

Section 1 - Section 1

Question No.1

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Bookmark

Quartz watch works because of the _____ property of the quartz crystal present in it.

- Piezo-electric
- Electromagnetic
- Electric
- Pseudo Electric

Question No.2

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Bookmark

FCC is the abbreviation for _____

- Fast Colour Camera
- False Colour Camera
- First Colour Composite
- False Colour Composite

Question No.3

4.00

Bookmark

The test of organic walled foraminifera is termed as:

- Hyaline
- Porcellaneous
- Tectinous
- Microgranular

Question No.4

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Bookmark

The diurnal variation of geomagnetic elements is due to a system of electric currents flowing in the

- Ionosphere
- Earth's outer core
- Oceans
- Inter-planetary medium

Question No.5

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Bookmark

_____ is a phenomenon of large-scale ocean circulation driven by density gradients created by surface heat and freshwater fluxes

- Hydrothermal circulation
- Alkaline circulation
- Hydrothermal flux
- Thermohaline circulation

Question No.6

4.00

Bookmark

Magnetic behaviour of calcite is

- Ferrimagnetic
- Diamagnetic
- Paramagnetic
- Ferromagnetic

Question No.7

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Bookmark

An ideal structure for tunnels is _____

- Anticline
- Unconformity
- Syncline
- Fault

Question No.8

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Based on the information given answer the following question.

1. In a family of six persons, there are people from three generations. Each has separate professions and they like different colours. There are two couples.
2. Shyam is an Engineer and his wife is not a doctor and she does not like Red colour.
3. Chartered Accountant likes green colour and his wife is a teacher.
4. Manisha is the mother-in-law of Sunita and she likes orange colour.
5. Vimal is the grand father of Tarun and tarun is the Principal and likes black colour.
6. Nyna is the grand daughter of Manisha and she likes blue colour. Nyna's Mother likes white colour.

Which of the following is the correct pair of two couples?

- Cannot be determined
- Shyam-Manisha, Vimal-Sunita
- Shyam-Sunita, Vimal-Manisha
- Tarun-Nyna, Shyam-Sunita

Question No.9

4.00

Bookmark

If the rake of net slip of an inclined fault is 90° , the fault is

- Transcurrent fault
- Oblique slip fault
- Dip slip fault
- Strike slip fault

Question No.10

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Bookmark

A system representing a regional isostatic compensation is known as

- Wadati
- Vening- Meinesz
- Airy-Heiskanen
- Pratt-Hayford

Question No.11

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Bookmark

Which of the following isotope is almost extinct on Earth

- ^{232}Th
- ^{26}Al
- ^{235}U
- ^{180}W

Question No.12

4.00

Bookmark

A narrow inlet with steep cliffs, created by glacial erosion is known as _____

- Creek
- Fjord
- Kames
- Cirque

Question No.13

4.00

Bookmark

The south-west monsoon is active during _____ in India

- January to April
- March to May
- October to December
- June-September

Question No.14

4.00

Bookmark

Which one of the following is NOT a set of polymorphous minerals?

- Kyanite, sillimanite, andalusite.
- Graphite, anthracite, diamond
- Calcite, aragonite, vaterite
- Quartz, coesite, tridymite

Question No.15

4.00

Bookmark

Since the _____ of the motor car, road accidents have increased dramatically.

- inception
- advent
- inauguration
- initiation

Question No.16

4.00

Bookmark

The shape of the earth is described as

- Spheroid
- Prolate ellipsoid
- Oblate spheroid
- Ellipsoid

Question No.17

4.00

Bookmark

If 5 men or 8 boys can do a work in 84 days. In how many days can 10 men and 5 boys can do the same work?

- 35
- 25
- 28
- 32

Question No.18

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Bookmark

If we know the bulk composition of the basalt and the composition of the olivine, we can estimate

- Depth of formation
- Pressure of formation
- Amount of water in magma
- The temperature of crystallisation

Question No.19

4.00

Bookmark

Choose the correct pair of plutonic rock and its equivalent.

