need to take this exam as a challenge and from this respect, this book is quite useful.
A word of apology is also perhaps due to the readers, who may come across some errors and others. While every effort has been made to avoid mistakes, we crave for the inclusion of the readers' suggestions, for the errors that might have inadvertently crept in, due to the great volume and the rush of work which we have to cope with today. Suggestions for the improvement of the book will be highly appreciated and will be duly incorporated.
Finally, we hope you will keep us informed about your opinion on the book, as it has been our endeavour to include the valuable suggestions of our esteemed readers wherever possible.

## Solved Papers

U.P.S.C. CIVIL SERVICES (Prelim) Exam 2014 General Studies Paper-II (CSAT)

U.P.S.C. CIVIL SERVICES (Prelim) Exam 2013

General Studies Paper-II (CSAT)
U.P.S.C. CIVIL SERVICES (Prelim) Exam 2012

General Studies Paper-II (CSAT)
U.P.S.C. CIVIL SERVICES (Prelim) Exam 2011 General Studies Paper-II (CSAT)

# U.P.S.C. <br> CIVIL SERVICES (Prelim) Exam 2014 General Studies Paper-II (CSAT) 

## COMPREHENSION

## Directions for the following 7 (seven) items:

Read the following two passages and answer the items that 'follow each passage. Your answers to these items should be based on the passages only.

## Passage- 1

Many nations now place their faith in capitalism and governments choose it as the strategy to create wealth for their people. The spectacular economic growth seen in Brazil, China and India after the liberalisation of their economies is proof of its enormous potential and success. However, the global banking crisis and the economic recession have left many bewildered. The debates tend to focus on free market operations and forces, their efficiency and their ability for self correction. Issues of justice, integrity and honesty are rarely elaborated to highlight the failure of the global banking system. The apologists of the system continue to justify the success of capitalism and argue that the recent crisis was a blip.
Their arguments betray an ideological bias with the assumptions that an unregulated market is fair and competent, and that the exercise of private greed will be in the larger public interest. " Few recognize the bidirectional relationship between capitalism and greed; that each reinforces the other. Surely, a more honest conceptualisation of the conflicts of interest among the rich and powerful players who have benefited from the system, their biases and ideology is needed; the focus on the wealth creation should also highlight the resultant gross inequity.

1. The apologists of the "Free Market System", according to the passage, believe in
(a) market without control by government authorities
(b) market without protection by the government
(c) ability of market to self correct
(d) market for free goods and services
2. With reference to "ideological bias", the passage implies that
(a) free market is fair but not competent
(b) free market is not fair but competent
(c) free market is fair and competent
(d) free market is neither fair nor biased
3. "The exercise of private greed will be in the larger public interest" from the passage
4. refers to the false ideology of capitalism
5. underlies the righteous claims of the free market
6. shows the benevolent face of capitalism
7. ignores resultant gross-inequity

Which of the statements given above is/are correct?
(a) 1 only
(b) 2 and 3
(c) 1 and 4
(d) 4 only

## Passage-2

Net profits are only 2-2\% of their total assets for central public sector undertakings, lower than for the private corporate sector. While the public sector or the State-led entrepreneurship played an important role in triggering India's industrialization, our evolving development needs, comparatively less-thansatisfactory performance of the public sector enterprises, the maturing of our private sector, a much larger social base now available for expanding entrepreneurship and the growing institutional capabilities to enforce competition policies would suggest that the time has come to review the role of public sector.
What should the portfolio composition of the government be? It should not remain static all times. The airline industry works well as a purely private affair. At the opposite end, rural roads, whose sparse traffic makes tolling" unviable, have to be on the balance-sheet of the State. If the government did not own rural roads, they would not exist. Similarly, public health capital in our towns and cities will need to come from the public sector. Equally, preservation and improvement of forest cover will have to be a new priority for the public sector assets.
Take the example of steel. With near-zero tariffs, India is a globally competitive market for the metal; Indian firms export steel into the global market, which demonstrates there is no gap in technology. Indian companies are buying up global steel companies, which shows there is no gap in capital availability. Under these conditions, private ownership works best.
Private ownership is clearly desirable in regulated industries, ranging from finance to infrastructure, where a government agency performs the function of regulation and multiple competing firms are located in the private sector. Here, the
simple and clean solution - government as the umpire and the private sector as the players is what works best. In many of these industries, we have a legacy of government ownership, where productivity tends to be lower, fear of bankruptcy is absent, and the risk of asking for money from the tax payer is ever present. There is also the conflict of interest between government as an owner and as the regulator. The formulation and implementation of competition policy will be more vigorous and fair if government companies are out of action.
4. According to the passage, what is/are the reason/reasons for saying that the time has come to review the role of public sector?

1. Now public sector has lost its relevance in the industrialization process.
2. Public sector does not perform satisfactorily.
3. Entrepreneurship in private sector is expanding.
4. Effective competition policies are available now.

Which of the statements given above is/are correct in the given context ?
(a) 1 and 3 only
(b) 2 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4
5. According to the passage, rural roads should be in the domain of public sector only. Why?
(a) Rural development work in the domain of government only.
(b) Private sector cannot have monetary gains in this.
(c) Government takes money from tax payers and hence it is the responsibility of government only.
(d) Private sector need not have any social responsibility.
6. The portfolio composition of the government refers to
(a) Public sector assets quality
(b) Investment in liquid assets
(c) Mix of government investment in different industrial sectors
(d) Buying Return on Investment yielding capital assets
7. The author prefers government as the umpire and private sector as players because
(a) Government prescribes norms for a fair play by the private sector.
(b) Government is the ultimate in policy formulation.
(c) Government has no control over private sector players.
(d) None of the above statements is correct in this context.

## Directions for the following 6 (six items):

The following six items are based on two passages in English to test the comprehension of English language and therefore these items do not have Hindi version. Read each passage and answer the items that follow.

## Passage - 1

In front of us was walking a bare-headed old man in tattered clothes. He was driving his beasts. They were all laden with heavy loads of clay from the hills and looked tired. The man carried a long whip which perhaps he himself had made. As he walked down the road, he stopped now and then to eat the wild berries that grew on bushes along the uneven road. When he threw away the seeds, the bold birds would fly to peck at them. Sometimes a stray dog watched the procession philosophically and then began to bark. When this happened, my two little sons would stand still holding my hands firmly. A dog can sometimes be dangerous indeed.
8. The author's children held his hands firmly because
(a) they were scared of the barking dogs
(b) they wanted him to pluck berries
(c) they saw the whip in the old man's hand
(d) the road was uneven
9. The expression "a stray dog watched the procession philosophically" means that
(a) the dog was restless and ferocious.
(b) the dog stood aloof, looking at the procession with seriousness.
(c) the dog looked at the procession with big, wondering eyes.
(d) the dog stood there with his eyes closed.

## Passage-2

Cynthia was a shy girl. She believed that she was plain and untalented. One day her teacher ordered the entire class to show up for audition for the school play. Cynthia nearly died of fright when she was told that she would have to stand on stage in front of the entire class and deliver dialogues. The mere thought of it made her feel sick. But a remarkable transformation occurred during the audition. A thin, shy girl, her knees quaking, her stomach churning in terror, began to stun everyone with her excellent performance. Her bored classmates suddenly stopped their noisy chat to stare at her slender figure on the stage. At the end of her audition, the entire room erupted in thunderous applause.
10. Cynthia was afraid to stand on stage because
(a) she felt her classmates may laugh at her
(b) her stomach was churning
(c) she lacked self-confidence
(d) she did not like school plays
11. Cynthia's classmates were chatting because
(a) it was their turn to act next
(b) they were bored of the performances
(e) Cynthia did not act well
(d) the teacher had no control over them
12. Cynthia's knees were quaking because
(a) she felt nervous and shy
(b) the teacher scolded her
(c) she was very thin and weak
(d) she was afraid of her classmates
13. The transformation that occurred during the audition refers to
(a) the nervousness of Cynthia
(b) the eruption of the entire room in thunderous applause
(c) the surprise on the faces of her classmates
(d) the stunning performance of Cynthia

## Directions for the following 6 (six) items-:

Read the following two passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

## Passage- 1

Climate change poses potentially devastating effects on India's agriculture. While the overall parameters of climate change are increasingly accepted - a $1^{\circ} \mathrm{C}$ average temperature increase over the next 30 years, sea level rise of less than 10 cm in the same period, and regional monsoon variations and corresponding droughts - the impacts in India are likely to be quite site and crop specific. Some crops may respond favourably to the changing conditions, others may not. This emphasizes the need to promote agricultural research and create maximum flexibility in the system to permit adaptations.