- Syenite- Rhyolite
- Diorite-Andesite
- Diorite- Dacite
- Granite- Granodiorite

Question No.20

4.00

Bookmark

Nappe structures can be formed by

- Recumbent folding
- Normal faulting
- Over thrusting
- Both (a) and (c)

Question No.21

4.00

Bookmark

On a 1:10,000 scale map, the length of a fault trace on a horizontal plane is represented as 5cm. The same on a 1:25,000 scale vertical aerial photograph is ____ cm.

- 2cm
- 3cm
- 4cm
- 2.5cm

Question No.22

4.00

Bookmark

A two digit number is three times the sum of its digits. If 45 is added to it, the digits are reversed. The number is

- 31
- 35
- 27
- 32

Question No.23

4.00

Bookmark

The angle between the present geographic north and geomagnetic north is

- 23.5°
- 7.5°
- 11.5°
- 1.5°

Question No.24

4.00

Bookmark

The igneous rock that result due to the intergrowth of Na and K feldspars is

- Ophitic
- Perthitic
- Graphic
- Myrmekitic

Question No.25

4.00

Bookmark

Narmada Valley is an example of _____

- Denudational valley
- Karst valley
- Hanging valley
- Graben

Question No.26

4.00

Bookmark

There are _____ silicate minerals in Moh's scale of hardness

- 4
- 2
- 3
- 5

Question No.27

4.00

Bookmark

The composition of a sandstone is Quartz: 55%, feldspar: 25%, rock fragments: 1% and matrix: 19%, petrographically the sandstone is classified as:

- Quartz wacke
- Lithic arenite
- Arkosic wacke
- Arkose

Question No.28

4.00

Bookmark

At what depth olivine changes to spinel?

- 660km
- 410km
- 220km
- 150km

Question No.29

4.00

Bookmark

Which of the following microfossil groups is generally found in deep sea below the Carbonate Compensation Depth?

- Coccoliths
- Radiolaria
- Foraminifera
- Ostracods

Question No.30

4.00

Bookmark

Pentlandite is an ore mineral of

- Lead
- Zinc
- Nickel
- Copper

Question No.31

4.00

Bookmark

Choose the correct meaning of the italicized idiom.

Those who work by *fits and start* seldom show good results.

- Irregularly
- Disinterestedly
- Regularly
- Rarely

Question No.32

4.00

Bookmark

The two most abundant elements in the earth are

- Oxygen and iron
- Iron and silicon
- Iron and magnesium
- Oxygen and silicon

Question No.33

4.00

Bookmark

These boys need some new books, _____?

- isn't it?
- do they?
- don't they?
- is it?

Question No.34

4.00

Bookmark

The planet having maximum number of moons is

- Neptune
- Uranus
- Jupiter
- Saturn

Question No.35

4.00

Bookmark

Which of the following geomorphic features is not related to desert environments?

- Esker
- Hamada
- Yardang
- Bajada

Question No.36

4.00

Bookmark

Which number replaces the question mark?



- 11
- 12
- 10
- 9

Question No.37

4.00

Bookmark

Choose the best antonym of the italicized word.

There are four chapters that are *extraneous* to the structure of the book.

- integral
- relevant
- needful
- important

Question No.38

4.00

Bookmark

In high grade metamorphism, biotite breakdown indicates

- Rock dehydration
- Rock uplifting
- Rock cooling
- Rock hydration

Question No.39

4.00

Bookmark

_____ processes are largely controlled by ground freezing and thawing leading to rock weathering.

- Polar
- Alpine
- Continental
- Periglacial

Question No.40

4.00

Bookmark

Hawaiian Island chain is the result of

- Divergence of two oceanic plates
- Collision of two oceanic plates
- Intraplate hot spot activity
- Interplate hot spot activity

Question No.41

4.00

Bookmark

In recent times, the number of cases of death by poisoning _____ sharply.

- has increased
- had increased
- increased
- have increased

Question No.42

4.00

Bookmark

Choose the correct meaning of the italicized idiom.
You cannot throw *dust into my eyes*.

- Abuse me
- Terrify me
- Cheat me
- Hurt me

Question No.43

4.00

Bookmark

The correct sequence of metamorphic facies with increasing depth in a subduction zone is

- Greenschist, blueschist, eclogite
- Greenschist, eclogite, blueschist
- Blueschist, eclogite, greenschist
- Blueschist, greenschist, eclogite

Question No.44

4.00

Bookmark

Allochems in a limestone consist of

- Spar
- Micrite
- Bioclasts and ooids
- Ooids

Question No.45

4.00

Bookmark

Which of the following is a feature of thrust fault terrain?

- Both (a) and (c)
- Decollement
- Klippe
- Nappe

Question No.46

4.00

Bookmark

The intersection of the lines connecting opposite fiducial marks in an aerial photograph is known as

- Focal point
- Principal Point
- Camera Centre
- Zenith point

Question No.47

4.00

Bookmark

Silica undersaturated minerals are

- Nepheline and albite
- Olivine and enstatite
- Leucite and orthoclase
- Olivine and leucite

Question No.48

4.00

Bookmark

On crystallisation of anorthite, Sr concentration in the magma will

- Increase
- Decrease
- Remain constant
- Increase and then decrease

Question No.49

4.00

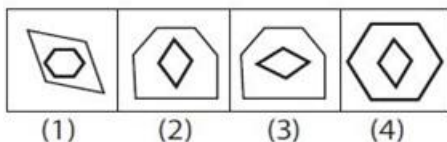
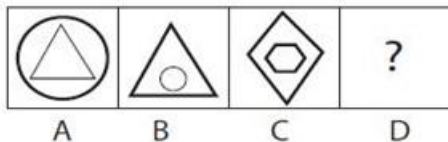
Bookmark

Choose the best synonym of the italicized word. The prisoners of war signed the document under *coercion*.

- confusion
- security
- compulsion
- supervision

Question No.50

4.00

Bookmark 

- 1
- 4
- 2
- 3

Question No.51

4.00

Bookmark

Choose a Proterozoic stratigraphic unit from the following

- Dharwar super group
- Gondwana super group
- Cuddapah super group
- Iron ore group

Question No.52

4.00

Bookmark

The boundary between western and eastern Dharwar Craton is demarcated by

- Kolar suture zone
- Chitradurga Shear Zone
- Closepet granite
- Peninsular gneiss

Question No.53

4.00

Bookmark

Which pair of rock types best describes the products of metamorphism in the contact aureole?

- Slate and schist
- Hornfels and skarn
- Schist and skarn
- Schist and hornfels

Question No.54

4.00

Bookmark

Waves can be best described as _____

- Features that occur on the free surface of bodies of water and are a result of earth's gravity
- Features that occur below the free surface of bodies of water and are a result of the blowing wind
- Features that occur on the surface of waterbodies result due to the blowing wind
- Features that occur on the free surface of bodies of water and are a result of moon's gravity

Question No.55

4.00

Bookmark

Silicate structure of mineral beryl is

- Nesosilicates
- Sorosilicates
- Inosilicates
- Cyclosilicates

Question No.56

4.00

Bookmark

Himalaya started forming at

- 50Ma
- 300Ma
- 150Ma
- 500Ma

Question No.57

4.00

Bookmark

The dominant process of heat transfer in the lithosphere is

- Conduction
- Radiation
- Convection
- Advection

Question No.58

4.00

Bookmark

The most suitable radioactive method for dating Holocene events is

- Sm-Nd
- U-Pb
- Rb-Sr
- C-14

Question No.59

4.00

Bookmark

Choose the missing term : AZ, GT, MN, ?, YB

- TS
- SH
- SX
- KE

Question No.60

4.00

Bookmark

A landform that results from fall of rocks is called

- Debris flow
- Alluvial fan
- Talus slope
- Eskers

Question No.61

4.00

Bookmark

A principle that tells us that any intrusive rock or layer is younger than the layers of sediments, is known as _____

- Principle of cross-cutting relationships
- Principle of lateral continuity
- Principle of original horizontality
- Principle of superposition

Question No.62

4.00

Bookmark

An igneous rock with 50% olivine, 25% orthopyroxene and 25% clinopyroxene by mode will be called

- Wehrlite
- Harzburgite
- Lherzolite
- Dunite

Question No.63

4.00

Bookmark

_____ is a mineral showing varying hardness.

- Calcite
- Kyanite
- Psilomelane
- Apatite

Question No.64

4.00

Bookmark

Select hypothermal mineral deposit from the following:

- Molybdenite
- Galena
- Cinnabar
- Sphalerite

Question No.65

4.00

Bookmark

The ash content in tertiary coal compared to Gondwana coal is,

- Higher
- Lower
- Equal
- Variable

Question No.66

4.00

Bookmark

Horizontal slickensides are observed on the surface of a vertical fault. What is the type of fault?