The key ingredient for "drought proofing" is the managed recharge of aquifers. To ensure continued yields of important staple crops (e.g. wheat), it may also be necessary to shift the locations where these crops are grown, in response to temperature changes as well as to water availability. The latter will be a key factor in making long term investment decisions.

For example, water runoff from the Himalayas is predicted to increase over the next 30 years as glaciers melt, but then decline substantially there after. It will be critical to provide incentives to plan for these large-scale shifts in agro-ecological conditions.

India needs to make long term investment in research and development in agriculture. India is likely to experience changed weather patterns in future.
14. Consider the following statements:

Climate change may force the shifting of locations of the existing crops due to

1. melting of glaciers
2. water availability and temperature suitability at other locations
3. poor productivity of crops
4. wider adaptability of crop plants

Which of the statements given above are correct?
(a) 1, 2 and 3
(b) 2 and 3 only
(c) 1 and 4 only
(d) 1,2, 3 and 4
15. According to the passage, why is it important to promote agricultural research in India?
(a) To predict variations in monsoon patterns and to manage water resources
(b) To make long term investment decisions for economic growth
(c) To facilitate wider adaptability of crops
(d) To predict drought conditions and to recharge aquifers

## Passage-2

It is essential that we mitigate the emissions of greenhouse gases and thus avoid some of the worst impacts of climate change that would take place in coming years and decades; Mitigation would require a major shift in the way we produce and consume energy. A shift away from overwhelming dependence on fossil fuels is now long overdue, but unfortunately, technological development has been slow and inadequate largely because government policies have not promoted investments in research and development, myopically as a result of relatively low prices of oil. It is now, therefore, imperative for a country like India treating the opportunity of harnessing renewable energy on a large scale as a national imperative. This country is extremely well endowed with solar, wind and biomass sources of energy. Where we have lagged, unfortunately, is in our ability to develop and to create technological solutions for harnessing these resources.

One particular trajectory for carrying out stringent mitigation of greenhouse gas emissions assessed by the Intergovernmental Panel on Climate Change (IPCC) clearly shows the need for ensuring that global emissions of greenhouse gases peak no later than 2015 and reduce rapidly thereafter. The cost associated with such a trajectory is truly modest and would amount, in the estimation of IPCC, to not more than 3 percent of the global GDP in 2030. In other words, the level of prosperity that the world would have reached without mitigation would at worst be postponed by a few months or a year at the most. This is clearly not a very high price to pay for protecting hundreds of millions of people from the worst risks associated with climate change. Any such effort, however, would require lifestyles to change appropriately also. Mitigation of greenhouse gas emissions is not a mere technological fix, and clearly requires changes in lifestyles and transformation of a country's economic structure, whereby effective reduction in emissions is brought about, such as through the consumption of much
lower quantities of animal protein. The Food and Agriculture Organization (FAO) has determined that the emissions from the livestock sector amount to 18 percent of the total. The reduction of emissions from this source is entirely in the hands of human beings, who have never questioned the impacts that their dietary habits of consuming more and more animal protein are bringing about. Mitigation overall has huge co-benefits, such as lower air pollution and health benefits, higher energy security and greater employment.
16. According to the passage, which of the following would help in the mitigation of greenhouse gases?

1. Reducing the consumption of meat
2. Rapid economic liberalization
3. Reducing the consumerism
4. Modern management practices of livestock

Select the correct answer using the code given below:
(a) 1,2 and 3
(b) 2, 3 and 4
(c) 1 and 3 only
(d) 2 and 4 only
17. Why do we continue to depend on the fossil fuels heavily?

1. Inadequate technological development
2. Inadequate funds for research and development
3. Inadequate availability of alternative sources of energy
Select the correct answer using the code given below:
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3
4. According to the passage, how does the mitigation of greenhouse gases help us?
5. Reduces expenditure on public health
6. Reduces dependence on livestock
7. Reduces energy requirements
8. Reduces rate of global climate change

Select the correct answer using the code given below:
(a) 1,2 and 3
(b) 1,3 and 4
(c) 2, 3 and 4
(d) 1 and 4 only
19. What is the essential message of the passage?
(a) We continue to depend on fossil fuels heavily
(b) Mitigation of the greenhouse gases is imperative
(c) We must invest in research and development
(d) People must change their lifestyle

## Directions for the following 5 (five) items:

Read the following two passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

## Passage- 1

In recent times, India has grown fast not only compared to its own past but also in comparison with other nations. But there cannot be any room for complacency because it is
possible for the Indian economy to develop even faster and also to spread the benefits of this growth more widely than has been done thus far. Before going into details of the kinds of micro-structural changes that we need to conceptualize and .then proceed to implement, it is worthwhile elaborating on the idea of inclusive growth that constitutes the defining concept behind this Government's various economic policies and decisions. A nation interested in inclusive growth views the same growth differently depending on whether the gains of the growth are heaped primarily on a small segment or shared widely by the population. The latter is cause for celebration but not the former. In other words, growth must not be treated as an end in itself but as an instrument for spreading prosperity to all. India's own past experience and the experience of other nations suggests that growth is necessary for eradicating poverty but it is not a sufficient condition. In other words, policies for promoting growth need to be complemented with policies to ensure that more and more people join in the growth process and further, that there are mechanisms in place to redistribute some of the gains to those who are unable to partake in the market process and, hence, get left behind.

A simple way of giving this idea of inclusive growth a sharper form is to measure a nation's progress in terms of the progress of its poorest segment, for instance the bottom 20 per cent of the population. One could measure the per capita income of the bottom quintile of the population and also calculate the growth rate of income; and evaluate our economic success in terms of these measures that pertain to the poorest segment. This approach is attractive because it does not ignore growth like some of the older heterodox criteria did. It simply looks at the growth of income of the poorest sections of the population. It also ensures that those who are outside of the bottom quintile do not get ignored. If that were done, then those people would in all likelihood drop down into the bottom quintile and so would automatically become a direct target of our policies. Hence, the criterion being suggested here is a statistical summing up of the idea of inclusive growth, which, in turn, leads to two corollaries : to wish that India must strive to achieve high growth and that we must work to ensure that the weakest segments benefit from the growth.
20. The author's central focus is on
(a) applauding India's economic growth not only against its own past performance, but against other; nations
(b) emphasizing the need for economic growth which is the sole determinant of a country's prosperity
(c) emphasizing inclusive growth where gains of growth are shared widely by the population
(d) emphasizing high growth
21. The author supports policies which will help
(a) develop economic growth
(b) better distribution of incomes irrespective of rate of growth.
(c) develop economic growth and redistribute economic gains to those getting left behind.
(d) put an emphasis on the development of the poorest segments of society.
22. Consider the following statements:

According to the author, India's economy has grown but there is no room for complacency as

1. growth eradicates poverty
2. growth has resulted in prosperity for all

Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Passage - 2
It is easy for the government to control State-owned companies through nods and winks. So what really needs to be done as a first step is to put petrol pricing on a transparent formula - if the price of crude is $x$ and the exchange rate $y$, then every month or fortnight, the government announces a maximum price of petrol, which anybody can work out from the x and the y . The rule has to be worked out to make sure that the oil-marketing companies can, in general, cover their costs. This will mean that if one company can innovate and cut costs, it will make greater profits. Hence, firms will be more prone to innovate and be efficient under this system. Once the rule is announced, there should be no interference by the government. If this is done for a while, private companies will re-enter this market. And once a sufficient number of them are in the fray, we can remove the rule-based pricing and leave it truly to the market (subject to, of course, the usual regulations of anti-trust and other competition laws).
23. Consider the following statements:

According to the passage, an oil company can make greater profits, if a transparent formula for petrol pricing announced every fortnight or month, by