- Reverse fault
- Normal fault
- Strike-slip fault
- Oblique fault

Question No.67

4.00

Bookmark

Study the following information carefully and answer the question below it:

Aasha, Bhuvnesh, Charan, Danesh, Ekta, Farhan, Ganesh and Himesh are sitting around a circle, facing the centre. Aasha sits fourth to the right of Himesh while second to the left of Farhan. Charan is not the neighbour of Farhan and Bhuvnesh. Danesh sits third to the right of Charan. Himesh never sits next to Ganesh.

Who among the following sits between Ganesh and Danesh?

- Ekta
- Bhuvnesh
- Aasha
- Charan

Question No.68

4.00

Bookmark

Gravity at the center of the earth is

- 980 gals
- 1068 gals
- Zero
- 432 gals

Question No.69

4.00

Bookmark

A confined sandy aquifer has a thickness of 10m and transmissivity of 0.75m^2 per day. Its hydraulic conductivity is ____ m per day.

- 75m per day
- 0.0075 m per day
- 0.75m per day
- 0.075m per day

Question No.70

4.00

Bookmark

If A+B means A is daughter of B,
A-B means A is husband of B
A × B means A is brother of B

From the statement P – Q + R × S, how is Q related to S?

- Niece
- Sister
- Mother
- None of these

Question No.71

4.00

Bookmark

The correct pair of naturally occurring fissile isotope of Uranium is

- U^{236} and U^{237}
- U^{236} and U^{238}
- U^{235} and U^{238}
- U^{235} and U^{236}

Question No.72

4.00

Bookmark

Study the following information carefully and answer the question below it

- (i) There is a group of five persons- A, B, C, D and E
- (ii) One of them is manual scavenger, one is sweeper, one is watchman, one is human scarecrow and one is grave-digger
- (iii) Three of them – A, C and grave-digger prefer tea to coffee and two of them – B and the watchman prefer coffee to tea
- (iv) The human scarecrow and D and A are friends to one another but two of these prefer coffee to tea.
- (v) The manual scavenger is C's brother

Who is a manual scavenger?

- A
- D
- B
- C

Question No.73

4.00

Bookmark

Herringbone structure is generally formed in which of the following environment?

- Fluvial
- Lacustrine
- Tidal
- Aeolian

Question No.74

4.00

Bookmark

Angle of repose is a term associated with _____

- Strike of beds
- Landslide
- Dip of beds
- Flood

Question No.75

4.00

Bookmark

Knick points indicate changes in the

- Strike of a fault
- Stream gradient
- Attitude of beds
- Attitude of joints

Question No.76

4.00

Bookmark

Pangea started breaking up in

- Mesozoic
- Palaeozoic
- Cenozoic
- Proterozoic

Question No.77

4.00

Bookmark

Gutenberg discontinuity is located at a depth of around

- 150km
- 600km
- 2900km
- 1500km

Question No.78

4.00

Bookmark

A fence diagram is used _____

- for graphical display of 2D sub-surface geological data
- for graphic display of 3-D data of stratigraphy and interpretations in 2D perspective view
- for displaying the boundaries of an outcrop.
- for 3D graphical display of water table in an area

Question No.79

4.00

Bookmark

A good example of aquitard is _____

- Sandstone
- Fractured basalt
- Porous Limestone
- Clay

Question No.80

4.00

Bookmark

What rock would you expect to find at the base of a typical oceanic plate?

- Diorite
- Gabbro
- Peridotite
- Basalt

Question No.81

4.00

Bookmark

Blue schist facies metamorphism in mafic rock is characterised by the presence of which mineral?

- Glauconite
- Pyrophyllite
- Glaucophane
- Pyrope

Question No.82

4.00

Bookmark

The crystal system of biotite is

- Monoclinic
- Hexagonal
- Triclinic
- Tetragonal

Question No.83

4.00

Bookmark

Choose the right pair from the following.