1. promoting its sales
2. undertaking innovation
3. cutting costs
4. selling its equity shares at higher prices

Which of the statements given above is/are correct?
(a) 1 only
(b) 2 and 3
(c) 3 and 4
(d) 1,2 and 4
24. Consider the following statements:

According to the passage, private oil companies re-enter the oil producing market if

1. a transparent rule-based petrol pricing exists.
2. there is no government interference in the oil producing market.
3. subsidies are given by the government
4. regulations of anti-trust are removed

Which of the statements given above are correct?"
(a) 1 and 2
(b) 2 and 3
(c) 3 and 4
(d) 2 and 4

## Directions for the following 8 (eight) items :

Read the following two passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

## Passage -1

The Himalayan ecosystem is highly vulnerable to damage, both due to geological reasons and on account of the stress caused by increased pressure of population, exploitation of natural resources and other related challenges. These aspects may be exacerbated due to the impact of climate change. It is possible that climate change may adversely impact the Himalayan ecosystem through increased temperature, altered precipitation patterns, episodes of drought and biotic influences. This would not only impact the very sustenance 6 of the indigenous communities in uplands but also the life of downstream dwellers across the country and beyond. Therefore, there is an urgent need for giving special attention to sustain the Himalayan ecosystem. This would require conscious efforts for conserving all the representative systems.

Further, it needs to be emphasized that the endemics with restricted distribution, and most often with specialized habitat requirements, are among the most vulnerable elements. In this respect the Himalayan biodiversity hotspot, with rich endemic diversity, is vulnerable to climate change. The threats include possible loss of genetic resources and species, habitats and concomitantly a decrease in ecosystem services. Therefore, conservation of endemic elements in representative ecosystems/ habitats assumes a great significance while drawing conservation plans for the region.

Towards achieving the above, we will have to shift toward contemporary conservation approaches which include a paradigm of landscape level interconnectivity between protected area systems. The concept advocates a shift from the species-habitat focus to an inclusive focus on expanding the biogeographic range so that natural adjustments to climate change can proceed without being restrictive.
25. Consider the following statements:

According to the passage, the adverse impact of climate change on an ecosystem can be a

1. permanent disappearance of some of its flora and fauna.
2. permanent disappearance of ecosystem itself Which of the statements given above is/are correct.?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
3. Which one of the following statements best implies the need to shift toward contemporary conservation approach?
(a) Exploitation of natural resources causes a stress on the Himalayan ecosystem.
(b) Climate change alters precipitation patterns, causes episodes of drought and biotic interference.
(c) The rich biodiversity, including endemic diversity, makes the Himalayan region a biodiversity hotspot.
(d) The Himalayan biogeographic region should be enabled to adapt to climate change smoothly.
4. What is the most important message conveyed by the passage?
(a) Endemism is a characteristic feature of Himalayan region.
(b) Conservation efforts should emphasize on biogeographic ranges rather than on some species or habitats.
(c) Climate change has adverse impact on the Himalayan ecosystem.
(d) Without Himalayan ecosystem, the life of the communities of uplands and downstreams will have no sustenance.
5. With reference to the passage, the following assumptions have been made :
6. To maintain natural ecosystems, exploitation of natural resources should completely be avoided.
7. Not only anthropogenic but also natural reasons can adversely affect ecosystems.
8. Loss of endemic diversity leads to the extinction of ecosystems.
Which of the above assumptions is/are correct ?
(a) land 2
(b) 2 only
(c) 2 and 3
(d) 3 only

## Passage - 2

It is often forgotten that globalization is not only about policies on international economic relationships and transactions, but has equally to do with domestic policies of a nation. Policy changes necessitated by meeting the internationally set conditions (by WTO etc.) of free trade and investment flows obviously affect domestic producers and investors. But the basic philosophy underlying globalization emphasizes absolute freedom to markets to determine prices and production and distribution patterns, and view government
interventions as processes that create distortions and bring in inefficiency. Thus, public enterprises have to be privatized through disinvestments and sales; sectors and activities hitherto reserved for the public sector have to be opened to the private sector. This logic extends to the social services like education and health. Any restrictions on the adjustments in workforce by way of retrenchment of workers should also be removed and exit should be made easier by removing any restrictions on closures. Employment and wages should be governed by free play of market forces, as any measure to regulate them can discourage investment and also create inefficiency in production. Above all, in line with the overall philosophy of reduction in the role of the State, fiscal reforms should be undertaken to have generally low levels of taxation and government expenditure should be kept to the minimum to abide by the principle of fiscal prudence. All these are policy actions on the domestic front and are not directly related to the core items of the globalization agenda, namely free international flow of goods and finance.
29. According to the passage, under the globalization, government interventions are viewed as processes leading to
(a) distortions and inefficiency in the economy.
(b) optimum use of resources.
(c) more profitability to industries.
(d) free play of market forces with regard to industries.
30. According the passage, the basic philosophy of globalization is to:
(a) give absolute freedom to producers to determine prices and production.
(b) give freedom to producers to evolve distribution patterns.
(c) give absolute freedom to markets to determine prices, production and employment.
(d) give freedom to producers to import and export.
31. According to the passage, which of the following is/are necessary for ensuring globalization?

1. Privatization of public enterprises
2. Expansionary policy of public expenditure
3. Free play of market forces to determine wages and employment
4. Privatization of social services like education and health
Select the correct answer using the code given below:
(a) 1 only
(b) 2 and 3 only
(c) 1, 3 and 4
(d) 2, 3 and 4
5. According to the passage, in the process of globalization the State should have
(a) expanding role
(b) reducing role
(c) statutory role
(d) none of the above roles

## Directions for the following 4 (four) items:

The following graph shows the average profit of two fruitsellers A and B in thousands (Rs.) per year from the year 1995 to 2000. Consider the graph and answer the 4 (four) items that follow :


$$
\text { Year } \longrightarrow
$$

33. In which year is the average profit of $A$ and $B$ same ?
(a) 1995
(b) 1996
(c) 1997
(d) 1998
34. What is the difference between the average profit of B and A in the year 1998 ?
(a) - Rs. 100
(b) -Rs. 1,000
(c) + Rs. 600
(d) - Rs. 300
35. How much more average profit did A make in the year 2000 than in the year 1999 ?
(a) Rs. 200
(b) Rs. 1,000
(c) Rs. 1,500
(d) Rs. 2,000
36. What is the trend of the average profit of B from the year 1997 to the year 2000?
(a) Non-increasing
(b) Non-decreasing
(c) Steady
(d) Fluctuating
37. The following table shows the marks obtained by two students in different subjects:

|  | Student <br> A | Max. <br> Marks | Student <br> B | Max. <br> Marks |
| :--- | :---: | :---: | :---: | :---: |
| English | 60 | 100 | 80 | 150 |
| Psychology | 70 | 100 | 70 | 100 |
| History | 50 | 100 | 60 | 100 |
| Sanskrit | 30 | 50 | 15 | 25 |

The difference in the mean aggregate percentage marks of the students is
(a) $2.5 \%$
(b) $13.75 \%$
(c) $1.25 \%$
(d) Zero
38. The following table gives population and total income of a city for four years :

| Year | 1992 | 1993 | 1994 | 1995 |
| :--- | :---: | :---: | :---: | :---: |
| Population <br> in lakhs | 20 | 21 | 22 | 23 |
| Income in <br> crores (Rs.) | 1050 | 1111 | 1225 | 1345 |

Which of the following statements is correct in respect of the above data?
(a) Population increased by $5 \%$ or more every year
(b) Income increased by $10 \%$ or more every year
(c) Per capital income was always above Rs. 5,000
(d) Per capital income was highest in 1994

## REASONING \& ANALYTICAL ABILITY

39. A question paper must have a question on one of the eight poets : A, B, C, D, E, F, G or H. The first four belong to the medieval period while the rest are considered modern poets. Generally, modern poets figure in the question paper in alternate years. Generally those who like H like G also; and those who like F like E also. The paper-setter does not like to ask about F as he has written a book on F , but he likes F. Last year, the paper contained a question on A. On the basis of the information given, this year's paper is most likely to contain a question on
(a) C
(b) E
(c) F
(d) H
40. In a group of six women there are four dancers, four vocal musicians, one actress and three violinists. Girija and Vanaja are among the violinists while Jalaja and Shailaja do not know how to play the violin. Shailaja and Tanuja are among the dancers. Jalaja, Vanaja, Shailaja and Tanuja are all vocal musicians and two of them are also violinists. If Pooja is an actress, who among the following is certainly a dancer and a violinist ?
(a) Jalaja
(b) Pooja
(c) Shailaja
(d) Tanuja
41. The letters $\mathrm{L}, \mathrm{M}, \mathrm{N}, \mathrm{O}, \mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}$ and T in their order are substituted by nine integers 1 to 9 but not in that order. 4 is assigned to P . The difference between P and T is 5 . The difference between N and T is 3 . What is the integer assigned to N ?
(a) 7
(b) 5
(c) 4
(d) 6
42. The number of deaths among the army personnel is 8 in 1000 , but among the civilian population it is 20 per 1000 . Which one of the following inferences can be drawn from this statement?
(a) It is better to join the army.
(b) The relationship is fortuitous.
(c) Quality of Life Index is very high within the armed forces.
(d) The groups cannot be compared due to their heterogeneity.
43. Given the statement.: "Buses are the cause of more accidents than cars and trucks/cause fewer accidents than buses", which of the following conclusions can we draw?
(a) There are more buses on the road than trucks.
(b) Car drivers are more careful than bus drivers.
(c) Truck drivers are more skilled than either car or bus drivers.
(d) None of the above
44. "If political leadership fails to emerge, there is likelihood of military taking over power in developing countries. Radical student groups or labour may try to raise revolution but they are not likely to compete with the military. Military intervention, rule, and withdrawal from politics is closely related to a society's level of political development."

In the context of political development, the assumption in the above passage is that
(a) political leadership is not an effective instrument.
(b) military fills in political vacuum.
(c) military intervention is inevitable for development
(d) None of the above
45. Examine the following statements :

1. George attends Music classes on Monday.
2. He attends Mathematics classes on Wednesday.
3. His Literature classes are not on Friday.
4. He attends History classes on the day following the day of his Mathematics classes.
5. On Tuesday, he attends his Sports classes.

If he attends just one subject in a day and his Sunday is free, then he is also free on
(a) Monday
(b) Thursday
(c) Saturday
(d) Friday
46. In a row ' A ' is in the 11 th position from the left, ' B ' is in the 10 th position from the right. If ' A ' and ' B ' interchange, then 'A' becomes 18th from the left. How many persons are there in the row other than ' A ' and ' B '?
(a) 27
(b) 26
(c) 25
(d) 24
47. Location of B is north of A and location of C is east of A . The distances $A B$ and $A C$ are 5 km and 12 km respectively. The shortest distance (in km ) between the locations B and C is
(a) 60
(b) 13
(c) 17
(d) 7

## Directions for the following 3 (three) items:

Read the passage given below and answer the items that follow. A, B, C, D, E, F are members of a family. They are engineer, stenographer, doctor, draughtsman, lawyer and judge (not in order). A, the engineer is married to the lady stenographer. The judge is married to the lawyer. F, the draughtsman is the son of B and brother of E. C, the lawyer is the daughter-in-law of D. E is the unmarried doctor. D is the grandmother of F . There are two married couples in the family.
48. What is the profession of B ?
(a) Judge
(b) Lawyer
(c) Draughtsman
(d) Cannot be determined
49. Which of the following is/are a couple/couples ?
(a) AD only
(b) BC only
(c) Both AD and BC
(d) Both AC and BD
50. What is/the profession of D ?
(a) Judge
(b) Stenographer
(c) Doctor
(d) Cannot be determined
51. Six books are labelled A, B, C, D, E and F and are placed side by side. Books B, C, E and F have green covers while others have yellow covers. Books A, B and D are new while the rest are old volumes. Books A, B and C are law reports while the rest are medical extracts. Which two books are old medical extracts and have green covers ?
(a) B and C
(b) E and F
(c) C and E
(d) C and F
52. There are seven persons up on a ladder, A, B, C, D, E, F and $G$ (not in that order). A is further up than $E$ but is lower than C. B is in the middle. G is between A and B. E
is between B and F . If F is between E and D , the person on the bottom step of the ladder will be
(a) B
(b) F
(c) D
(d) E
53. Consider that:

1. A is taller than B
2. C is taller than A
3. D is taller than C
4. E is the tallest of all

If they are made to sit in the above order of their height, who will occupy the mid position?
(a) A
(b) B
(c) C
(d) D
54. Consider the following statements :

There are six villages A, B, C, D, E and F.
$F$ is 1 km to the west of $D$.
$B$ is 1 km to the east of $E$.
A is 2 km to the north of $E$.
'C is 1 km to the east of A .
D is 1 km to the south of $A$.
Which three villages are in a line?
(a) A,C,B
(b) A, D, E
(c) C, B, F
(d) E, B, D
55. Four children are sitting in a row. A is occupying the seat next to $B$ but not next to $C$. If $C$ is not sitting next to $D$, who is/are occupying seat/seats adjacent to D ?
(a) B
(b) A
(c) B and A
(d) Impossible to tell
56. Examine the following figure :


Which one of the following figures has the above figure embedded in it?

(a)

(b)

(c)

(d)
57. Consider the following matrix :


Which one of the following figures fits into the blank part of the above matrix?

(a)

(b)

(c)

(d)
58. Consider the table given below in which the numbers; bear certain relationship among themselves along the rows :

| 29 | 13 | 18 |
| :--- | :--- | :--- |
| 33 | $X$ | 19 |
| 30 | 27 | 3 |

Which one of the following numbers is the missing number indicated above by X ?
(a) 19
(b) 15
(c) 14
(d) 8
59. Consider the following matrix with one empty block in the lower extreme corner :


Which of the following figures could fit in the empty block and thus complete the matrix ?

(a)

(b)
(c)
(d)
60. With reference to the figure given below, the number of different routes from S to T without retracing from U and/or V , is

61. Consider the following figures:


Change in positions of beads in the four figures above follows a sequence. Following the same sequence, which of the figures below should appear as the fifth figure above?
(a).

(b)

(c)

(d)

62. "Price is not the same thing as value. Suppose that on a day the price of everything viz., coal, bread, postage stamps, a day's labour, the rent of houses, etc. were to double. The prices would certainly rise, but values of all things except one would not."

The writer wants to say that if prices of all things were doubled
(a) the values of all things would remain constant.
(b) the values of the things sold would be doubled.
(c) the values of the things bought would be halved.
(d) the value of money only would be halved.
63. "Liberty, therefore, is never real unless the Government can be called to account when it invades rights."

Which one of the following is the best justification of the above statement?
(a) In the realisation that the government can be brought to book in a court of law
(b) In identifying a man as a political unit in a way which distinguishes him from other citizens
(c) In a decentralized society wherein the basic needs of men can find satisfaction
(d) In the understanding that liberty and restraints are complementary