- Ninetyeast ridge- Rift
- Pranhita-godavari basin- Subduction
- Makran coast- transform fault
- Carlsberg ridge- spreading centre

Question No.84

4.00

Bookmark

Which of the following pairs of minerals exhibit exsolution texture?

- Sphalerite- Pyrrhotite
- Pyrite- Chalcopyrite
- Pyrite- Pyrrhotite
- Hematite- Magnetite

Question No.85

4.00

Bookmark **Statement:** "A Car is required on rent"-An Advertisement**Assumptions:**

- I. All types of Vehicles are available on Rent
 - II. People will respond to the advertisements
- If both I and II are implicit
 - If only assumption I is implicit
 - If only assumption II is implicit
 - If neither I nor II is implicit

Question No.86

4.00

Bookmark

Rust-coloured oxide and hydroxide minerals of iron and manganese that cap an ore deposit is called:

- Terra rosa
- Laterite
- Bauxite
- Gossan

Question No.87

4.00

Bookmark

Which of the following mineral crystallise in monoclinic system?

- Tourmaline
- Beryl
- Pigeonite
- Pyrite

Question No.88

4.00

Bookmark

Identify the mineral assemblage of greenschist facies metamorphism in mafic rock.

- chlorite + albite + diopside ± epidote, biotite
- chlorite + albite + epidote ± actinolite, quartz
- chlorite + albite + plagioclase + biotite
- chlorite + albite + quartz + stilpnomelane + muscovite

Question No.89

4.00

Bookmark

Choose the best antonym of the italicized word.

Many snakes are actually *innocuous*.

- ferocious
- harmful
- deadly
- poisonous

Question No.90

4.00

Bookmark

The void ratio (in percentage) of sandstone is 25. Its porosity in percentage is:

- 10%
- 20%
- 30%
- 40%

Question No.91

4.00

Bookmark

If in a certain language, GRASP is coded as BMVNK, which word would be coded as CRANE?

- HWFSJ
- XMVIZ
- FUDQH
- BQZMD

Question No.92

4.00

Bookmark

Name the minerals of Moh's scale of hardness which fall in the hexagonal crystal system.

- Talc, Gypsum, Calcite, Quartz
- Topaz, Corundum, Fluorite, Quartz
- Calcite, Apatite, Fluorite, Topaz
- Calcite, Apatite, Quartz, Corundum

Question No.93

4.00

Bookmark

Choose the correct chemical(general) formula for garnet.

- $X_3Y_2(SiO_4)_3$
- $X_3Y_2SiO_4$
- $X_3Y_2(SiO_4)_2.OH$
- $X_3Y_2(SiO_4)_2$

Question No.94

4.00

Bookmark

Diamond bearing conglomerates are associated with _____ in India

- Faults in Vindhyaans
- Unconformity in Vindhyaans
- Faults in Cuddappahs
- Unconformity in Cuddappahs

Question No.95

4.00

Bookmark

Snowball garnet is

- Pre-tectonic
- Contact metamorphic
- Post-tectonic
- Syn-tectonic

Question No.96

4.00

Bookmark

The wavelength is visible part of the EMR is _____

- 1.0 to 2.5 microns
- 0.4 to 0.7 mm
- 1.0 to 2.5 mm
- 0.4 to 0.7 microns

Question No.97

4.00

Bookmark

Who proposed the principle "the present is the key to the past"?

- Carl von Linnaeus
- William Smith
- Alcide d' Orbigny
- James Hutton

Question No.98

4.00

Bookmark

Didymograptus, an extinct genus of graptolites thrived during_____

- Late Cambrian to Middle Ordovician
- Devonian
- Middle Ordovician to Late Ordovician
- Late Ordovician to Late Silurian

Question No.99

4.00

Bookmark

Which of the following mineral cannot be used as an abrasive?

- Garnet
- Corundum
- Gypsum
- Quartz

Question No.100

4.00

Bookmark

Statements: All tools are books, Some books are pens.

Conclusion:

I. Some tools are pen

II. Some pens are books

- If only conclusion II follows
- If neither I nor II follows
- If only conclusion I follows
- If either I or II follows