## GENERAL MENTAL ABILITY

64. Four persons, Alok, Bhupesh, Gharider and Dinesh have a total of Rs. 100 among themselves. Alok and Bhupesh between them have as much money as Chander and Dinesh between them, but Alok has more money than Bhupesh; and Chander has only half the money that Dinesh has. Alok has in fact Rs. 5 more than Dinesh has. Who has the maximum amount of money?
(a) Alok
(B) Bhupesh
(c) Chander
(d) Dinesh
65. Two cars start towards each other, from two places A and B which are at a distance of 160 km . They start at the same time $08: 10 \mathrm{AM}$. If the speeds of the cars are 50 km and 30 km per hour respectively, they will meet each other at
(a) 10:10 AM
(b) 10:30 AM
(c) 11:10 AM
(d) 11:20 AM
66. If the 3rd day of a month is Monday, which one of the following will be the fifth day from 21st of this month?
(a) Monday
(b) Tuesday
(c) Wednesday
(d) Friday
67. For a charity show, the total tickets sold were 420. Half of these tickets were sold at the rate of Rs. 5 each, onethird at the rate of Rs. 3 each and the rest for Rs. 2 each. What was the total amount received?
(a) Rs. 900
(b) Rs. 1540
(c) Rs. 1610
(d) Rs. 2000
68. There are 50 students admitted to a nursery class. Some students can speak only English and some can speak only Hindi. 10 students can speak both English and Hindi. If the number of students who can speak English is 21, then how many students can speak Hindi, how many can speak only Hindi and how many can speak only English?
(a) 21, 11 and 29 respectively
(b) 28, 18 and 22 respectively
(c) 37, 27 and 13 respectively
(d) 39, 29 and 11 respectively
69. A, gardener increased the area of his rectangular garden by increasing its length by $40 \%$ and decreasing its width by $20 \%$. The area of the new garden
(a) has increased by $20 \%$
(b) has increased by $12 \%$
(c) has increased by $8 \%$
(d) is exactly the same as the old area
70. A straight line segment is 36 cm long. Points are to be marked on the line from both the end points. From each end, the first point is at a distance of 1 cm from the end, the second point is at a distance of 2 cm from the first point and the third point is at a distance of 3 cm from the second point and so on. If the points on the ends are not counted and the common points are counted as one, what is the number of points?
(a) 10
(b) 12
(c) 14
(d) 16
71. If Sohan, while selling two goats at the same price, makes a profit of $10 \%$ on one goat and suffers a loss of $10 \%$ on the other
(a) he makes no profit and no loss
(b) he makes a profit of $1 \%$
(c) he suffers a loss of $1 \%$
(d) he suffers a loss of $2 \%$
72. Out of a total of 120 musicians in a club, $5 \%$ can play all the three instruments, guitar, violin and flute. It so happens that the number of musicians who can play any two and only two of the above instruments is 30 . The number of musicians who can play the guitar alone is 40 . What is the total number of those who can play violin alone or flute alone?
(a) 45
(b) 44
(c) 38
(d) 30
73. Six identical cards are placed on a table. Each card has number ' 1 ' marked on one side and number ' 2 ' marked on its other side. All the six cards are placed in such a manner that the number ' 1 ' is on the upper side. In one try, exactly four (neither more nor less) cards are turned upside down. In how many least number of tries can the cards be turned upside down such that all the six cards show number ' 2 ' on the upper side?
(a) 3
(b) 5
(c) 7
(d) This cannot be achieved
74. Five persons fire bullets at a target at an interval of 6,7 , 8,9 and 12 seconds respectively. The number of times they would fire the bullets together at the target in an hour is
(a) 6
(b) 7
(c) 8
(d) 5
75. A group of 630 children is seated in rows for a group photo session. Each row contains three less children than the row in front of it. Which one of the following number of rows is not possible ?
(a) 3
(b) 4
(c) 5
(d) 6
76. Assume that
77. the hour and minute hands of a clock move without jerking.
78. the clock shows a time between 8 o'clock and 9 o'clock.
79. the two hands of the clock are one above the other. After how many minutes (nearest integer) will the two hands be again lying one above the other?
(a) 60
(b) 62
(c) 65
(d) 67
80. A bell rings every 18 minutes. A second bell rings every 24 minutes. A third bell rings every 32 minutes. If all the three bells ring at the same time at 8 o'clock in the morning, at what other time will they all ring together ?
(a) $12: 40 \mathrm{hrs}$
(b) $12: 48 \mathrm{hrs}$
(c) 12: 56 hrs
(d) 13:04 hrs
81. A and $B$ decide to travel from place $X$ to place $Y$ by bus. A has W 10 with him and he finds that it is $80 \%$ of the bus fare for two persons. B finds that he has 3 with him and hands it over to A. In this context, which one of the following statements is correct?
(a) Now the money A has is just enough to buy two tickets.
(b) A still needs Rs. 2 for buying the tickets.
(c) After buying the two tickets A will be left with 50 paise.
(d) The money A now has is still not sufficient to buy two tickets.
82. As per agreement with a bank, a businessman had to refund a loan in some equal instalments without interest. After paying 18 instalments, he found that 60 percent of his loan was refunded. How many instalments were there in the agreement ?
(a) 22
(b) 24
(c) 30
(d) 33
83. A worker reaches his factory 3 minutes late if his speed from his house to the factory is $5 \mathrm{~km} / \mathrm{hr}$. If he walks at a speed of $6 \mathrm{~km} / \mathrm{hr}$, then he reaches the factory 7 minutes early. The distance of the factory from his house is
(a) 3 km
(b) 4 km
(c) 5 km
(d) 6 km

## EXPLANATORY NOTES

1. (c)
2. (c)
3. (b)
4. (c) 2 and 3 given statement 4 can be inferred
5. (b) Use of the phrase "tolling unviable" in passage.
6. (c) Implied from examples given in second paragraph
7. (d) No statement establishes cause and effect relationship
8. (a)
9. (b)
10. (c)
11. (b)
12. (a)
13. (d)
14. (a) Statements 2 and 3 are given in passage. Statement 1 can be inferred from the example given in 3rd paragraph.
15. (c) The last line of 1 st paragraph says "to permit adaptations".
16. (c) Statement 1 is an idea match given in passage.

Statement 2 is inferred from the phrase "requires lifestyle to change appropriately".
17. (d) Statements 1 and 2 are given explicitly

Statement 3 is not given, but going through the options in answer one can make this possible inference.
18. (d) Statement 1 is given. Statement 2 can be inferred from the paragaraph on IPCC finding.
19. (b) Confirmed by 1 st and last sentences of the passage.
20. (c)
21. (c) Condition given in the last sentence of passage.
22. (d) Passage gives only 2 reasons viz; possibility of faster growth, and possibility of wider spread of benefit.
23. (b) Statements 1 and 4 are beyond the scope and passage; hence wrong.
24. (a) Statements 1 and 2 are explicitly given in passage; hence word match.
25. (a) Statement 1 can be inferred but statement 2 is an extreme inference.
26. (b)
27. (b) Option (c) is half the summary of passage, hence not the best option.
28. (b) Given 1st sentence of the passage
29. (a) Given in the passage word match
30. (c)
31. (c) Statement 2 is an anti-inference, hence wrong.
32. (b) This is the overall Philosphy of the passage.
33. (b)
34. (c)
35. (d)
36. (b)
37. (d) $A=\frac{210}{350} \times 100=60 \%$ $B=\frac{225}{375} \times 100=60 \%$
38. (c)
39. (B)

## Medieval Modern

ABCD

## HG

EFGH
FE

Since he likes F; therefore, he likes E Question of E is more likely.
40. (d)

|  | Violin | Dance | Vocal |
| :--- | :---: | :---: | :---: |
| Girija | $\checkmark$ |  |  |
| Vanaja | $\checkmark$ |  | $\checkmark$ |
| Jalaja | $\times$ |  | $\checkmark$ |
| Shailja | $\times$ | $\checkmark$ | $\checkmark$ |
| Tanuja | $\checkmark$ | $\checkmark$ | $\checkmark$ |

41. (d)

L
M
N --- 6
O
P --- 4
Q
R
S
T --- 9
42. (c)
43. (d)
44. (b)
45. (d)

M - Music
T - Sports
W - Maths
Th - History
F - Free
S - Literature
46. (c)


$$
\text { Total }=18+10-1=27
$$

The total number of persons in the row other than $A$ nd $B$

$$
=25
$$

47. (b)

48. (a)
49. (c)

A D
(+) (-)

(+)
Draughtsman
(-)
Doctor
50. (b)
51. (b)

|  | Y | G | Q | N | LR | MR |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| A | $\checkmark$ |  |  |  | $\checkmark$ |  |
| B |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| C |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |
| D | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |
| E |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |
| F |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |

52. (c)
$\begin{array}{lllllll}\text { C } & \text { A } & \text { G } & \text { B } & \text { E } & \text { F } & \text { D }\end{array}$
53. (c) E $>$ D $>$ C $>$ A $>$ B
54. (b)


| C | B | A | D |
| :--- | :--- | :--- | :--- |
| D | A | B | C |

56. (c)
57. (b)
58. (b) $27+3=30-0=30$
$19+15=34-1=33$
$18+13=31-2=29$
59. (a)
60. (d) $3 \times 2 \times 3=18$
61. (b) Alternate transfer and mirror image
62. (d)
63. (a)
64. (a) Dinesh : $x=33.33$

Alok $x+5=38.33$
Chander $\frac{x}{2}=16.67$
$x+\frac{x}{2}=50$
$3 x=100$
$x=33.33$
65. (a) Relative speed $=80 \mathrm{~km} / \mathrm{h}$

Time $=\frac{D}{5}=\frac{160}{80}=2 h r$
Meeting time - 10.10
66. (c)

| 3 rd | Monday |
| :--- | :--- |
| 10 | Monday |
| 17 | Monday |
| 24 | Monday |

$\therefore 26$ th day is Wednesday
67. (c) Total revenues $=210 \times 5+140 \times 3+70 \times 2$

$$
=1050+420+140=1610
$$

68. (d)
69. (b)
70. 

| 0 | 0 |
| :--- | :--- |
| 1 | 8 |
| 3 | 15 |
| 6 | 21 |
| 10 | 26 |
| 15 | 30 |
| 21 | 33 |
| 28 | 35 |
| 36 | 36 |

71. (c) $\operatorname{Loss} \frac{r^{2}}{100}=\frac{10^{2}}{100}=1 \%$
72. 


$x+y+z=30$
$46+x+y+z+a+\mathrm{b}=120$
$46+30+a+b=120$
$a+b=120-76=44$
73. (a)

|  | 1 | 1 | 1 | 1 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1st | 2 | 2 | 2 | 2 | 1 | 1 |
| 2nd | 2 | 1 | 1 | 1 | 2 | 1 |
| 3rd | 2 | 2 | 2 | 2 | 2 | 2 |

74 (c) LCM of 6, 7, 8, 9, 12

| 2 | $6,7,8,9,12$ |
| :--- | :--- |
| 2 | $3,7,4,9,6$ |
| 3 | $3,7,2,9,3$ |
|  | $1,7,2,3,1$ |

$72 \times 7=504$ seconds $=8 \min 24 \mathrm{sec}$.
75. (d)
76. (c) $8^{\prime} x$
$H \rightarrow 240+\frac{x}{2}$
MH $\quad 6 x$
$\frac{11 x}{2}=240 \Rightarrow x=\frac{480}{11}$
$\frac{11 x}{2}=240=360 \Rightarrow x=\frac{1200}{11}$
$\frac{1200}{11}-\frac{480}{11}=\frac{720}{11}=65$
77. (b) LCM of $18,24,32$

| 2 | $18,24,32$ |
| :--- | :--- |
| 3 | $9,12,16$ |
| 4 | $3,4,16$ |
|  | $3,1,4$ |

$\operatorname{LCM}=288 \mathrm{~min}=4$ hours 48 min
78. (c) $x \times \frac{80}{100}=10$
$x=12.50$
79.(c) $18: 60:: x: 40$
$\frac{18}{60}=\frac{x}{40}$
$x=12$
Total 30 instalments
80. (c) $\frac{x}{5}-\frac{x}{6}=\frac{10}{60}$

$$
\begin{aligned}
& \frac{x}{30}=\frac{1}{6} \\
& x=5 \mathrm{~km}
\end{aligned}
$$

# U.P.S.C. <br> CIVIL SERVICES (Prelim) Exam 2013 General Studies Paper-II (CSAT) 

Directions (1-2): Read the following passage and answer the two items that follow. Your anwers to these items should be based on the passage only.

## Passage

Ecological research over the last quarter of the century has established the deleterious effects of habitat fragmentation due to mining, highways and such other intrusions on forests. When a large block of forests gets fragmented into smaller bits, the edges of all these bits come into contact with human activities resulting in the degradation of the entire forests. Continuity of forested landscapes and corridors gets disrupted affecting several extinction-prone species of wildlife. Habitat fragmentation is therefore considered as the most serious threat to biodiversity conservation. Ad hoc grants of forest lands to mining companies coupled with rampant illegal mining is aggravating this threat.

1. What is the central focus of this passage ?
(A) Illegal mining in forests
(B) Extinction of wildlife
(C) Conservation of nature
(D) Disruption of habitat
2. What is the purpose of maintaining the continuity of forested landscapes and corridors?
3. Preservation of biodiversity.
4. Management of mineral resources.
5. Grant of forest lands for human activities.

Select the correct answer using the codes given below :
(A) 1 only
(B) 1 and 2
(C) 2 and 3
(D) 1, 2 and 3
3. In a rare coin collection, there is one gold coin for every three non-gold coins. 10 more gold coins are added to the collection and the ratio of gold coins to the non-gold coins would be $1: 2$. Based on the information, the total number of coins in the collection now becomes-
(A) 90
(B) 80
(C) 60
(D) 50
4. A gardener has 1000 plants. He wants to plant them in such a way that the number of rows and the number of columns remains the same. What is the minimum number of plants that he needs more for this purpose?
(A) 14
(B) 24
(C) 32
(D) 34
5. A sum of $₹ 700$ has to be used to give seven cash prizes to the students of a school for their overall academic performance. If each prize is 20 less than its preceding prize, what is the least value of the prize ?
(A) ₹ 30
(B) ₹ 40
(C) ₹ 60
(D) ₹ 80
6. Out of 120 applications for a post, 70 are male and 80 have a driver's license. What is the ratio between the minimum to the maximum number of males having driver's licecse?
(A) 1 to 2
(B) 2 to 3
(C) 3 to 7
(D) 5 to 7
7. In a garrison, there was food for 1000 soldiers for one month. After 10 days, 1000 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?
(A) 25 days
(B) 20 days
(C) 15 days
(D) 10 days
8. The tank-full petrol in Arun's motorcycle lasts for 10 days. If he starts using $25 \%$ more everyday, how many days will the tank-full petrol last ?
(A) 5
(B) 6
(C) 7
(D) 8
9. A person can walk a certain distance and drive back in six hours. He can also walk both ways in 10 hours. How much time will he take to drive both ways ?
(A) Two hours
(B) Two and a half hours
(C) Five and a half hours
(D) Four hours

Directions (10-16) : Read the following two passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

## Passage-1

The law in many parts of the world increasingly restricts the discharge of agricultural slurry into watercourses. The simplest and often the most economically sound practice returns the material to the land as semi-solid manure or as sprayed slurry. This dilutes its concentration in the environment to what might have occurred in a more primitive and sustainable type of agriculture and converts pollutant into fertilizer. Soil microorganisms decompose the organic components of sewage and slurry and most of the mineral nutrients become available to be absorbed again by the vegetation.

The excess input of nutrients, both nitrogen and phosphorus-based, from agricultural runoff (and human sewage) has caused many 'healthy' oligotrophic lakes (low nutrient concentrations, low plant productivity with abundant water weeds, and clear water) to change to eutrophic condition where high nutrient inputs lead to high phytoplankton productivity (sometimes dominated by bloom-forming toxic species). This makes the water turbid, eliminates large plants and, in the worst situations, leads to anoxia and fish kills; so called cultural eutrophication. Thus, important ecosystem services are lost, including the provisioning service of wild-caught fish and the cultural services associated with recreation.

The process of cultural eutrophication of lakes has been understood for some time. But only recently did scientists notice huge 'dead zones' in the oceans near river outlets, particularly those draining large catchment areas, such as the Mississippi in North America and the Yangtze in China. The nutrient-enriched water flows through streams, rivers and lakes, and eventually to, the estuary and ocean where the ecological impact may be huge, killing virtually all invertebrates and fish in areas up to $70,000 \mathrm{~km}^{2}$ in extent. More than 150 sea areas worldwide are now regularly starved of oxygen as a result of decomposition of the algal blooms, fuelled particularly by nitrogen from agricultural runoff of fertilizers and sewage from large cities. Oceanic dead zones are typically associated with industrialised nations and usually lie off countries that subsidise "their agriculture, encouraging farmers to increase productivity and use more fertiliser.
10. According to the passage, why should the discharge of agricultural slurry into watercourses be restricted ?

1. Losing nutrients in this way is not a good practice economically.
2. Watercourses do not contain the microorganisms that can decompose organic components of argicultural slurry.
3. The discharge may lead to the eutrophication of water bodies.
Select the correct answer using the codes given below :
(A) 1 only
(B) 2 and 3 only
(C) 1 and 3 only
(D) 1, 2 and 3
4. The passage refers to the conversion of 'pollutant to fertilizer'. What is pollutant and what is fertilizer in this context?
(A) Decomposed organic component of the slurry is pollutant and microrganisms in soil constitute fertilizer
(B) Discharged agricultural slurry is pollutant and decomposed slurry in soil is fertilizer
(C) Sprayed slurry is pollutant and watercourse is fertilizer
(D) None of the above expression is correct in this context.
5. According to the passage, what are the effects of the indiscriminate use of fertilizers?
6. Addition of pollutants to the soil and water
7. Destruction of decomposer microorganisms in soil
8. Nutrient enrichment of water bodies
9. Creation of algal blooms.

Select the correct answer from the codes given below :
(A) 1, 2 and 3 only
(B) 1,3 and 4 only
(C) 2 and 4 only
(D) 1, 2, 3 and 4
13. What is/are the characteristics of a water body with cultural eutrophication?

1. Loss of ecosystem services
2. Loss of flora and fauna
3. Loss of mineral nutrients.

Select the correct answer using the code given below :
(A) 1 only
(B) 1 and 2 only
(C) 2 and 3 only
(D) 1, 2 and 3
14. What is the central theme of this passage ?
(A) Appropriate legislation is essential to protect the environment
(B) Modern agriculture is responsible for the destruction of environment
(C) Improper waste disposal from agriculture can destroy the aquatic ecosystems
(D) Use of chemical fertilizers is undesirable in agriculture

## Passage-2

The miseries of the world cannot be cured by physical help only. Until man's nature changes, his physical needs will always arise, and miseries will always be felt, and no amount of physical help will remove them completely. The only solution of the problem is to make mankind pure. Ignorance is the mother of evil and of all the miseries we see. Let men have light, let them be pure and spiritually strong and educated; then alone will misery cease in the world. We may convert every house in the country into a charitable asylum, we may fill the land with hospitals, but human misery will continue until man's character changes.
15. According to the passage, which of the following statements is most likely to be true as the reason for man's miseries?
(A) The poor economic and social conditions prevailing in the society
(B) The refusal on the part of man to change his character
(C) The absence of physical and material help from his society
(D) The ever increasing physical needs due to the changing social structure
16. With reference to the passage, the following assumptions have been made-

1. The author gives primary importance to physical and material help in eradicating human misery.
2. Charitable homes, hospitals, etc., can remove human misery to a great extent.
Which of the assumptions is/are valid?
(A) 1 only
(B) 2 only
(C) Both 1 and 2
(D) Neither 1 nor 2
3. Consider the following figures $1,2,3$ and $4-$


In the figures from 1 to 4 above, two symbols are shown to change their position in a regular direction. Following the same sequence, which one of the following will appear at the fifth stage ?
(A)

(B)

(C)

(D)


Directions (18-19): In each item, there are two sets of figures; first four figures named Problem figures and next four figures named Answer figures indicated as (A), (B), (C) and (D). The problem figures follow a particular sequence. In accordance with the same, which one of the four answer figures should appear as the fifth figure ?
18. Problem figures


Answer figures

(A)

(D)
19. Problem figures


Answer figures

20. Consider the following diagrams-
$x$ men, working at constant speed, do a cetain job in $y$ days. Which one of these diagrams shows the relation between r and $y$ ?

(A) Diagram I
(B) Diagram II
(C) Diagram III
(D) Diagram IV
21. Consider the following matrix-

| 3 | 370 | 7 |
| :--- | :--- | :--- |
| 2 | 224 | 6 |
| 1 | 730 | $X$ |

What is the number of ' X ' in the above matrix ?
(A) 5
(B) 8
(C) 9
(D) 11
22. Four cars are hired at the rate of 6 per km plus the cost of diesel at 40 a litre. In this context, consider the details given in the following table-

| Car | Mileage <br> $(\mathrm{km} / \mathrm{lit})$ | Hours | Total Payment Rs. |
| :---: | :---: | :---: | :---: |
| A | 8 | 20 | 2120 |
| B | 10 | 25 | 1950 |
| C | 9 | 24 | 2064 |
| D | 11 | 22 | 1812 |

Which car maintained the maximum average speed?
(A) Car A
(B) Car B
(C) Car C
(D) Car D
23. Examine the following three figures in which the numbers follow a specific pattern-


The missing number (?) in the third figure above is-
(A) 7
(B) 16
(C) 21
(D) 28
24. A cube has six numbers marked $1,2,3,4,5$ and 6 on its faces. Three views of the cube are shown below-


What possible numbers can exist on the two faces marked (A) and (B), respectively on the cube ?

(A) 2 and 3
(B) 6 and 1
(C) 1 and 4
(D) 3 and 1

Directions (25-29) : Study the two figures given below and answer the five items that follow-


Fig. 1: Number of Professors in Selected Disciplines in a University by Sex.


Fig. 2 : Age of Physics Professors
25. How many Physics professors belong to the age group 35-44?
(A) 18
(B) 16
(C) 14
(D) 12
26. Which one of the following disciplines has the highest ratio of males to females ?
(A) Physics
(B) Mathematics
(C) Chemistry
(D) Economics
27. What percentage of all Psychology professors are females?
(A) $40 \%$
(B) $50 \%$
(C) $60 \%$
(D) $70 \%$
28. If the number of female Physics professors in the age group 25-34 equals $25 \%$ of all the Physics professors in that age group, then what is the number of male Physics professors in the age group 25-34 ?
(A) 9
(B) 6
(C) 3
(D) 2
29. If the Psychology professors in the University constitute $2 \%$ of all the professors in the University, then what is the number of professors in the University?
(A) 400
(B) 500
(C) 600
(D) 700
30. Consider the following figures-





Which one of the following figures would logically come in the 7 th position indicated above by a question mark ?
(A)

(B)

(C)

(D)


Directions (31-38): Read the following four passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

## Passage-1

The subject of democracy has become severely muddled because of the way the rhetoric surrounding it has been used in recent years. There is, increasingly, an oddly confused dichotomy between those who want to 'impose' democracy on countries in the non-Western world (in these countries' 'own interest', of course) and those who are opposed to such 'imposition' (because of the respect for the countries' 'own ways')- But the entire language of 'imposition', used by both sides, is extraordinarily inappropriate since it makes the implicit assumption that democracy belongs exclusively to the West, taking it to be a quintessentially 'Western' idea which has originated and flourished only in the West.

But the thesis and the pessimism it generates about the possibility of democratic practice in the world would be extremely hard to justify. There were several experiments in local democracy in ancient India. Indeed, in understanding the roots of democracy in the world, we have to take an interest in the history of people participation and public reasoning in different parts of the world. We have to look beyond thinking of democracy only in terms of European and American evolution. We would fail to understand the pervasive demands for participatory living, on which Aristotle spoke with farreaching insight, if we take democracy to be a kind of a specialized cultural product of the West.

It cannot, of course, be doubted that the institutional structure of the contemporary practice of democracy is largely the product of European and American experience over the last few centuries. This is extremely important to recognise since these developments in institutional formats were immensely innovative and ultimately effective. There can be little doubt that there is a major 'Western' achievement here.
31. Which of the following is the closest to the view of democracy as mentioned in the above passage ?
(A) The subject of democracy is a muddle due to a desire to portray it as a Western concept, 'alien' to nonWestern countries
(B) The language of imposition of democracy is inappropriate. There is, however, a need to consider this concept in the backdrop of culture of 'own ways' of the non-Western society
(C) While democracy is not essentially a Western idea belonging exclusively to the West, the institutional structure of current democratic practices has been their contribution
(D) None of the statements, (A), (B) and (C) given above is correct
32. With reference to the passage, the following assumptions have been made-

1. Many of the non-Western countries are unable to have democracy because they take democracy to be a specialised cultural product of the West.
2. The Western countries are always trying to impose democracy on non-Western countries.
Which of the above is/are valid assumption/assumptions?
(A) 1 only
(B) 2 only
(C) Both land 2
(D) Neither 1 nor 2

## Passage-2

Corporate governance is based on principles such as conducting the business with all integrity and fairness, being transparent with regard to all transactions, making all the necessary disclosures and decisions, complying with all the laws of the land, accountability and responsibility towards the stakeholders and commitment to conducting business in an ethical manner. Another point which is highlighted on corporate governance is the need for those in control to be able to distinguish between what are personal and corporate funds while managing a company.

Fundamentally, there is a level of confidence that is associated with a company which is known to have good corporate governance. The presence of an active group of independent directors on the board contributes a great deal towards ensuring confidence in the market. Corporate governance is known to be one of the criteria that foreign institutional investors are increasingly depending on when deciding on which companies to invest in. It is also known to have a positive influence on the share price of the company. Having a clean image on the corporate governance front could also make it easier for companies to source capital at more reasonable costs. Unfortunately, corporate governance often becomes the centre of discussion only after the exposure of a large scam.
33. According to the passage, which of the following should be the practice/practices in good corporate governance?

1. Companies should always comply with labour and tax laws of the land.
2. Every company in the country should have a government representative as one of the independent directors on the board to ensure transparency.
3. The manager of a company should never invest his personal funds in the company.
Select the correct answer using the codes given below :
(A) 1 only
(B) 2 and 3 only
(C) 1 and 3 only
(D) 1,2 and 3
4. According to the passage, which of the following is/are the major benefit/benefits of good corporate governance?
5. Good corporate governance leads to increase in share price of the company.
6. A company with good corporate governance always increases its business turnover rapidly.
7. Good corporate governance is the main criterion for foreign institutional investors when they decide to buy a company.
Select the correct answer using the codes given below :
(A) 1 only
(B) 2 and 3 only
(C) 1 and 3 only
(D) 1, 2 and 3

## Passage-3

Malnutrition most commonly occurs between the ages of six months and two years. This happens despite the child's food requirements being less than that of an older child. Malnutrition is often attributed to poverty, but it has been found that even in households where adults eat adequate quantities of food, more than 50 per cent of children-under-five do not consume enough food. The child's dependence on someone else to feed him/her is primarily responsible for the malnutrition. Very often the mother is working and the responsibility of feeding the young child is left to an older sibling. It is therefore crucial to increase awareness regarding the child's food needs and how to satisfy them.
35. According to the passage, malnutrition in children can be reduced-
(A) if the children have regular intake of food.
(B) after they cross the age of five.
(C) if the food needs of the younger children are known.
(D) if the responsibility of feeding younger children is given to adults
36. According to the author, poverty is not the main cause of malnutrition, but the fact that-

1. taking care of the younger ones is not a priority for the working mothers.
2. awareness of nutritional needs is not propagated by the Public Health authorities.
Select the correct answer using the code given below :
(A) 1 only
(B) 2 only
(C) Both 1 and 2
(D) Neither 1 nor 2

## Passage-4

A number of empirical studies find that farmers are riskaverse, though only moderately in many cases. There is also evidence to show that farmers' risk aversion results in cropping patterns and input use designed to reduce risk rather than to maximise income. Farmers adopt a number of strategies to manage and cope with agricultural risks. These include practices like crop and field diversification, non-farm employment, storage of stocks and strategic migration of family members. There are also institutions ranging from share tenancy to kinship, extended family and informal credit agencies. One major obstacle to risk sharing by farmers is that the same type of risks can affect a large number of farmers in the region. Empirical studies show that the traditional methods are not adequate. Hence, there is a need for policy interventions, especially measures that cut across geographical regions.

Policies may aim at tackling agricultural risks directly or indirectly. Examples of risk-specific policies are crop insurance, price stablisation and the development of varieties resistant to pests and diseases. Policies which affect risk indirectly are irrigation, subsidised credit and access to information. No single risk-specific policy is sufficient to reduce risk and is without side-effects, whereas policies not specific to risk influence the general situation and affect risks only indirectly. Crop insurance, as a policy measure to tackle agricultural risk directly, deserves careful consideration in the Indian context and in many other developing countries because the majority of farmers depend
on rain-fed agricultural years and in many areas yield variability is the predominant cause of their income instability.
37. The need for policy intervention to mitigate risks in agriculture is because-
(A) farmers are extremely risk-averse.
(B) farmers do not know how to mitigate risks.
(C) the methods adopted by the farmers and the existing risk sharing institutions are not adequate.
(D) majority of farmers depend on rainfed agriculture
38. Which of the following observations emerges from the above passage?
(A) One can identify a single policy that can reduce risk without any side-effect.
(B) No single risk-specific policy is sufficient to reduce the agricultural risk.
(C) Policies which affect risk indirectly can eliminate it.
(D) The Government's policy intervention can mitigate agricultural risk completely.
39. Consider the following statements-
(i) A primary group is relatively smaller in size.
(ii) Intimacy is an essential characteristic of a primary group.
(iii) A family may be an example of a primary group. In the light of the above statements, which one of the following is true?
(A) All families are primary groups.
(B) All primary groups are families.
(C) A group of smaller size is always a primary group.
(D) Members of a primary group know each other intimately.
40. Four friends, $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D distribute some money among themselves in such a manner that A gets one less than B , C gets 5 more than $\mathrm{D}, \mathrm{D}$ gets 3 more than B . Who gets the smallest amount?
(A) A
(B) B
(C) C
(D) D

Directions (41-44) : Read the following statements and answer the four items that follow-

Five cities $\mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}$ and T are connected by different modes of transport as follows:

P and Q are connected by boat as well as rail.
S and R are connected by bus and boat.
Q and T are connected by air only.
P and R are connected by boat only.
T and R are connected by rail and bus.
Which mode of transport would help one to reach R starting from Q , but without changing the mode of transport?
(A) Boat
(B) Rail
(C) Bus
(D) Air
42. If a person visits each of the places starting from $P$ and gets back to $P$, which of the following places must he visit twice?
(A) Q
(B) R
(C) S
(D) T
43. Which one of the following pairs of cities is connected by any of the routes directly without going to any other city?
(A) P and T
(B) T and S
(C) Q and R
(D) None of these
44. Between which two cities among the pairs of cities given below are there maximum travel options available?
(A) Q and S
(B) P and R
(C) P and T
(D) Q and R

Directions (45-47): Read the following passage and answer the three items that follow :

A tennis coach is trying to put together a team of four players for the forthcoming tournament. For this 7 players are available : males A, B and C; and females W, X, Y and Z. All players have equal capability and at least 2 males will be there in the team. For a team of four, all players must be able to play with each other. But, B cannot play with W, C cannot play with Z and W cannot play with Y .
45. If $Y$ is selected and $B$ is rejected, the team will consist of which one of the following groups?
(A) A, C, W and Y
(B) A, C, X and Y
(C) A,C,Y and Z
(D) A, W, Y and Z
46. If $B$ is selected and $Y$ is rejected, the team will consist of which one of the following groups ?
(A) A, B, C and W
(B) A, B, C and Z
(C) A, B, C and X
(D) A, W, Y and Z
47. If all the three males are selected, then how many combinations of four-member teams are possible?
(A) 1
(B) 2
(C) 3
(D) 4
48. The music director of a film wants to select four persons to work on different aspects of the composition of a piece of music. Seven persons are available for this work; they are Rohit, Tanya, Shobha, Kaushal, Kunal, Mukesh and Jaswant.
Rohit and Tanya will not work together. Kunal and Shobha will not work together. Mukesh and Kunal want to work together. Which of the following is the most acceptable group of people that can be selected by the music director?
(A) Rohit, Shobha, Kunal and Kaushal
(B) Tanya, Kaushal, Shobha and Rohit
(C) Tanya, Mukesh, Kunal and Jaswant
(D) Shobha, Tanya, Rohit and Mukesh
49. Five people, A, B, C, D and E are seated about a round table. Every chair is spaced equidistant from the adjacent chairs.
(i) C is seated next to A .
(ii) A is seated two seats from $D$.
(iii) B is not seated next to A.

Which of the following must be true ?
(I) D is seated next to B .
(II) E is seated next to A .

Select the correct answer from the codes given below:

